J. Chapman, sc.

Music.

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COMPILED, DIGESTED, AND ARRANGED,

BY JOHN WILKES, OF MILLAND HOUSE, IN THE COUNTY OF SUSSEX, ESQUIRE;

ASSISTED BY EMINENT SCHOLARS OF THE ENGLISH, SCOTCH, AND IRISH, UNIVERSITIES.

VOLUME XVI.

CONTAINING

A comprehenſive Treatiſe on MUSIC;

The Hiſtory of NAPLES to the late Peace; and the important Article

NAVIGATION.

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Non audiendi ſunt homines imperiti, qui humano ingenio majorem, vel inutilem, et rebus gerendis adverſum, πολυμαθειαν *criminantur. Eſt ſcilicet quædam Scientiarum cognatio et conciliato; unde et* Εγκυκλοπαιδειαν *vocant Græci; ut in unâ perfectus dici nequeat, qui cæteras non attigerit.* Morhofi Polyhiſt. l. i. c. i. ſ. i.

Thoſe inexperienced perſons, who make it a charge of accuſation againſt variety and extenſive learning, that it exceeds the compaſs of human ability, or is uſeleſs, or that it is an impediment to tranſacting buſineſs, deſerve no attention. For there is between the Sciences a degree of natural and cloſe connexion; from which the Greeks uſe the term "Encyclopædia;" ſo that no one can be perfect in any one Science, who has not attained to ſome knowledge of the reſt.

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DESCRIPTION OF THE FRONTISPIECE ILLUSTRATING MUSIC.

APOLLO, HAVING OBTAINED IN THE ASSEMBLY OF THE GODS THE POSSESSION OF THE LYRE, (SEE HOMER'S HYMN,*) LEAVES THE MELODIOUS SPHERES OF THE HEAVENS, AND BRINGS HARMONY UPON THE EARTH.—THE ELEMENT OF AIR PRESENTS HIM ON HIS WAY WITH THE WIND-INSTRUMENTS PREVIOUSLY INVENTED, THE SYRINX AND THE FLUTE. THE TERRESTRIAL ABODE OF THE MUSES, THE SUMMIT OF HELICON, WITH PEGASUS AND THE CASTALIAN SPRINGS, ARE FAINTLY DELINEATED ON ONE SIDE; AND, ON THE OTHER, A DISTANT VISION OF MODERN MUSICAL INSTRUMENTS, THE ORGAN, THE VIOLIN, THE TRUMPET, THE HARP, &c. AND A PASTORAL DANCE WHICH ORIGINATED FROM MUSIC, ARE SEEN IN VARIOUS GROUPS. THE SEVEN PLANETS SURROUNDING THE GOD OF LIGHT AND SOUND, THE SEVEN STARS OF THE BEAR, THE PLEIADES WHO WERE ORIGINALLY SEVEN, AND PART OF THE RAINBOW, ALLUDE TO THE SEPTIFORM SYSTEM OF HARMONY WHICH SEEMS TO PERVADE THE WHOLE OF THE UNIVERSE.

* Ειη μοι κιθαρις τε φιλη και καμπυλα τοξα,
Χρησω τ᾽ ανθρωποισι διος νημερτεα βȣλην.

Let the ſtrong bow and vocal lyre be mine,
All men I'll teach Jove's mighty will divine.
Homer's Hymn to Apollo.

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MOROCCO.

MOROC'CO, an empire of Africa, comprehending a conſiderable part of the ancient Mauritania, is bounded on the weſt by the Atlantic Ocean; on the eaſt by the river Mulvya, which ſeparates it from Algiers; on the north by the Mediterranean; and on the ſouth by Mount Atlas, or rather by the river Sus, which divides it from the kingdom of Tafilet. Its greateſt length is from the north-eaſt to the ſouth-weſt, amounting to above 590 miles; its breadth is not above 260 where broadeſt, and in the narroweſt places it is not above half that breadth.

The ancient hiſtory of Morocco has been already given under the article MAURITANIA, vol. xiv. It continued under the dominion of the Romans upwards of 400 years. On the decline of that empire it fell under the Goths, who held it till about the year 600, when the Goths were driven out by the Vandals, the Vandals by the Greeks, and they in their turn by the Saracens, who conquered not only this empire, but we may ſay the whole continent of Africa; at leaſt the religion, one way or other, is to be found in all parts of it. The Saracen empire did not continue long united under one head, and many princes ſet up for themſelves in Africa as well as elſewhere, through whoſe diſſenſions the Almoravides were at length raiſed to the ſovereignty, as related under the article ALGIERS, vol. i. p. 324. Yuſef, or Joſeph, the ſecond monarch of that line, built the city of Morocco, conquered the kingdom of Fez, and the Mooriſh dominions in Spain; all which were loſt by his grandſon Abu Ali, who was defeated and killed by the Spaniards. On this prince's death the crown paſſed to the *Mohedians*, or Almohedes; with whom it had not continued above three generations, when Mahomet the ſon of Al Manſur loſt the famous battle of Naves de Toloſe, (July 12, 1212.) in which 200,000 Moors were ſlain, and in conſequence of which Alphonſo IX. retook a great many of the Mooriſh conqueſts immediately after.

Mahomet returned to Africa in diſgrace, and ſoon after died, leaving his empire to Said Barrax, one of his grandſons. After the death of Said, who was aſſaſſinated, the principal perſons of the Mohedians elected his uncle, Abdul Cader, in his room; but this prince, not able to ſecure the confidence of the people, was obliged to ſurrender his power to Abdallah, of the race of the *Benimerins*, who was the firſt of that dynaſty that poſſeſſed himſelf of the ſovereign authority. Abdallah was ſucceeded by his ſon; and his death made way for the acceſſion of his uncle Ben-Joſeph, who wholly deprived the Mohedians of their power. The kingdom of Morocco, by this change of its monarchs, loſt the ſovereignty of Spain; but Ben-Joſeph, unoccupied with foreign conqueſts or government, eſtabliſhed more firmly his authority in Mauritania. In 1275, however, he paſſed over into Spain; and, having committed various ravages in the kingdom of Andaluſia, returned into Africa. Ben-Joſeph was ſucceeded by his ſon Abu-Said, who, like his father, made ſeveral expeditions into Spain, all of which were unſucceſsful. His reign was tranquil until the year 1303, when his ſon occupied the throne which was vacated by his death; and he was ſucceeded in 1318 by Joſeph-Ben-Jacob. After the death of this monarch, Abul-Haſſan, his ſon, took poſſeſſion of the throne; and, by various military operations in Spain, involved himſelf in expenſes, which, joined to his ill ſucceſs, produced murmurs among his ſubjects, of which one of his ſons, named Abdalharaman, availing himſelf, drew over ſeveral tribes to his ſupport. Abu-Hennon, another of his ſons, inſtigated a rebellion againſt him, and ultimately ſucceeding, took poſſeſſion of the kingdom in 1354, and remained in quiet poſſeſſion of it till his death in 1409, when he was ſucceeded by his ſon, Abu-Said, a prince addicted to pleaſure and debauchery; in conſequence of which, ſeveral internal commotions made way for the ſucceſſion of his ſon Abdallah, in the year 1423. Abdallah reigned with juſtice for ſeveral years, but at length was ſlain by an inhabitant of Fez, who was a *ſharif*, and who was proclaimed as ſovereign inſtead of Abdallah, with whom terminated the family of the Benimerins. This ſharif was overpowered by Muley-Shaik who was the firſt of the kings of the race called *Merini*, the deſcendants of a branch of the Benimerins.

The family of Merini were unable to maintain their authority, and the kingdoms of Fez and Morocco continued in a ſtate of anarchy till the beginning of the 16th century. At this time a Moor of the province of Dara, whoſe name was Mahomet-Ben-Achmet, calling himſelf a ſharif and deſcendant of the prophet, availed himſelf of the opportunity that preſented itſelf for accompliſhing his projects of ambition. With this view he ſent his three ſons, in 1508, in pilgrimage to Mecca, who, on their return, were highly honoured by the Moors. Having thus eſtabliſhed their reputation, their father proſecuted his ſcheme of ambition. At length Achmet, the eldeſt of his three ſons, aided by the principal men of Morocco, was proclaimed king. In proceſs of time, the power and the ambition of the ſharifs advanced together; and two of the brothers divided their conqueſts; the eldeſt, Muley Achmet, retained Morocco; and Muley Mahomet took up his reſidence at Tarudant, by which they could mutually ſuccour each other againſt the Portugueſe and their allies, who were maſters of the greateſt part of the weſtern coaſt, from the cape of Aguer to the province of Duquella incluſive. After a variety of ſucceſſive contentions between theſe two brothers, Muley Mahomet, having ſeized on the kingdom of Fez, ſent

Muley Achmet into the deſert, with a part of his family, that he might have nothing to fear from his ambition. The former, however, was aſſaſſinated in 1556, and the latter was murdered in priſon: and thus both theſe ſharifs, who had perfidiouſly made religion and good faith a pretext to deſpoil their maſters and benefactors of ſovereignty, fell themſelves, as did alſo moſt of their poſterity, by the hands of murderers, and thus received the juſt recompence of their crimes.

Muley Abdallah, the ſon of Muley Mahomet, was, in 1557, joyfully received at Morocco, whither he repaired as ſoon as he heard of the death of his father; and, having aſſembled the chiefs of the army and the principal men of the city, he was proclaimed king of Fez, Morocco, and other towns and provinces under the dominion of the ſharif. Upon the death of Abdallah in 1574, he was ſucceeded by his eldeſt ſon Muley Mohamet, ſurnamed the Negro; and, when he prematurely died, Muley Achmet, uncle of Muley Mahomet, was proclaimed king of Fez; and he obliged his brothers to ſwear fidelity to his ſon Muley Shek, and to inſure to him the ſucceſſion. Muley Achmet was loved and reſpected by his ſubjects; he was the laſt deſcendant of the ſharifs, and died in 1603, much regretted. After his death, Muley Sidan, the youngeſt of his ſons, was proclaimed his ſucceſſor; and, notwithſtanding the various competitions of his brothers, he remained ſovereign of the empire. At length, in 1630, he died at Morocco, leaving princes, as his ſucceſſors, who were little qualified to govern.

Muley Abdelmeleck, eldeſt ſon of Muley Sidan, ſucceeded his father, and was the firſt king of Morocco, who, beholding ſeveral ſmall kingdoms united under his government, aſſumed the title of *emperor*. His conduct excited public diſcontent, and in 1635 he was aſſaſſinated. Upon his death, his brother Muley El-Valid aſcended the throne; and his reign was diſtinguiſhed by condeſcenſion and affability, ſo that he gained the cordial eſteem of his ſubjects. His death took place in 1647; and Muley Achmet Shek, the laſt of the ſons of Muley Sidan, was elected emperor. The indolence and effeminacy in which this monarch lived, and the oppreſſions of the governors of provinces and cities, excited murmurs among the people, and at length univerſal diſcontent. The mountaineers, having beſieged and taken Morocco, put Muley Achmet to death, and proclaimed one of their chiefs, named Crom-El-Hadgy, who reigned ſome years, but without the love of his people. This prince inhumanly maſſacred all the deſcendants of the ſharifs who might diſturb his reign; and by his cruelty revenged the blood and the rights of the houſe of Merini, whoſe monarchs theſe ſame ſharifs had deſtroyed, after having ſtripped them of wealth and ſovereignty. Crom-El-Hadgy, after having reigned about ſeven years, cloſed his life tragically, and was ſucceeded by his ſon Muley Shek, who was dethroned by a new revolution, which placed the preſent reigning family on the throne.

The Moors of Tafilet, who, on account of a dearth in the province, made a pilgrimage to Mecca, brought back a ſharif, named Muley Ali, a deſcendant of Mahomet, born at the town of Yambo, near Medina, who was treated with great reſpect, and was at length advanced to the throne. This dynaſty acquired the name of ***Fileli***, derived from Tafilet, of which Muley Sharif was ſovereign. He is ſaid to have had eighty-four ſons, and a greater number of daughters. However that be, the firſt and the two laſt, viz. Muley Mahomet, Muley Arſhid, and Muley Iſhmael, reigned in ſucceſſion. The firſt died in 1664, and was ſucceeded by Muley Arſhid, who terminated his life in 1672, and left behind him a character marked by a ſucceſſion of cruelties, which the ferocity of his character rendered habitual, and led him to practiſe for amuſement. His ſucceſſor, Muley Iſhmael, poſſeſſed the the ſame qualities, and ſtill greater vices than his brother. Wholly regardleſs of the lives of men, the emperor made it his paſtime to aſſaſſinate them with his own hand. But in the character of this monarch were found the moſt ſingular inconſiſtencies; for it is certain, that, although a tyrant, yet in other reſpects, as if to repair the miſchief which he committed, he left nothing undone for the encouragement of population. He introduced large colonies of negroes from Guinea; built towns for them, many of which are ſtill remaining; aſſigned them portions of land, and encouraged their increaſe by every poſſible means. He ſoon initiated them in the Mahometan faith; and, had his plan been followed, the country by this time would have been populous, and probably flouriſhing. As the Negroes are of a more lively, active, and enterpriſing, diſpoſition, than the Moors, they might ſoon have been taught the arts of agriculture; and their ſingular ingenuity might have been directed to other uſeful purpoſes. It is true, Muley Iſhmael, when he adopted this plan, had more objects in view than that of merely peopling his dominions. He ſaw plainly that his own ſubjects were of too capricious a diſpoſition to form ſoldiers calculated for his tyrannical purpoſes. They had uniformly manifeſted an inclination to change their ſovereigns, though more from the love of variety than to reform the government, or reſtrain the abuſes of tyranny. Muley Iſhmael had diſcernment enough to ſee, that by forming an army of ſlaves, whoſe ſole dependence ſhould reſt upon their maſter, he could eaſily train them in ſuch a manner as to act in the ſtricteſt conformity to his wiſhes. He ſoon learnt that the great object with the negroes was plenty of money and liberty of plunder; in theſe he liberally indulged them, and the plan fully anſwered his expectations. Though, however, Muley Iſhmael had no great merit in introducing ſubjects for the purpoſes of tyranny, yet the good effects of this new colonization were very generally experienced. By intermarrying among themſelves, and intermixing among the Moors (for the Moors will keep negro women as concubines, though they ſeldom marry them), a new race of people ſtarted up, who became as uſeful ſubjects as the native inhabitants, and brought the empire into a much more flouriſhing ſtate than it had ever been in ſince their great revolution.

After a reign of fifty-four years, Muley Iſhmael died in 1727, at the age of eighty-one. His ſucceſſor was his ſon Muley Achmet Daiby, who was proclaimed emperor by the grandees and the negroes, and who became brutal by inſolence and intemperance, ſo that he was deſpiſed and hated by his ſubjects. He died of an incurable dropſy in 1729, and was ſucceeded by Muley Abdallah, who was capricious and cruel. He was ſix times depoſed, and as often regained the throne. Death conſtrained him to vacate the throne in 1757, after having divided the empire with his ſon Sidi Mahomet, who, having accuſtomed the people to reſpect his authority, ſucceeded to the throne without oppoſition. This prince manifeſted a laudable deſire of making peace with the powers of Europe; and accordingly, after confirming that already made between Morocco, England, and Holland, he began his reign with concluding treaties with Denmark and Sweden, and in the following year with Venice, France, Spain, and Portugal. In 1712 the emperor and the grand duke of Tuſcany made peace, and the other powers of Italy enjoyed a kind of truce, with the empire of Morocco. For the encouragement of commerce, he built the town of Mogador, where nature had formed a port acceſſible at all ſeaſons. He ordered the fortreſſes of Laracha and Rabat to be repaired, embelliſhed each of theſe cities with ſome edifices and public markets, and made additions to his own palace at Morocco. He multiplied mercantile eſtabliſhments on the coaſt of Morocco; and merchants ſettled at Santa Cruz, Mogador, Saſſi, Rabat, Laracha, and Tetuan. Deſirous of effacing the remembrance of all the caprices of his father, he wholly employed himſelf in the reſtoration of order, of re-eſtabliſhing rules for government, and uniformity in the deciſions of juſtice; and, with a view of carrying all his laudable plans into full effect, he raiſed his relation, Muley Dris, to the rank of his aſſociate in the empire; but, after the death of this prince in 1772, Sidi Mahomet indulged his own propenſities more freely, to the diſhonour of his government, as well as to the detriment of his country. Sidi Mahomet, who, after a reign of thirty-three years, died in 1790, was ſucceeded by one of his ſons, Muley Yezid. The preſent emperor is Muley Solyman.

We have ſeen that the territories of Morocco are formed by the union of ſeveral ſmall kingdoms, anciently limited to a ſingle province, and perpetually at variance among themſelves, till at length they were ſubdued and united under one ſovereign by the ſharifs. The ſouthern part of the empire contains the kingdoms of Sus, or Suſe, Tarudant, Morocco, Tafilet, and Sugulmeſſa; and the northern, thoſe of Fez, Mequinez, and Tremecen; but the latter, which was formerly ſubject to Morocco, having been conquered by the Turks of Algiers, is now a part of the territories of that regency.

The kingdom of Morocco comprehends at preſent the provinces of Morocco, Eſcura, Ramna, Duquella, Abda, Sherma, Hea, Sus, Dra, and Geſula; that of Fez contains thoſe of Temſena, Shavoya, Tedla, Beni-Haſſen, Fez, Rif, Garet, Shaus, and Algaub, or El-Garb. Theſe provinces have been called by other names, ſo that the geography of the country has been confuſed; and beſides, the limits of theſe provinces have frequently varied, according to the different tribes that have occupied them, and this variation of extent has occaſioned a variation of name. Beſides the provinces which compoſe the empire of Morocco, the ſharifs claim ſovereignty of the Vled de Nun and the *deſert*, or Sahara; but their authority over theſe is very precarious, being dependent on the will of their ſubjects and temporary circumſtances. The people who inhabit theſe deſerts, far removed from the centre of deſpotic authority, live in tribes or ſmall republics, and chooſe their own chiefs. They nevertheleſs retain for the emperor of Morocco that reſpect and veneration which his power, and the idea they have of his ſupremacy as head of the church, inſpire; but they pay or refuſe tribute according to their own pleaſure. This part of the coaſt has been called *Vled de Nun*, from Cape Non, diſcovered by the Portugueſe in the beginning of the fifteenth century, and to which they gave this name, becauſe thoſe who firſt doubled it never returned.

The whole empire of Morocco is ſurrounded to the eaſt, north, and ſouth, by a chain of valleys and mountains, which are diſtinguiſhed according to the numbers and names of the tribes by which they are inhabited. From Laracha to near Saffi, the weſtern part forms a ſort of plain, which, in many places, is fifteen or twenty leagues in breadth from eaſt to weſt. The principal mountains form the chain which goes under the name of *Mount Atlas*, and runs the whole length of Barbary from eaſt to weſt, paſſing through Morocco, and abutting upon that ocean which ſeparates the eaſtern from the weſtern continent, and which from this mountain is called the *Atlantic Ocean*. The principal rivers, beſides the Malva or Mulvya above mentioned, which riſes in the deſerts, and running from ſouth to north divides Morocco from the kingdom of Algiers, are the Suz, Ommirabih, Rabbata, Larache, Darodt, Sebon, Gueron, and Tenſift, which riſe in Mount Atlas, and fall into the Atlantic Ocean.

The climate of Morocco is in general ſufficiently temperate, healthy, and not ſo hot as its ſituation might lead us to ſuppoſe. The chain of mountains which form the Atlas, on the eaſtern ſide, defends it from the eaſt winds, that would ſcorch up the earth were they frequent. The ſummit of theſe mountains is always covered with ſnow; and their abundant deſcending ſtreams ſpread verdure through the neighbourhood, make the winter more cold, and temper the heats of ſummer. The ſea on the weſt ſide, which extends along the coaſt from north to ſouth, alſo refreſhes the land with regular breezes, that ſeldom vary, according to their ſeaſons. At a diſtance from the ſea, within land, the heat is ſo great, that the rivulets become dry in ſummer; but, as in hot countries dews are plentiful, the nights are there always cool. The rains are tolerably regular in winter, and are even abundant, though the atmoſphere is not loaded with clouds as in northern latitudes. Thoſe rains which fall by intervals are favourable to the earth, and increaſe its fecundity. In January the country is covered with verdure, and enamelled with flowers. Barley is cut in March, but the wheat-harveſt is in June. All fruits are early in this climate; and in forward years the vintage is over in the beginning of September. Though in general there is more uniformity in hot than in northern climates, the firſt are nevertheleſs expoſed to the intemperance of weather: heavy rains often impede the harveſt; and drought has ſtill greater inconveniences, for it enſures the propagation of locuſts; and theſe locuſts, which have ſo often laid hot countries deſolate, ſometimes commit the moſt dreadful ravages in the empire of Morocco. The devaſtation of locuſts increaſes the price of proviſions, and often occaſions famines; but the Moors find a kind of compenſation in making food of theſe inſects; prodigious quantities are brought to market ſalted and dried like red herrings. They have an oily and rancid taſte, which habit only can render agreeable; they are eaten here, however, with pleaſure.

The ſoil of Morocco is exceedingly fertile; the land, light and ſandy on the weſtern coaſt, contains in itſelf ſalts ſufficient to make it fruitful. To theſe ſalts, and to the abundant dews, muſt we attribute a humidity almoſt corroſive; which, without making any ſenſible impreſſion on bodies, quickly covers with ruſt, iron, ſteel, metals, and even keys and ſciſſars carried in the pocket. The increaſe of corn in Morocco is often as 60 for one, and 30 is held to be but an indifferent harveſt. The property of land is entirely precarious, ſo that each individual grows little more than ſufficient for his own wants. Hence it happens, when the harveſt fails, from the ravages of locuſts or the intemperance of ſeaſons, that theſe people are expoſed to miſery, ſuch as Europeans have no conception of, who enjoy a ſtable adminiſtration which obviates and provides for all their wants. Oranges, lemons, and thick-ſkinned fruits, the trees of which require little nurture, grow in the open fields; and there are very large plantations of them found, which they take the trouble to water, to increaſe their product. Their vines yield excellent grapes. Figs, melons, water-melons, apricots, apples, and pears, are in tolerable plenty. The tree called the Barbary fig, or prickly pear, (Cactus opuntia,) is plentifully found in the empire of Morocco. The olive grows every-where along the coaſt, but particularly to the ſouth. In the province of Sus, between the 25th and 30th degrees, the inhabitants have an almond-harveſt, which varies little, becauſe of the mildneſs of the climate. The palm-tree is common in the ſouthern provinces of Morocco; but dates ripen there with difficulty, and few are good, except in the province of Sus, and towards Tafilet, where they are ſtill better, becauſe of its diſtance from the ſea. On the coaſt of Salee and Mahmora, there are foreſts of oak, which produce acorns near two inches long; they taſte like cheſnuts, and are eaten raw and roaſted. The empire of Morocco alſo produces much wax; but, ſince it has been ſubjected by the emperor to the payment of additional duties, the country people have neglected the care of their hives. Salt abounds in the empire, and in ſome places on the coaſt requires only the trouble of gathering. The Moors cultivate their lands only in proportion to their wants; hence two-thirds of the empire at leaſt lie waſte.

The inhabitants of the empire of Morocco, known by the name of Moors, are a mixture of Arabian and African nations, formed into tribes; with the origin of whom we are but imperfectly acquainted. Theſe tribes, each ſtrangers to the other, and ever divided by traditional hatred or prejudice, ſeldom mingle. It ſeems probable that moſt of the caſts who occupy the provinces of Morocco have been repulſed from the eaſtern to the weſtern Africa, during thoſe different revolutions by which this part of the world has been agitated; that they have followed the ſtandard of their chiefs, whoſe names they have preſerved; and that by theſe they, as well as the countries they inhabit, are diſtinguiſhed. At preſent theſe tribes are called *Caſiles*, or *Cabiles*, from the Arabic word *kobeila;* and they are ſo numerous, that it is impoſſible to have a knowledge of them all. Mr. Jackſon divides the inhabitants in general into four claſſes, namely, Moors, Arabs, Brebbers, (which latter are probably the aborigines,) and Shelluhs.

The Moors (he ſays) are the deſcendants of thoſe who were driven out of Spain; they inhabit the cities of Morocco, Fez, Mequinez, and all the coaſt towns, as far ſouthward as the province of Haha. Their language is a corrupt Arabic intermixed with Spaniſh.

The Arabs have their original ſtock in Sahara, from whence they emigrate to the plains of Morocco, whenever the plague, famine, or any other calamity, depopulates the country ſo as to admit of a new colony, without injuring the territory of the former inhabitants. The laſt great plague, which was followed by a great influx of Arabs from the Sahara, is deſcribed by Mr. Jackſon in the following terms: "The deſtruction of the human ſpecies in the province of Suſe was conſiderably greater than elſewhere. Terodant, formerly the metropolis of a kingdom, but now that of Suſe, loſt, when the infection was at its height, about eight hundred each day. The ruined, but ſtill extenſive and populous, city of Morocco, loſt one thouſand each day. The populous cities of Old and New Fez diminiſhed in population twelve or fifteen hundred each day; and in theſe extenſive cities the mortality was ſo great, that, the living having not time to bury the dead, the bodies were depoſited or thrown together into large holes, which, when nearly full, were covered over with earth. Young healthy robuſt perſons were for the moſt part attacked firſt; then women and children; and laſtly, thin, ſickly, emaciated, old people. The mortality amounted to 124,000 ſouls. After this deadly calamity had ſubſided, we beheld a general alteration in the fortunes and circumſtances of men. We ſaw perſons who, before the plague, were common labourers, now in poſſeſſion of thouſands, and keeping horſes, without knowing how to ride them. Parties of this deſcription were met wherever we went; and the men of family called them in deriſion *el wurata*, the inheritors. Proviſions alſo became extremely cheap and abundant. The flocks and herds had been left in the fields, and there was now no one to own them; and the propenſity to plunder, ſo notoriouſly attached to the character of the Arab, was ſuperſeded by a conſcientious regard to juſtice, originating from a continual apprehenſion of diſſolution; and that the *khere*, as the plague was now called, was a judgment of the Omnipotent on the diſobedience of man; and that it behoved every individual to amend his conduct, as a preparation to his departure for Paradiſe. The expenſe of labour, at the ſame time, increaſed enormouſly; and never was equality in the human ſpecies more conſpicuous than at this time. When corn was to be ground, or bread baked, both were performed in the houſes of the affluent, and prepared by themſelves; for the very few people whom the plague had ſpared, were inſufficient to adminiſter to the wants of the rich and independent; and they were accordingly compelled to work for themſelves, performing perſonally the menial offices of their reſpective families. The country being now depopulated, and much of the territory without owners, vaſt tribes of Arabs emigrated from their abodes in the interior of Sahara, and took poſſeſſion of the country contiguous to the river Draha, as well as many diſtricts in Suſe; and, in ſhort, ſettling themſelves, and pitching their tents, wherever they found a fertile country with little or no population." Theſe Arabs live in tents, and ſpeak the language of the Koran, ſomewhat corrupted. They are a reſtleſs and turbulent people, continually at war with each other: in one province a rebellious *kahyle*, or clan, will fight againſt a neighbouring or loyal one, and will thus plunder and deſtroy one another, till, fatigued by the toils of war, they mutually ceaſe, when the next year, perhaps, the rebellious clan will be found fighting for the emperor againſt the former loyal one, now become rebellious. This plan of ſetting one tribe againſt another is an act of policy of the emperor, becauſe, if he did not, in this manner, quell the broils continually breaking out amongſt them, he would be compelled, in order to preſerve tranquillity in his dominions, to employ his own army for that purpoſe, which is generally occupied in more important buſineſs.

The Brebbers, or Brebes, inhabit the mountains of Atlas, north of the city of Morocco, living generally in tents; they are a robuſt nervous people, having a language peculiar to themſelves, which differs more from the Arabic, or general language of Africa, than any two languages of Europe differ from each other; it is probably a dialect of the ancient Carthaginian. The general occupation of theſe people is huſbandry, and the rearing of bees for honey and wax.

The Shelluhs inhabit the Atlas Mountains, and their various branches ſouth of Morocco; they live generally in towns, and are, for the moſt part, occupied in huſbandry, like the Brebbers, though differing from them in their language, dreſs, and manners; they live almoſt entirely on barley-meal made into gruel, and barley roaſted or granulated, which they mix with cold water when travelling: this is called *zimeta*. Many families among theſe people are reported to be deſcended from the Portugueſe, who formerly poſſeſſed all the ports on the coaſt; but who, after the diſcovery of America, gradually withdrew thither. Eaſt of Morocco, near Dimenet, on the Atlas Mountains, there is ſtill remaining a church, having inſcriptions in Latin over the entrance, ſuppoſed to have been built by them, which, being ſuperſtitiouſly reported to be haunted, has eſcaped deſtruction. Their language is called Amazirk.

The Moors, as well as the other natives of this country, are generally of a middle ſtature; they have not ſo much nerve as the Europeans, and are, for the moſt part, thick and clumſy about the legs and ancles, inſomuch that a well-formed leg is ſeldom ſeen among them; this may proceed from their conſtantly ſitting croſs-legged, with their legs under them, like the tailors of Europe, or perhaps from their wearing no covering to their legs, which are thus expoſed to all weathers. Deformed perſons are rarely met with; the looſe Arabian dreſs covers deformity, and their mode of bringing up children (every thing being left to follow nature) generally prevents it. Corns and deformed feet are unknown; the toes take their natural growth, and are as uſeful to the mechanics as their fingers. Lame people are ſeldom ſeen; but the blind are more numerous than in Europe. Both ſexes have very fine teeth. Their complexion, from frequent intermarriages or intercourſe with the Soudanic race, is of all ſhades, from black to white. The women of Fez are as fair as the Europeans, with the exception of their eyes and hair, which are univerſally dark. Thoſe of Mequinez are in general ſo handſome, that it is a rare thing to ſee a young woman in that city who is not pretty. With large black expreſſive ſparkling eyes, they have a healthy countenance, uniting the colours of the lily and the roſe, that beautiful red and white ſo much admired by foreigners in our Engliſh ladies; indeed their beauty is proverbial, as the term *Mequinaſia* is applied to any beautiful woman of elegant form, with ſparkling eyes and white teeth; they alſo poſſeſs a modeſty and ſuavity of manners rarely met with elſewhere. It is extraordinary that the inhabitants of two great and populous cities, ſituated within a day's journey of each other, ſhould diſcover

cover ſuch a phyſiognomical difference as is apparent between the females of Fez and thoſe of Mequinez, the former being generally of a ſallow or pale complexion.

The Moors may be diſtinguiſhed into thoſe who lead a paſtoral life, and thoſe who inhabit the cities.

The Moors of the country live in tents; and, that they may allow their ground a year's reſt, they annually change the place of their encampments, and go in ſearch of freſh paſturage. Their encampments, which they call *douhars*, are compoſed of ſeveral tents, and form a creſcent; or they are ranged in two parallel lines, and their flocks, when they return from paſture, occupy the centre. The tents, viewed in front, are of a conical figure; they are from eight to ten feet high, and from twenty to twenty-five feet long; like thoſe of high antiquity, they reſemble a boat reverſed. They are made of cloth compoſed of goats' and camels' hair, and the leaves of the wild palm, by which they are rendered impervious to water; but at a diſtance their black colour gives them a very diſagreeable look. Thus encamped, they live in the greateſt ſimplicity, and exhibit a faithful picture of the inhabitants of the earth in the firſt ages of the world. The nature of their education, the temperature of the climate, and the rigour of the government, diminiſh the wants of the people, who find in their plains, in the milk and wool of their flocks, every thing neceſſary for food and clothing. Polygamy is allowed among them; a luxury ſo far from being injurious to a people who have few wants, that it is a great convenience in the economy of thoſe ſocieties, becauſe the women are entruſted with the whole care of the domeſtic management. In their half-cloſed tents, they are employed in milking the cows for daily uſe; and, when the milk abounds, in making butter, in picking their corn, their barley, and pulſe, and grinding their meal, which they do daily in a mill compoſed of two ſtones about eighteen inches in diameter, the uppermoſt having a handle, and turning on an axis fixed in the under one. See the article Mill, vol. xv. p. 383, 4. and the correſponding figures. Their bread they make every day, which they bake between two earthen plates, and often upon the ground after it has been heated by fire. Their ordinary food is the cooſcooſoo; which is a paſte made with meal in the form of ſmall grains, like Italian paſte. This cooſcooſoo is dreſſed in the vapour of boiling ſoup, in a hollow diſh perforated with many ſmall holes in the bottom, and the diſh is encloſed in a kettle where meat is boiled; the cooſcooſoo, which is in the hollow diſh, grows gradually ſoft by the vapour of the broth, with which it is from time to time moiſtened. This ſimple food is very nouriſhing, and even agreeable when one has got the better of the prejudices which every nation entertains for its own cuſtoms. The common people eat it with milk or butter indifferently; but thoſe of higher rank, ſuch as the governors of provinces and lieutenants, who live in the centre of the encampments, add to it ſome ſucculent broth, made with a mixture of mutton, poultry, pigeons, or hedgehogs, and then pour on it a ſufficient quantity of freſh butter.

The women are alſo employed in preparing their wool, ſpinning, and weaving in looms hung lengthways in their tents. Thus they make their *haicks*, which, without dreſſing, milling, or dyeing, are immediately applied to uſe. This is the conſtant country-dreſs of the Moors, without either ſhirts or drawers, linen being deemed a luxury fit only for the court and city. The finery of which the country-women are moſt deſirous conſiſts of large ear-rings, in the ſhape of a creſcent, or ſilver rings, with bracelets and rings for the ſmall of the leg. They alſo wear necklaces of ſmall coloured glaſs-beads, or clove-grains ſtrung on a ſilken thread. They alſo paint the face, neck, boſom, and almoſt the whole body, with the forms of flowers and ornaments; making impreſſions with models in which are the points of needles, that ſlightly raiſe the ſkin, under which a blue colour is inſerted, or gunpowder pulverized, which is never effaced. The women of ſome Mooriſh tribes bear on the forehead, or on the chin, a croſs, denoting probably that they are the deſcendants of thoſe who were formerly ſubjected to the Chriſtians of Africa, and who, to avoid paying taxes like the Moors, thus imprinted croſſes upon their ſkins, that they might paſs for Chriſtians. The country Moors regard their wives more as ſlaves than as companions, and compel them to ſubmit to every drudgery, except that of tilling the ground. The ſkin of the country-women is tanned, as they walk unveiled; and in ſome places they paint their cheeks, and every-where ſtain their hair, their feet, and their fingers-ends, with an herb called *henna*, (ſee Lawsonia,) which produces a deep ſaffron colour. In their douhars, which are ſcattered over the country, and commonly fixed near ſome rivulet or well, there is a tent for the reception of travellers, where they find poultry, milk, and eggs, and forage for their horſes. Over the tents of travellers there is a guard, leſt any of the Moors, who are naturally thieviſh, ſhould attempt to commit a robbery. The douhar is reſponſible for all thefts committed in its vicinity, during the day, or in ſight of its encampment. To facilitate barter, there is a public market held every day, except Friday, in various quarters of each province. Here the neighbouring Moors aſſemble to buy or ſell cattle, corn, vegetables, dried fruit, carpets, haicks, and all the productions of their country. On the outſide of the market they have uſually ſhows, buffoons, ſingers, dancers, and merry-andrews. On one ſide is the place of the barbers or ſurgeons, to whom they bring their ſick to be cured of ſtrains, diſlocations, or other accidents.

The Moors of the cities differ but little from thoſe who live under tents; but they affect a ſuperiority, of which they are vain. They are of the ſame general origin; unleſs we ſuppoſe that the former are intermixed with the deſcendants of thoſe Moors of Spain, who, after their expulſion, preferred a city to a rural life. Their houſes have in general few conveniencies: they have no windows, and they are ſeldom more than ſixteen feet high. They have all terraces on the roof, which are formed of earth and mortar; their furniture chiefly conſiſts of mats, carpets, ſome chairs, a cheſt, a table, and a bed which is concealed by curtains. The inhabitants of cities have only one wife; but they have female negroes, whom they may take as concubines. In their dreſs they are diſtinguiſhed from the country Moors by wearing a ſhirt and linen drawers, and an upper garment of cotton in ſummer, and of cloth in winter, which they call a *caftan*. Obliged as they are to conceal their riches, the Moors wear no jewels; very few of them have ſo much as a ring, a watch, or a ſilver ſnuff-box.

The Mooriſh women of the cities ſeldom leave the houſe, and they are always veiled. Thoſe of the ſouth are the handſomeſt; and they are ſo reſerved, or ſo guarded, that their relations do not enter their houſes, nor their tents. The females of the cities are, as in other nations, more addicted to ſhow and finery in dreſs than thoſe of the country; but, as they generally leave the houſe only one day in the week, they ſeldom dreſs themſelves. Not allowed to receive male viſitors, they remain at home employed in their families, and ſo totally in diſhabille, that they often wear only a ſhift, and another coarſer ſhift over that, tied round their waiſt, with their hair plaited, and ſometimes with, though often without, a cap. When dreſſed, they wear a fine linen ſhift, the boſom embroidered in gold; a rich caftan of cloth, ſtuff, or velvet, worked in gold; and one or two folds of gauze, ſtreaked with gold and ſilk, round the head, and tied behind ſo as that the fringes, intermingled with their treſſes, deſcend as low as the waiſt; to which ſome add a ribband of about two inches broad, worked in gold or pearls, that encircles the forehead in form of a diadem. Their caftan is bound round their waiſt by a crimſon velvet girdle, embroidered in gold, with a buckle of gold or ſilver, or elſe a girdle of tamboured ſtuff, manufactured at Fez. The women have yellow ſlippers, and a cuſtom of wearing a kind of ſtocking of fine cloth ſomewhat large, which is tied below the knee and at the ankle, over which it falls in folds. This ſtocking is leſs calculated to ſhow what we call a handſome leg, than to make it appear thick; for to be fat is one of the rules of beauty among the Mooriſh women. To obtain this quality they take infinite pains, and feed when they become thin on a diet ſomewhat like forced-meat balls, a certain quantity of which is given them daily; and in fine, the ſame care is taken among the Moors to fatten young women as is in Europe to fatten fowls.

Among the inhabitants of Morocco there is another claſs, of whom we muſt not omit to make mention. Theſe are the ***Renegadoes***, or foreigners who have renounced their religion for the faith of Mahomet. Of theſe there are a great number who have been originally Jews: they are held in little eſtimation by the Moors; and would be held in abhorrence by the Jews, if they durſt freely expreſs their averſion. The families of theſe apoſtates are called *toornadis:* not having at any time married with the Moors, they ſtill preſerve their ancient characteriſtics, and are known almoſt at ſight to be the progeny of thoſe who formerly embraced the Mahometan religion. The Chriſtian renegadoes are but few; and generally are fugitive peculators of Spain, or men fallen from power, who becauſe of their miſconduct, or in deſpair, quit one unfortunate ſituation for another much more deplorable.

The *Jews* were formerly very numerous in this empire. After being proſcribed in Spain and Portugal, multitudes of them paſſed over to Morocco, and ſpread themſelves through the towns and over the country. By the relations they themſelves give, and by the extent of the places aſſigned them to dwell in, it would appear there were more than 30,000 families, of whom at preſent there is ſcarcely a reſidue of one-twelfth; the remainder either having changed their religion, ſunk under their ſufferings, or fled from the vexations they endured, and the arbitrary taxes and tolls impoſed upon them. The Jews poſſeſs neither lands nor gardens, nor can they enjoy their fruits in tranquillity: they muſt wear only black; and are obliged, when they paſs near moſques, or through ſtreets in which there are ſanctuaries, to walk barefoot. The loweſt among the Moors imagines he has a right to ill-treat a Jew; nor dares the latter defend himſelf, becauſe the koran and the judge are always in favour of the Mahometan. Notwithſtanding this ſtate of oppreſſion, the Jews have many advantages over the Moors: they better underſtand the ſpirit of trade; they act as agents and brokers, and profit by their own cunning and the ignorance of the Moors.

The Mooriſh manufactures are—The haick, which, as was before obſerved, is a long garment compoſed of white wool and cotton, or cotton and ſilk woven together, and is uſed by the Moors for the purpoſe of covering their under dreſs when they go abroad, which they do by totally wrapping themſelves in it in a careleſs but eaſy manner; ſilk handkerchiefs of a particular kind, prepared only at Fez; ſilks checkered with cotton; carpeting, little inferior to that of Turkey; beautiful matting, made of the palmetto or wild palm tree; paper of a coarſe kind; cordovan, commonly called *Morocco leather;* gunpowder of an inferior nature; and long-barrelled muſkets, made of Biſcay iron. The Moors are unacquainted with the mode of caſting cannon: and therefore thoſe few which are now in the country are obtained from Europeans. The manufacture of glaſs is likewiſe unknown to them; as indeed they make great uſe of earthen-ware, and have few or no windows to their houſes, this commodity may be of leſs importance to them than many others. They make butter, by putting the milk into a goat-ſkin, with its outward coat turned inwards, and ſhaking it till the butter collects on the ſides, when it is taken out for uſe. From this operation it proves always full of hairs, and has an inſipid flavour. Their cheeſe conſiſts merely of curds hardened and dried, and has uniformly a diſagreeable taſte. The bread in ſome of the principal towns, particularly at Tangier and Sallee, is good; but in many other places it is coarſe, black, and heavy. Their looms, forges, ploughs, carpenters' tools, &c. are much upon the ſame conſtruction with the unimproved inſtruments of the ſame kind which are uſed at this time in ſome parts of Europe, only ſtill more clumſily finiſhed. In their work, they attend more to ſtrength than neatneſs or convenience; and, like all other ignorant people, they have no idea that what they do is capable of improvement. It is probable, indeed, that the Moors have undergone no very material change ſince the revolution in their arts and ſciences, which took place ſoon after their expulſion from Spain. Previous to that period, it is well known they were an enlightened people, at a time when the greater part of Europe was involved in ignorance and barbariſm; but, owing to the weakneſs and tyrany of their princes, they gradually ſunk into the very oppoſite extreme, and may now be conſidered as but a few degrees removed from a ſavage ſtate.

They are now, as we have already ſaid, a paſtoral people, and their wealth conſiſts in their flocks and herds. The wool of their ſheep is partly employed in their own clothing and carpets, and partly ſold to foreign nations. The wool is of various ſorts; ſome kinds being very coarſe, and others very fine, and particularly that of Tedla. In the empire of Morocco there are few black ſheep. Oxen of a ſmall breed are plentiful; for home-conſumption, the Moors ſalt their beef and preſerve it from year to year; their raw hides are ſent in prodigious quantities to Marſeilles. The camel is an animal of great value and uſe to the Moors; as it is uſed for the purpoſes of agriculture, as well as for travelling; and its fleſh alſo ſerves for food. Mr. Jackſon has given a very animated deſcription of the *heirie*, or camel of the deſert, which we ſhall here preſent to the reader: "Nature, ever provident, and ſeeing the difficulty of communication, from the immenſe tracts of deſert country in Sahara, has afforded the Saharawans a means, upon any emergency, of croſſing the great African deſert in a few days. Mounted upon the deſert-camel (which is in figure ſimilar to the camel of burden, but more elegantly formed), the Arab, with his loins, breaſt, and ears, bound round, to prevent the precuſſion of air proceeding from a quick motion, rapidly traverſes, upon the back of this abſtemious animal, the ſcorching deſert, the fiery atmoſphere of which parches and impedes reſpiration, ſo as almoſt to produce ſuffocation. The motion of the heirie is violent, and can be endured only by thoſe patient, abſtemious, and hardy, Arabs, who are accuſtomed to it. The moſt inferior kind of heirie are called *talatayee*, a term expreſſive of their going the diſtance of three days' journey in one: the next kind is called *ſebayee*, a term appropriated to that which goes ſeven days' journey in one, and this is the general character; there is alſo one called *taſayee*, or the heirie of nine days; theſe are extremely rare." The ſwiftneſs of this uſeful animal is thus deſcribed by the Arabs, in their figurative manner: "When thou ſhalt meet a heirie, and ſay to the rider, *Salem alick*, (Peace be between us,) ere he ſhall have anſwered thee, *Alick ſalem*, (There is peace between us,) he will be afar off, and nearly out of ſight; for his ſwiftneſs is like the wind."

The horſes of Morocco are in general good; and they are taught to endure fatigue, heat, cold, hunger, and thirſt. They are formed for fleetneſs and activity; but the breed is decreaſed, except in Abda, and about Morocco. Mules are much uſed, and the breed is encouraged. Poultry is abundant in Morocco; pigeons are excellent; partridges are plentiful; woodcocks are ſcarce; but ſnipes are numerous in the ſeaſon; the oſtrich is hunted both for ſport and for profit, as its feathers are a conſiderable article of traffic: hares are good; but rabbits are confined to the northern part of the empire from Laracha to

Tetuan. Fallow deer, the roebuck, the antelope, foxes, and other animals of Europe, are not very abundant in Morocco; lions and tigers are not uncommon in ſome parts of the empire: of all the ſpecies of ferocious animals found in this empire, the wild boar is the moſt common: the ſow has ſeveral litters in the year, and her young, which are numerous, ſerve as food for the lion. The ſame varieties of fiſh, that are found in the Mediterranean, are taken on the ſhores of Weſt Barbary.

The religion of the Moors is Mahometiſm, which they very rigidly obſerve. They follow the ſect of Abdallah Melek, who was one of the four commentators on the Koran. Saints and their ſanctuaries are very numerous among the Moors; and they are devoutly invoked by the men for the cure of their diſeaſes, for the fertility of their lands, and for ſucceſs in their undertakings; and by the women for the bleſſing of children. Some of them pretend to have charms againſt wizards, ſorcerers, the poiſon of ſerpents, and other venomous inſects. They even eat ſcorpions. The number of ſaints contributes very much to the increaſe of ſuperſtition among the Moors, of which their deſpotic governors are not at a loſs to avail themſelves. The Moors of the country never fail, after harveſt, to perform a viſit of pilgrimage to the ſaint, whom they highly venerate, carrying their firſt fruits as an expreſſion of homage and gratitude. Their prieſts, their judges, all the learned in the law, every well-informed perſon, together with their ſharifs or nobles, are held by the Moors to be holy; and they extend their veneration even to Chriſtian prieſts. Madmen, idiots, and dotards, are ſuppoſed by theſe people to be poſſeſſed by a divine ſpirit. The ſanctuaries of the ſaints are very numerous, and there are ſome to which large poſſeſſions are annexed. The propenſity of the Moors to ſuperſtition, enthuſiaſm, and fanaticiſm, inſpires them with a veneration for ſuch of their number as have made the pilgrimage to Mecca. Even a camel, that has been at Mecca, is well fed, maintained without work, and allowed to graze freely wherever he ſhall ſtray.

Their moſques, or places of public worſhip, are uſually large ſquare buildings, compoſed of the ſame materials as the houſes. The building conſiſts of broad and lofty piazzas, opening into a ſquare court, in a manner in ſome degree ſimilar to the Royal Exchange of London. In the centre of the court is a large fountain; and a ſmall ſtream ſurrounds the piazzas, where the Moors perform the ceremony of ablution. The court and piazzas are floored with blue-and-white checquered tiling; and the latter are covered with matting, upon which the Moors kneel while repeating their prayers. In the moſt conſpicuous part of the moſque, fronting the eaſt, ſtands a kind of pulpit, where the *talbe,* or prieſt, occaſionally preaches. The Moors always enter this place of worſhip barefooted, leaving their ſlippers at the door. On the top of the moſque is a ſquare ſteeple with a flag-ſtaff, whither at ſtated hours the talbe aſcends, hoiſts a white flag, and calls the people to prayers; for they have no bells. From this high ſituation the voice is heard at a conſiderable diſtance; and the talbes have a monotonous mode of enunciation, the voice ſinking at the end of every ſhort ſentence, which in ſome meaſure reſembles the ſound of a bell. The moment the flag is diſplayed, every perſon forſakes his employment, and goes to prayers. If they are near a moſque, they perform their devotions within it, otherwiſe immediately on the ſpot where they happen to be, and always with their faces towards the eaſt, in honour of their prophet Mahomet, who it is well known was buried at Medina. Their Sabbath is on our Friday, and commences from ſix o'clock the preceding evening. On this day they uſe a blue flag inſtead of the white one. As it has been propheſied that they are to be conquered by the Chriſtians on the Sabbath-day, the gates of all the towns and of the emperor's palaces are ſhut when at divine ſervice on that day, in order to avoid being ſurpriſed during that period.

The Moors have three ſolemn devotional periods in the courſe of the year. The firſt, which is named *Adi de Cabier,* is held in commemoration of the birth of Mahomet. It continues ſeven days; during which period, every perſon who can afford the expenſe kills a ſheep as a ſacrifice, and divides it among his friends. The ſecond is the *Ramadan.* This is held at the ſeaſon when Mahomet diſappeared in his flight from Mecca to Medina Every man is obliged at that period to faſt (that is, to abſtain from animal food from ſunriſe to ſunſet each day) for thirty days; at the expiration of which time a feaſt takes place, and continues a week. The third is named *Llaſhore,* and is a day ſet apart by Mahomet for every perſon to compute the value of his property, in order for the payment of *zakat,* that is, one-tenth of his income, to the poor, and other pious uſes. Although this feaſt only laſts a ſingle day, yet it is celebrated with far greater magnificence than either of the others.

The Moors of the empire of Morocco, as well as thoſe to the northern limits of Africa, ſpeak Arabic; but this language is corrupted in proportion as we retire farther from Aſia, where it firſt took birth; the intermixture which has happened among the African nations, and the frequent tranſmigrations of the Moors, during a ſucceſſion of ages, have occaſioned them to loſe the purity of the Arabic language; its pronunciation has been vitiated, the uſe of many words loſt, and other foreign words have been introduced without thereby rendering it more copious; the pronunciation of the Africans, however, is ſofter to the ear and leſs guttural than that of the Egyptians. The language, when written, is in effect much the ſame at Morocco as at Cairo, except that there are letters and expreſſions among the Moors which differ from thoſe of the Oriental Arabs, who, however, underſtand the Moors in converſation, notwithſtanding their vitiated manner of pronouncing. They mutually read each other's writings with ſome difficulty.

As to the ſtate of knowledge among the Moors, much cannot be ſaid in commendation of it. Deriving their language and religion from the Arabs, they ſeem not in any degree to have participated of their knowledge. The Moors of this empire, though the Moors of Spain blended with thoſe of Morocco may be found among their progenitors, have preſerved no traces of the genius of their anceſtors. The Moors have no conception of the ſpeculative ſciences: thoſe among them who can read, and their number is very ſmall, ſeldom read any thing but their books of religion. Education conſiſts merely in learning to read and write; and, as the revenues of the learned are derived from thoſe talents, the prieſts and talbes among them are the ſole depoſitories of this ſcanty knowledge. The Moors, like the Arabs, adopt the practice of rhyming and ſinging the hiſtory of any extraordinary event. The Moors of Spain paid particular attention to the ſtudy of phyſic and aſtronomy, and they have left valuable monuments of their ſkill and attainments; but the modern Moors are much degenerated: they have no inclination to the ſtudy of ſcience, and they are ſhamefully ignorant both of diſeaſes and their remedies. Their moſt common phyſicians are their talbes, their fakirs, and their ſaints, in whom they repoſe a ſuperſtitious confidence. Aſtronomy is almoſt unknown to the Moors: although they lead a kind of wandering life, with the canopy of the heavens always open to their view, they have little acquaintance with the celeſtial bodies; and they are totally unable to calculate eclipſes, which they always interpret to portend evil. However, magic, the companion of aſtrology, has here its followers; and it is particularly ſtudied by the talbes in the ſouthern parts, who ſucceſsfully uſe it in impoſing upon Mooriſh credulity with ſtrange dreams, and ambiguous forebodings and predictions.

Perſonal cleanlineſs has been conſidered as one of thoſe circumſtances which ſerve to mark and determine the civilization of a people. It was in vain that Mahomet enjoined the frequency of ablution as a religious duty to the Moors. Their dreſs, which ſhould be white, is but ſeldom waſhed; and their whole appearance evinces that they perform this branch of their religious ceremonies in but a ſlovenly manner. With this degree of negligence as to their perſons, we may be juſtly ſurpriſed to find united a moſt ſcrupulous nicety in their habitations and apartments. They enter their chambers barefooted, and cannot bear the ſlighteſt degree of contamination near the place where they are ſeated. This delicacy again is much confined to the inſides of their houſes. The ſtreets receive the whole of their rubbiſh and filth; and by theſe means the ground is ſo raiſed in moſt parts of the city of Morocco, that the new buildings always ſtand conſiderably higher than the old.

With reſpect to the hours for eating, the people of this country are remarkably regular. Very ſoon after daybreak they take their breakfaſt, which is generally a compoſition of flour and water boiled thin, together with an herb which gives it a yellow tinge. The male part of the family eat in one apartment, and the female in another. The children are not permitted to eat with their parents, but take their meals afterwards with the ſervants; indeed in moſt other reſpects they are treated exactly as ſervants or ſlaves by their parents. The meſs is put into an earthen bowl, and brought in upon a round wooden tray. It is placed in the centre of the gueſts, who ſit croſs-legged either on a mat or on the floor, and who form a circle for the purpoſe. Having previouſly waſhed themſelves, a ceremony always performed before and after meals, each perſon with his ſpoon attacks the bowl, while they diverſify the entertainment by eating with it fruit or bread. At twelve o'clock they dine, performing the ſame ceremonies as at breakfaſt. For dinner, from the emperor down to the peaſant, their diſh is univerſally *cooſcooſoo*, the mode of preparing which has been already deſcribed. This diſh is brought in upon a round tray and placed on the floor, round which the family ſit as at breakfaſt, and with their fingers commit a violent aſſault on its contents: they are at the ſame time, however, attended by a ſlave or domeſtic, who preſents them with water and a towel occaſionally to waſh their hands. From the want of the ſimple and convenient invention of knives and forks, it is not uncommon in this country to ſee three or four people pulling to pieces the ſame piece of meat, and afterwards with their fingers ſtirring up the paſte, or *cooſcooſoo*, of which they often take a whole handful at once into their mouth. We have often, in our own country, ſeen children feed themſelves in the ſame primitive, ſimple, and original, manner. At ſunſet they ſup upon the ſame diſh; and indeed ſupper is their principal meal.

But the common people muſt content themſelves with a little bread and fruit inſtead of animal food, and ſleep in the open ſtreets. This kind of exiſtence ſeems ill calculated to endure even in an inactive ſtate; far more ſevere muſt it therefore be to thoſe who exerciſe the laborious employment of *couriers* in this country, who travel on foot a journey of three or four hundred miles at the rate of thirty or forty miles a-day, without taking any other nouriſhment than a little bread, a few figs, and ſome water, and who have no better ſhelter at night than a tree. It is wonderful with what alacrity and perſeverance theſe people perform the moſt fatiguing journeys at all ſeaſons of the year. There is a regular company of them in every town, who are ready to be diſpatched at a moment's warning to any part of the country their employers may have occaſion to ſend them.

As the Moors are not fond of admitting men into their houſes except upon particular occaſions, if the weather be fine they place a mat, and ſometimes a carpet, on the ground before their door, ſeat themſelves upon it croſs-legged, and receive their friends, who form a circle, ſitting in the ſame manner, with their attendants on the outſide of the groupe. Upon theſe occaſions they either drink tea or ſmoke. The ſtreets are ſometimes crowded with parties of this kind; ſome engaged in playing at cheſs or draughts, at which they are very expert; but the majority in converſation. The people of this country, indeed, are ſo decidedly averſe to ſtanding up or walking about, that, if only two or three people meet, they ſquat themſelves down in the firſt clean place they can find, if the converſation is to hold but a few minutes.

The Moors have in general but few amuſements; the ſedentary life they lead in cities is little varied, except by the care they take of their gardens, which however are kept rather for profit than pleaſure. Moſt of theſe gardens are planted with the orange, the lemon-tree, and the cedar, in rows, and in ſuch great quantities, that the appearance is rather that of a foreſt than of a garden. The Moors ſometimes, though rarely, have muſic in their retreats: a ſtate of ſlavery but ill agrees with the love of pleaſure: the people of Fez alone, either from a difference in education, or becauſe their organs and ſenſibility are more delicate, make muſic a part of their amuſements. There are not in Morocco, as in Turkey, public coffee-houſes, where people meet to inquire the news of the day; but, inſtead of theſe, the Moors go to the barbers' ſhops, which in all countries ſeem to be the rendezvous of newſmongers.

A common diverſion in the towns where there are ſoldiers, as well as in the country, is what the Moors call the *game of gunpowder*; a kind of military exerciſe, that is the more pleaſing to theſe people, inaſmuch as, by the nature of their government, they all are, or are liable to become, ſoldiers, therefore all have arms and horſes. By exploſions of powder, too, they manifeſt their feſtivity on their holidays. Their game of gunpowder conſiſts in two bodies of horſe, each at a diſtance from the other, galloping in ſucceſſive parties of four and four, and firing their pieces charged with powder. Their chief art is in galloping up to the oppoſite detachment, ſuddenly ſtopping, firing their muſkets, facing about, charging, and returning to the attack; all which manœuvres are imitated by their opponents. The Moors take great pleaſure in this amuſement, which is only an imitation of their military evolutions.

The Moors marry very young, many of their females not being more than twelve years of age at their nuptials. As Mahometans, it is well known that their religion admits of polygamy to the extent of four wives, and as many concubines as they pleaſe; but, if we except the very opulent, the people ſeldom avail themſelves of this indulgence.

In ſome caſes the huſband receives no portion with his wife, but pays for her; but it is moſt common for the parents to give a portion with the bride. If ſhe be repudiated, the huſband reſtores it two-fold: if the huſband die, the wife recovers her portion, and the eighth part of his effects. The children of the wives have all equal claim to the effects of the parents; thoſe of the concubines can only claim half a ſhare. As women are not admitted into the ſociety of men, young perſons do not marry here for love, but for convenience; the relations form the contract, and ſettle the terms of it. The purity of the bride at the time of marriage is much regarded, and proofs of it are required and publicly exhibited.

Women ſuffer but little inconvenience in this country from child-bearing; they are frequently up the next day, and go through all the duties of the houſe with the infant upon their backs. In celebrating the rite of circumciſion, the child is dreſſed very ſumptuouſly, and carried on a mule, or, if the parents are in poor circumſtances, on an aſs, accompanied with flags flying and muſicians playing on hautboys and beating drums. In this manner they proceed to the moſque, where the ceremony is performed. Children, as ſoon as they can be made in the leaſt degree uſeful, are put to the various kinds of labour adapted to their age and ſtrength. Others, whoſe parents are in better circumſtances, are ſometimes ſent to ſchool; and thoſe who are intended for the church uſually continue their ſtudies till they have nearly learnt the Koran by rote. In that caſe they are enrolled among the *talbes*, or learned men of the law; and upon leaving ſchool are paraded round the ſtreets on a horſe, accompanied by muſic and a large concourſe of people.

At their funerals, a certain number of women are hired for the purpoſe of lamentation; in the performance of which, nothing can be more grating to the ear, or more unpleaſant, than their frightful moans, or rather howlings: at the ſame time, theſe mercenary mourners beat their heads and breaſts, and tear their cheeks with their nails. The bodies are uſually buried a few hours after death. Previous to interment, the corpſe is waſhed very clean, and ſewed up in a ſhroud, with the right hand under the head, which is pointed towards Mecca: it is carried on a bier ſupported upon men's ſhoulders, to the burying-place, which is always, with great propriety, on the outſide of the town; for they never bury their dead in the moſques, or within the bounds of an inhabited place.

The people of this empire, being born ſubjects of an arbitrary deſpot, may be ſaid to have no eſtabliſhed laws. They know no other than the will of the prince; and, if this ſhould deviate, as it ſometimes does, from the moral principles laid down in the Koran, it muſt be obeyed. Where the emperor reſides, he adminiſters juſtice, in perſon, generally twice, and ſometimes four times, a-week, in the *meſhoire*, or place of audience, whither all complaints are carried. Here acceſs is eaſy; he liſtens to every one, foreigners or ſubjects, men or women, rich or poor. There is no diſtinction; every one has a right to appear before him, and boldly to explain the nature of his caſe; and, although his perſon is conſidered as ſacred, and eſtabliſhed cuſtom obliges the ſubject to proſtrate himſelf, and to pay him rather adoration than reſpect, yet every complainant may tell his ſtory without the leaſt heſitation or timidity. Indeed, if any one is abaſhed, or appears diffident, his cauſe is weakened in proportion. Judgment is always prompt, deciſive, plauſible, and generally correct. In places remote from the emperor's court, the caliph, vice-regent, or baſhaw, has his meſhoire, where he adminiſters juſtice, ſometimes according to the laws of the Koran, and, at others, as his caprice dictates; for the ſame imperious deſpotiſm which the emperor too frequently exerciſes over his baſhaws and alcaids, is exerciſed by them over thoſe who fall under their government; and the ſame is done again by their ſubalterns, when they have it in their power. Thus tyranny proceeds progreſſively from the prince to the loweſt of his officers. Theſe petty tyrants are diſperſed over the whole empire, and often give ſanction to their extortions, by effecting them in the name of their maſter. The accumulation of wealth is the grand object of all their deſires. When they learn from their emiſſaries or ſpies that an individual has acquired conſiderable property, they contrive to find out ſome cauſe of accuſation againſt him, and by that means extort money from him. It often happens, however, that thoſe who amaſs the greateſt ſums in this way enjoy them but a very ſhort time. Some unexpected order from the emperor, accuſing them of crimes or miſdemeanors, is made a pretext for depriving them, in their turn, of their ill-gotten wealth, which his majeſty never fails to inform them can be of no uſe to them, being more than ſufficient to procure the neceſſaries of life, and ought therefore to belong to the Mahometan treaſury, into which it is accordingly delivered, never more to return to its former poſſeſſor! The influence of this mode of government upon the people, is ſuch as might naturally be expected. They are ſuſpicious, deceitful, and cruel. They have no reſpect for their neighbours, but will plunder one another, whenever it is in their power. They are ſtrangers to every ſocial tie and affection; for their hearts are ſcarcely ſuſceptible of one tender impreſſion. The father fears the ſon, the ſon the father; and this lamentable miſtruſt and want of confidence diffuſes itſelf throughout the whole community."

The wretched condition of theſe people does not prevent them from being proud and inſolent beyond all other nations. The people of ancient Greece did not more profoundly contemn all foreigners, than the Moors do the moſt enlightened Europeans. The word, indeed, which ſignifies European, *Agein*, is ſynonymous with *Barbarian*. Nevertheleſs, they deſpiſe renegadoes more than even the unconverted. A change of religion, whether to or from Iſlamiſm, is, in their eyes, beyond every thing contemptible. It is ſingular to find ſo conſiderable a degree of toleration among ſuch a people. The emperor of Morocco, it ſeems, will allow any ſect not worſhipping a plurality of gods, to have in his dominions places of public worſhip. There are, in conſequence of this permiſſion, Roman-catholic eſtabliſhments at Morocco, Mequinez, Tangiers, and Mogador. The maxim even of the moſt ignorant and bigotted of the people is, that every man ſhould be allowed to worſhip God according to his own conſcience, or agreeably to the religion of his anceſtors. Certainly theſe Muſſulmans have a good right, in one particular at leaſt, to conſider ſome Europeans, ſome followers of the religion of peace, nay, ſome of the moſt enlightened among them, as barbarians.

Mr. Jackſon, though far from being partial to the Moors, allows that they have one noble trait of character, fortitude under misfortune. "This, ſays he, "the Moor poſſeſſes in an eminent degree: he never deſpairs; no bodily ſuffering, no calamity, however great, will make him complain: he is reſigned in all things to the will of God, and waits in patient hope for an amelioration of his condition. In illuſtration of this, I will take the liberty to relate the following anecdote, as it will alſo tend to ſhow the great riſks to which merchants are expoſed in traverſing this country. A Fez merchant (with whom I had conſiderable tranſactions) went with all his property, on a commercial ſpeculation, from Fez to Tombuctoo; and, after remaining at the latter place a ſufficient time to diſpoſe of and barter his effects for gold duſt and gum of Soudan, he ſet out on his return to Fez. After paſſing the Deſert, he began to congratulate himſelf on his good fortune and great ſucceſs, when ſuddenly a party of Arabs attacked the caravan, and plundered all who belonged to it, leaving the merchant deſtitute of every thing but the clothes he had on his back. During the interregnum, between the death of the ſultan Yezzid and the proclamation of the preſent ſultan Soliman, this man was plundered again on his way to Mogador, whither he was going to diſcharge ſome debts, and to diſpoſe of gum and other Soudanic produce. Four wives and a numerous family of children rendered his caſe peculiarly diſtreſſing; yet, when condoling with him a few days after his misfortunes had happened, he very patiently obſerved; What remedy is there? God willed it ſo, and there is none but God. This man afterwards collected together what merchandiſe he could procure on credit, and proceeded again to Tombuctoo, where he realized much property; and, travelling therewith through Wangara and Houſſa to Egypt, he was plundered a third time of all he poſſeſſed, near Cairo, and reduced to the greateſt diſtreſs: this laſt miſfortune he bore with the ſame fortitude as the former. He is now, however, one of the principal merchants eſtabliſhed at Tombuctoo."

We have already noticed the ſtate of the government; and may now add, that the Moors are all equal by birth, knowing no diſtinctions of rank, except ſuch as office beſtows; and all office flows from the emperor, and is held at his will. His pleaſure may thus raiſe a perſon from the duſt to the higheſt rank in the ſtate: and, in a moment, ſink the firſt man in the country to the loweſt level. Mr. Jackſon mentions a peculiar etiquette of the emperor's court, which we do not remember to have met with in the hiſtory of any other deſpotic country. The word *death*, it ſeems, may not be pronounced in the imperial preſence; ſo that, if it is neceſſary to inform the prince that any one is dead, it is done by a circumlocution, “He has completed his deſtiny;” to which the reply is, “God be merciful to him.” Moors, in announcing to each other a Jew's death, ſay, *Maat bel karan*, “The ſon of a cuckold is dead.” Of a Chriſtian, who bore a good character, they ſay, *Maat meſquin*, “The inoffenſive or negative man is dead;” if he was diſliked, *Maat el Kafper*, “The infidel (Caffre) is dead.”

As to the ancient commerce of this country, we can find no certain or ſatisfactory report. It is probable, however, that the Carthaginians, who were an enlightened and induſtrious people, and who governed parts of Africa and eſtabliſhed ſettlements on its coaſt, muſt have conſtituted caravans to exchange their products for the gold and other productions of interior Africa. The progreſs which navigation made, in the fourteenth and fifteenth centuries, muſt have conſiderably affected the commerce of Africa, and have inſenſibly attracted it from the centre towards the ſea-coaſt, on the weſt, which approaches the equator, and where the French, Portugueſe, Dutch, and Engliſh, each emulative of the other, have ſucceſſively formed eſtabliſhments. The great rivers of Africa, which empty themſelves in thoſe ſeas, united its utmoſt boundaries; and the ports of Europe then received gold-duſt, ivory, ambergris, Guinea pepper, and other productions, of inland Africa; the excluſive enjoyment of which had, till that time, been confined to the bordering nations, and even to them became objects of luxury. After the deſtruction of Carthage and Rome, the Moors, having had no intercourſe of a commercial nature with Europe till towards the fourteenth century, muſt have confined their trade to the more central nations of Africa, with which they reſpectively interchanged their products. There they probably vended their merchandiſe of woollen-ſtuffs, ſheep-ſkins, cloth, corn, ſalt, and dried fruits. In exchange for theſe they obtained gold-duſt, ivory, Guinea pepper, and ſlaves. Such was, probably, the firſt ſource of the wealth of the empire of Morocco. The Moors on the confines of Africa might ſtill poſſeſs nearly the ſame reſources, if they had the ſame facility of communication. Thoſe of Morocco, whoſe ſituation is more central, have, perhaps, profited the leaſt by them during the three laſt centuries, either on account of the frequent revolutions which their empire has undergone, or becauſe their deſpotic government has ſo entirely ſhackled trade and induſtry.

As for the preſent ſtate of commerce, the exports, as may very naturally be ſuppoſed, conſiſt almoſt entirely of raw produce, gums, fruits, bees-wax, ivory, &c. Of theſe, the value exported from Mogador in 1804, did not exceed 128,000l. freight and duty included. The imports are manufactures, as woollen and cotton cloths, hardware, and ſome colonial produce; and in the ſame year, there were imported into Mogador about 150,000l. worth of ſuch articles. The traffic of the other ports is very trifling. Ceuta and Tangiers export proviſions to Gibraltar; and theſe, as well as a few other towns on the coaſt, uſed to carry on a conſiderable corn-trade before the acceſſion of the preſent emperor, who has prohibited the exportation of grain. The whole foreign trade of the empire, therefore, is very limited; and Mr. Jackſon, who ſeems greatly to overrate the importance of a more intimate connexion with Weſt Barbary, aſcribes the declining ſtate of the commerce to the miſmanagement of the Engliſh government in its intercourſe with that of Morocco. Our conſuls never underſtand Arabic; they muſt converſe with the emperor, or his miniſters, through the medium of an ignorant Jew interpreter, who is always an object of contempt, and for the moſt part deſerves no confidence. With ſuch negociators, it cannot be expected that the Mooriſh court ſhould communicate freely. There is, moreover, a marked inattention to this ſubject on the part of our government, which Mr. Jackſon complains of with ſome appearance of juſtice; for he relates, that when the emperor of Morocco lately (1809) wrote a moſt friendly latter to the king of England, it was ſuffered to lie in the ſecretary of ſtate's office for ſome months, without any notice being taken of its contents, to the great indignation of his imperial majeſty. At laſt, the circumſtance having come to the knowledge of the chancellor of the exchequer, he applied to Mr. Jackſon to tranſlate the letter. The reſult is not mentioned.

Another neglect of the Britiſh government, ariſing in a great meaſure out of the former, is pointed out in a ſtriking manner by Mr. Jackſon. The crews of the veſſels wrecked on the Barbary coaſt, are, as is well known, after being plundered, carried away and ſold as ſlaves by the Arabs. In ſixteen years, ending 1806, ſeventeen Engliſh veſſels are known to have been loſt, and their crews, amounting probably to 200 perſons, have been either killed in the plunder of the wrecks, or diſperſed in captivity in the interior. There muſt, beſides, have been many more, of which no notice ever reached Mogador. The Arabs going nearly in a ſtate of nature, wearing nothing but a cloth or rag to cover their nakedneſs, immediately ſtrip their unhappy victims, and march them up the country, barefooted, like themſelves. The feet of the Europeans, from their not being accuſtomed, like the Arabs, to this mode of travelling, ſoon begin to ſwell with the heat of the burning ſand over which they paſs. The Arab, conſidering only his booty, does not give himſelf the trouble to enquire into the cauſe of this; but, abſtemious and unexhauſted himſelf, he conceives his unfortunate captive will, by dint of fatigue and travelling, becomes ſo too. In theſe marches the Europeans ſuffer the pains of fatigue and hunger in a moſt dreadful degree; for the Arab will go fifty miles a-day without taſting food, and at night will content himſelf with a little barley-meal mixed with cold water; miſerable fare for an Engliſh ſeaman, who (to uſe the term that is applied to the richeſt men among the Arabs) eats meat every day! They carry the Chriſtian captives about the Deſert, to the different markets to ſell them, for they very ſoon diſcover that their habits of life render them altogether unſerviceable, or very inferior to the black ſlaves which they procure from Tombuctoo. After travelling three days to one market, five to another, nay ſometimes fourteen, they at length become objects of commercial ſpeculation, and the itinerant Jew traders, who wander about from Wedinoon to ſell their wares, find means to barter for them tobacco, ſalt, a cloth garment, or any other thing, juſt as a combination of circumſtances may offer, and then return to Wedinoon with the purchaſe. If the Jew have a correſpondent at Mogador, he writes to him, that a ſhip had been wrecked, mentioning the flag or nation ſhe belonged to, and requeſts him to inform the agent, or conſul, of the nation of which the captain is a ſubject; in the mean time flattering the poor men, that they will ſhortly be liberated and ſent to Mogador, where they will meet their countrymen. A long and tedious ſervitude, however, generally follows, for want of a regular fund at Mogador for the redemption of theſe people. The agent can do nothing but write to the conſul-general at Tangier; this takes up nearly a month, before an anſwer is received, and the merchants at Mogador, being ſo little protected by their reſpective governments, and having various immediate uſes for their money, are very unwilling to advance for the European intereſt of 5 per cent. ſo that the time loſt in writing to the government of the country to whom the unfortunate captives belong, the neceſſity of procuring the money for their purchaſe previous to their emancipation, and various other circumſtances, form impediments to their liberation. “I knew an inſtance, (ſays Mr. Jackſon,) where a merchant had advanced the money for one of theſe captives, who, had his ranſom not been paid, would have been obliged to return to the ſouth, where he would have been ſold, or compelled to embrace the Mahometan religion; for the Britiſh vice-conſul had not the purchaſe-money, nor any orders to redeem him, having previouſly ſent to the conſul-general an account of the purchaſe of the reſt of the crew. This man was delivered up, by the merchant who had redeemed him, to the Britiſh vice-conſul, to whom he looked for payment. Various applications were made to the conſul-general; but the money was not paid two years afterwards, all applications to government having failed. A repreſentation of the caſe was next made to the Ironmongers' Company in London, who poſſeſs a fund which has been eſtabliſhed ever ſince the year 1724, for the redemption of Britiſh ſlaves in Turkey and Barbary; who, after deliberating on the matter, agreed to pay the merchant the money he had advanced. (See the article LONDON, vol. xiii. p. 605.) The purchaſe-money, in this caſe, including the coſt of clothes, (for the man was naked when purchaſed), did not amount altogether to forty pounds. There was, however, ſo much trouble attending the accompliſhment of the buſineſs, that no individual merchant has ſince ventured to make an advance on a ſimilar ſecurity; for, not to mention the difficulty of recovering the principal at the expiration of a long period, the value of money is ſuch at Mogador, that merchants are unwilling to advance it at a low intereſt, 6 per cent. per month being often paid for it.

Of the 200 perſons above mentioned, as compoſing the crews of ſhipwrecked veſſels, Mr. Jackſon eſtimates, that 40 continued unredeemed among the Arabs, in conſequence of no offers having been made for them by the conſuls; and that 80 were redeemed, after a tedious captivity, ſometimes of five years. The remaining 80 were either killed at firſt, or induced to embrace the Mahometan religion. The remedy for this great evil is pointed out by him as follows: "If any nation of Europe ought to enquire into the mode of remedying this evil, it is certainly Great Britain, whoſe influence at the court of Morocco might be made very conſiderable and advantageous to the country. A trifling ſum would be ſufficient at Mogador, if depoſited in the hands of the vice-conſul, or any merchant of reſpectability, where it might remain ready to be employed in the purchaſe of theſe unfortunate people; and, by allowing a ſum rather above the price of a black ſlave, the Arabs would immediately bring them to Mogador, knowing they could depend on an adequate price. By this means, they might be procured for half what they now coſt; and it would be an infinitely better plan, than that of ſoliciting the emperor to procure them through the baſhaw of Suſe; for, beſides the delay, and conſequent protracted ſufferings of the captives, the favour is conſidered by the emperor as incalculably more than the coſt and charges of their purchaſe. It is generally a month or two before the news of a ſhipwreck reaches Mogador, at which time, if a fund were there depoſited, a hundred and fifty dollars would be ſufficient to purchaſe each man; yet, often from the ſcarcity of ſpecie, and the various demands which the merchants have for their money, they have it not in their power (however charitably diſpoſed) to redeem theſe poor men; and, if they do, it is at their own riſk; and they muſt wait to know if the government chooſes to reimburſe their expenſes." As a further proof of the practicability of eſtabliſhing an advantageous alliance with the preſent emperor, it ſhould be here obſerved, that his predeceſſors often obliged the Engliſh to ſend an ambaſſador with preſents, &c. to ſolicit the liberation of Britiſh ſeamen; but Muley Soliman, the preſent emperor, gives them up to the Britiſh conſul, without exacting this.

If we except ſome trifling barter, the ſafety of the ſea has been the principal cauſe why the nations of Europe have made treaties with the emperor of Morocco. England is the firſt power which concluded treaties of friendſhip and commerce with the emperors of this country. Poſſeſſing Tangiers, ceded to her by Portugal in 1662, an intercourſe ſubſiſted between England and Morocco; but it was often interrupted by the caprices of Muley Iſhmael. At the commencement of the laſt century, a treaty of peace was renewed under George I. After the death of Muley Iſhmael this treaty was confirmed, and renewed in 1728 by Muley Achmet Daiby, and a little time after by Muley Abdallah. The Engliſh have long maintained a trade on the coaſt of this empire, where they ſell coarſe cloths, ſerges, linens, pewter, lead, mercers' commodities, and the iron which their ſhips bring from Biſcay. In return they receive ſometimes oils, gums, wax, elephants' teeth; and have often ſent, in French bottoms, to Marſeilles, oils, raw hides, and wool. Before the American war had ſeparated America from England, they alſo exported a number of mules to North America.

In 1732 an ambaſſador was ſent by Muley Abdallah into Holland, and the republic then made its peace with that emperor; but ſubſequent revolutions gave little ſtability to that treaty. Holland was the firſt power that renewed treaties of peace with Sidi Mahomet; but this emperor afterwards, viz. towards the end of 1774, declared war againſt the Dutch. However, Holland renewed the peace in 1778. Holland afterwards carried on ſome trade with the coaſt of Morocco; and cuſtom has almoſt rendered her importations neceſſary. She there vends quantities of Sileſian linens, called platillas, many of the coarſe linens of the Baltic, and others, ſome few ſpices, drugs, tea, timber, iron of Biſcay, and quantities of the cutlery and mercery wares of Germany. Holland has been uſed to receive from the coaſt of Morocco, in return, ſometimes oils, wax, gums, and elephants' teeth; but, as theſe returns, which ſuit the Dutch merchants, are inſufficient to balance the quantity of merchandiſe they ſend thither, they have almoſt continually profited by the facility with which they can run for the French ports, to ſend oils to Marſeilles, wools, and raw hides, which there find a more ready ſale than in the north. The court of Denmark began to negociate with Sidi Mahomet in 1755. But interruptions occurred, and the Danes could obtain the continuation of peace merely by paying annually the ſum of 25,000 piaſtres. Denmark has not itſelf any trade with that coaſt. The Swedes concluded peace with the emperor of Morocco in 1763, on condition of paying a certain tribute; but in 1771 Guſtavus III. objected to this tribute; and it was at length agreed, that the king of Sweden ſhould ſend an ambaſſador and a preſent once in two years to the emperor of Morocco. The Swedes have no commercial intercourſe with this empire. The republic of Venice made peace with the emperor of Morocco in 1765, on condition of paying an annual tribute of upwards of four hundred thouſand pounds; and, after ſome temporary diſcord, peace was re-eſtabliſhed in 1781. That republic has no commercial intercourſe with Morocco, and therefore, like the courts of Denmark and Sweden, pays this tribute ſolely for the ſafety of navigation. The court of Spain, as well as that of France, made peace with the emperor of Morocco in 1767. But a rupture occurred between Spain and the emperor; and the court of Madrid, deferring to conclude a treaty, was ſatisfied with remaining in a kind of truce. Sidi Mahomet renewed peace with Spain in 1780. Between Portugal and Morocco there is no continued trade; and the intercourſe of the two courts is ſimply confined to teſtimonies of friendſhip: the republic of Genoa enjoyed a kind of truce with the empire of Morocco, wholly unſupported by any treaty. In 1777, the emperor of Morocco, being at peace with the principal commercial nations, granted, by public letters, entire liberty to all ſhips to trade with, and enter, his ports, profeſſing himſelf deſirous of maintaining peace with the whole world. But this declaration produced little effect, and was ſoon counteracted by his own conduct. The United States of America, after ſecuring their independence, wiſhing to profit, during the year 1786, by the pacific diſpoſition which the emperor of Morocco had announced to all commercial nations, concluded a treaty of peace with this monarch. The French have been accuſtomed to vend, on the coaſt of Morocco, much of the linen of Brittany, and of other places, ſome raw ſilks for the manufactures of Fez, unſpun cotton, Biſcay iron, common papers, mercery-goods, ſome few ſilks, cloths, ſugar, and coffee, and as much ſulphur as the emperor requires; and they have received, in exchange, wool, oils, raw hides, gums, and elephants' teeth.

The duties, coins, weights, and meaſures, in Morocco, are almoſt as variable as the opinion of the emperor. The duties both of exportation and importation have been very various, and are entirely arbitrary. The coins, which are current over the coaſt of Morocco, are thoſe of the emperor, and thoſe of Spain. The coins of the emperor are thoſe of gold, ſilver, and copper, which have no fixed value. The gold ducat, which is very ſcarce, and which has little circulation, is worth 15 ounces, correſponding to eight and fourpence Engliſh. The ſilver money is the current ducat, the ounce, and the blanquil. The current ducat is worth 10 ounces, the ounce 4 blanquils, and the blanquil 24 flus. The flus is the only current copper coin. The value of the blanquil is nearly ſeven farthings Engliſh; ſo that the ounce is worth 5s. 6¾d. The Spaniſh piaſtre is current in trade; but, though in general its value is fixed, it may vary according to the convenience of the emperor, and his intereſt in rendering piaſtres ſcarce or common. The weights by which they buy and ſell in Morocco are equivalent to the old weights of Paris, the poids de marc, or pound of 16 ounces; the ſubdiviſions of which are in both places the ſame. Merchandiſe is generally ſold by the quintal of 100 pounds; but ſome commodities are ſold by the great quintal, or 150 pounds. Corn is meaſured along the coaſt of Morocco in different ways. In the ſouthern provinces, known by the name of the kingdom of Morocco, wheat is ſold by the garara and the mood. The garara contains 40 mood, and the mood weighs from 18 to 20 pounds; ſo that the garara muſt be nearly 8 cwt. The corn-meaſures, however, are liable to variation according to the will of the emperor. The meaſure by which cloths, linen, and woollen, are ſold, is called *coode*, which is the cubit of the ancients. The coode contains 19 inches four lines; and, as the French ell is 44 inches, 2¼ coodes are nearly equal to an ell.

The military eſtabliſhment of the empire of Morocco is the reſult of a ſucceſſion of accidental circumſtances. Some few years ago, 50,000 negroes were kept in pay in Morocco; but, with views of economy, the emperor diſarmed and diſbanded them; and now the total amount does not exceed more than between 15 and 18,000 men, who are kept in conſtant pay; and even ſome of thoſe are ſent into diſtant provinces, to protect the tax-gatherers. Nevertheleſs, moſt of the Moors are ſoldiers; as each keeps a horſe, a ſabre, and a muſket, and they are ready to march at the firſt warrant of the monarch. Although the population of this empire bears but a ſmall proportion to its extent, the emperor might with great eaſe raiſe from 2 to 300,000 men, if ſuch a force were found to be neceſſary. The emperor has few infantry, the chief force of his army conſiſting of cavalry. The Moors are good horſemen, and capable of being good ſoldiers, though not actually formed for this purpoſe. Armies among the Moors are uſually drawn up in a creſcent, the ſtrength of which is in the centre, and here the artillery is placed; and their whole art of attack conſiſts in acting with the detachments of the two extremities, ſo as to ſurround the enemy, put him between two fires, and at the ſame time expoſe him to be cannonaded by the artillery. The emperor has of late procured more than 60 mortars of various dimenſions, and above 200 pieces of artillery; and he has exerciſed ſome perſons in the art of gunnery. The muſquets are forged in the empire of Morocco of iron procured from Biſcay; they are about 6½ feet long, and are ſo much loaded with iron as to fatigue the ſoldier. Their ſabres are alſo manufactured in Morocco of Biſcay iron. Gunpowder is likewiſe made in this empire.

The revenues of the emperor of Morocco cannot be eaſily eſtimated, as they entirely depend on his will. In the preſent exhauſted ſtate of the empire, the various taxes united are ſcarcely ſufficient for its own ſupport; and the treaſury of the emperor, which was formerly very conſiderable, was reduced in 1782 to about two millions of ducats, or about five hundred thouſand pounds ſterling. Such is the ſtate of an empire which nature has enriched with her gifts, and which, after having been laid deſolate by the conflicting paſſions of man, is at preſent ſcarcely ſufficient to ſupply his wants.

Various and contradictory ſtatements have been made by travellers of the population of this country. Mr. Jackſon has collected from the beſt ſources of information to which he could have acceſs a variety of particulars, from which we deduce the following general reſults. The total population of the principal towns, which he enumerates, is ſtated at 895,600: that of the provinces and ſtates, alſo ſpecified, is given at 10,341,000; and the total is as follows: the tribes of the Brebes of North Atlas alltogether amount to 3,000,000; the diſtrict of Tafilet contains 650,000; the provinces of the Morocco empire, weſt of Atlas, include 10,341,000; and the inland cities, towns, and ports, contain 895,600; ſo that the total population of the whole empire, including Tafilet, amounts to 14,886,600 perſons. We very much fear that theſe calculations are not to be depended upon, and that the numbers are greatly exaggerated. Yet the accounts of other writers are to be depended on as little; and the following compariſon of population, as given by three travellers, is exhibited as a curious ſpecimen of ſtatiſtical accuracy:

	Morocco.	Fez.	Mequinez.	Of all the Towns.
Dr. Buffa	650,000	—	—	—
Jackſon	270,000	380,000	110,000	895,600
Jardine	20,000	30,000	15,000	120,000

MOROC'CO, a city of the kingdom of Morocco, in Barbary, lying about 120 miles to the north of Tarudant, 90 to the eaſt of Mogadore, and 350 to the ſouth of Tangier. It is ſituated in a beautiful valley, formed by a chain of mountains on the northern ſide, and thoſe of Atlas, from which it is diſtant about 20 miles, on the ſouth and eaſt. The country which immediately ſurrounds it is a fertile plain, beautifully diverſified with clumps of palm-trees and ſhrubs, and watered by ſmall and numerous ſtreams which deſcend from Mount Atlas. The emperor's out-gardens, which are ſituated at the diſtance of about five miles to the ſouth of the city, and are large plantations of olives walled in, add conſiderably to the beauty of the ſcene.

Morocco, though one of the capitals of the empire (for there are three, Morocco, Mequinez, and Fez), has nothing to recommend it but its great extent and the royal palace. It is encloſed by remarkably-ſtrong walls built of *tabby*, a mixture of ſtone and mortar, which becomes as hard as a rock, the circumference of which is about eight miles. On theſe walls there are no guns mounted; but they are flanked with ſquare towers, and ſurrounded by a wide and deep ditch. The city has a number of entrances, conſiſting of large double porches of tabby in the Gothic ſtyle, the gates of which are regularly ſhut every night at certain hours. The moſques, which are the only public buildings except the palace worth noticing at Morocco, are more numerous than magnificent; one of them is ornamented with a very high and ſquare tower, built of cut ſtone, which is viſible at a conſiderable diſtance from the city. The ſtreets are very narrow, dirty, and irregular, and many of the houſes are uninhabited and falling to ruin. Thoſe which are decent and reſpectable in their appearance are built of tabby, and encloſed in gardens. That of the effendi, or prime miniſter, (according to Mr. Lempriere,) was among the beſt in Morocco. This houſe, which conſiſted of two ſtories, had elegant apartments both above and below, furniſhed in a ſtyle far ſuperior to any thing our author ever ſaw in that country. The court, into which the lower apartments opened, was very neatly paved with glazed blue-and-white tiling, and had in its centre a beautiful fountain. The upper apartments were connected together by a broad gallery, the baluſters of which were painted of different colours. The hot and cold baths were very large, and had every convenience which art could afford. Into the garden, which was laid out in a tolerably-neat ſtyle, opened a room adjoining to the houſe, which had a broad arched entrance but no door, beautifully ornamented with chequered tiling; and at both ends of the apartment the walls were entirely covered with looking-glaſs. The flooring of all the rooms was covered with beautiful carpeting, the walls ornamented with large and valuable looking-glaſſes, intermixed with watches and clocks in glaſs caſes. The ceiling was carved wood-work, painted of different colours; and the whole was in a ſuperior ſtyle of Mooriſh grandeur. This and a few others are the only decent habitations in Morocco. The generality of them ſerve only to impreſs the traveller with the idea of a miſerable and deſerted city.

The Kaſſaria is a particular part of the town where ſtuffs and other valuable articles are expoſed to ſale. It conſiſts of a number of ſmall ſhops, formed in the walls of the houſes, about a yard from the ground, of ſuch a height within as juſt to admit a man to ſit in one of them croſs-legged. The goods and drawers are ſo arranged round him, that, when he ſerves his cuſtomers, who are ſtanding all the time out in the ſtreet, he can reach down any article he wants without being under the neceſſity of moving. Theſe ſhops, which are found in all the other towns of the empire, are ſufficient to afford a ſtriking example of the indolence of the Moors. There are three daily markets in differents parts of the town of Morocco where proviſions are ſold, and two weekly fairs or markets for the diſpoſal of cattle. The city is ſupplied with water by means of wooden pipes connected with the neighbouring ſtreams, which empty themſelves into reſervoirs placed for the purpoſe in the ſuburbs, and ſome few in the centre of the town.

The caſtle is a large and ruinous building, the outer walls of which encloſe a ſpace of ground about three miles in circumference. It has a moſque, on the top of which are three large balls, formed, as the Moors allege, of ſolid gold, and weighing 1205lbs. avoirdupois. The caſtle is almoſt a town of itſelf; it contains a number of inhabitants, who in ſome department or other are in the ſervice of the emperor, and all under the direction of a particular alcaide, who is quite independent of the governor of the town. On the outſide of the caſtle, between the Mooriſh town and the Jewdry, are ſeveral ſmall diſtinct pavilions, encloſed in gardens of orange-trees, which are intended as occaſional places of reſidence for ſuch of the emperor's ſons or brothers as happen to be at Morocco. As they are covered with coloured tiling, they have at a ſmall diſtance rather a neat appearance; but, upon approaching or entering them, that effect in a great meaſure ceaſes.

The Jews, who are at this place pretty numerous, have a ſeparate town to themſelves, walled in, and under the charge of an alcaide, appointed by the emperor. It has two large gates, which are regularly ſhut every evening about nine o'clock; after which time no perſon whatever is permitted to enter or go out of the Jewdry till they are opened again the following morning. The Jews have a market of their own; and, when they enter the Mooriſh town, caſtle, or palace, they are always compelled to be barefooted.

The palace is an ancient building, ſurrounded by a ſquare wall, the height of which nearly excludes from the view of the ſpectator the other buildings. Its principal gates are conſtructed with gothic arches, compoſed of cut ſtone, which conduct to ſeveral open and ſpacious courts; through theſe it is neceſſary to paſs before we reach any of the buildings. Theſe courts were uſed by the late emperor for the purpoſes of tranſacting public buſineſs and exerciſing his troops. The habitable part conſiſts of ſeveral irregular ſquare pavilions, built of tabby, and whitened over; ſome of which communicate with each other, others are diſtinct, and moſt of them receive their names from the different towns of the empire. The principal pavilion is named by the Moors the *douhar*, and is more properly the palace or ſeraglio than any of the others. It conſiſts of the emperor's place of reſidence and the harem, forming all together a building of conſiderable extent. The other pavilions are merely for the purpoſes of pleaſure or buſineſs, and are quite diſtinct from the douhar. The *Mogadore* pavilion, ſo named from the late emperor's partiality to that town, has by far the faireſt claim to grandeur and magnificence. This apartment was the work of Sidi Mahomet, and is lofty and ſquare. It is built of cut-ſtone, handſomely ornamented with windows, and covered with varniſhed tiles of various colours; and its elegance and neatneſs, contraſted altogether with the ſimplicity and irregularity of the other buildings, produce a moſt ſtriking effect. To this pavilion the late emperor manifeſted an excluſive preference, frequently retiring to it both for the purpoſe of buſineſs and of recreation. The apartments of the emperor have in general a much ſmaller complement of furniture than thoſe of the Moors in the inferior walks of life. Handſome carpeting, a mattreſs on the ground covered with fine linen, a couch, and a couple of European bedſteads, are the principal articles they contain. The gardens within the walls of the palace, of which he has ſeveral, are very neat; they contain orange and olive trees, variouſly diſpoſed and arranged, and interſected with ſtreams of water, fountains, and reſervoirs. Thoſe on the outſide are nothing more than large tracts of ground, irregularly planted with olives; having four ſquare walks, and ſurrounded by walls. Lat. 30. 57. N. lon. 7. 0. W. *Chenier's Morocco. Lempriere's Tour*, 1791. *Jackſon's Account of the Empire of Morocco*, 1809.

MOROC'CO, or MARROQUIN, *ſ.* [French.] The ſkin of a goat, or ſome other animal reſembling it, dreſſed in ſumach or galls, and coloured at pleaſure; much uſed in book-binding, &c. The name is commonly derived from the kingdom of Morocco, whence it is ſuppoſed the manner of preparing theſe ſkins was firſt borrowed. We have Morocco ſkins brought from the Levant, Barbary, Spain, Flanders, and France; red, black, yellow, blue, &c. For the manner of preparing them, ſee the article LEATHER, vol. xii. p. 424.

MOROC'CO (Red), in botany. See ADONIS.

MOROCH'I, a town of Mexico, in New Biſcay: ſeventy-five miles eaſt-ſouth-eaſt of Parral.

MOROCH'THUS, *ſ.* in mineralogy. See TALCUM ſmectis.

MOROKIN'NE, or MOROTINNEE, one of the ſmall Sandwich Iſlands, between the ſouth-weſt coaſt of Mowes and the iſland of Tahoorowa. Lat. 20. 37. N. lon. 233. 31. E.

MOROL'OGIST, *ſ.* [from *morology.*] A prating fooliſh fellow. *Scott.*

MOROL'OGY, *ſ.* [from the Gr. μορος, fooliſh, and λογος, a word.] Silly ſpeech, fooliſh talking. *Scott.*

MO'RON, a town of France, in the department of the Morbihan: nine miles north-north-eaſt of Ploermel, and thirty north-eaſt of Vannes.

MO'RON, a town of Spain, in the province of Seville: twenty-three miles eaſt-ſouth-eaſt of Seville.

MORO'NA, a river of South America, which riſes about twenty miles ſouth-eaſt of Riobamba, and runs into the Maragnon forty miles eaſt of St. Franciſco de Borja.

MORO'NE (John), a cardinal and ſtateſman, born at Milan in 1509, was ſon of Jerome Morone, grand chancellor of Milan, an eminent political character. John was educated partly at Modena, after which, it is ſuppoſed, he ſtudied at the univerſity of Padua. At the age of twenty he was nominated by Clement VII. to the biſhopric of Modena, but he did not enter upon the charge till the year 1533. Even before this, ſo much confidence was placed in his early talents and diſcretion, that he was ſent by the pope into France to induce the king to conſent to a peace. In 1536 pope Paul III. appointed him nuncio in ordinary to Ferdinand king of the Romans; he was preſent at the diets held at Hagenau and Spire, and it was owing to him that the approaching general council was appointed to be held at Trent. In 1542 he was made a cardinal, and fixed upon as preſident of the council, though then only thirty-three years of age. In 1544 he was appointed to the legation of Bologna, of which he was deprived in 1548 from the ſuſpicions of the French, who thought him too much devoted to the intereſts of the emperor: it was perhaps for a ſimilar reaſon, that on the aſſembling of the council of Trent he was excluded from the preſidentſhip to which he had been elected. In 1553 he was ſent by Julius III. as legate to the diet of Augſburg, where he vigilantly and warmly defended the intereſts of the holy ſee.

The cardinal, though zealouſly attached to the church of Rome, was an enemy to perſecution, and on that account fell under the ſuſpicion of the bigot cardinal Caraffa, afterwards pope Paul IV. who cauſed Morone to be arreſted and confined in the caſtle of St. Angelo. In 1558 he was brought to trial upon the charge of teaching and having taught many opinions connected with the reformed faith. He made his innocence ſo apparent, that the pope offered to liberate him from priſon, which he refuſed, unleſs he would grant him, at the ſame time, a ſolemn declaration that he believed him innocent. The pope heſitated, and died without coming to a determination; and Morone was admitted to the conclave which elected Pius IV. The examination of his cauſe was then reſumed; and he obtained a complete abſolution not only from crime, but even from all ſuſpicion in matters of faith. As a recompence for ſo ſerious an injury, he was appointed to ſucceed cardinal Gonzaga as preſident of the council of Trent, and by his addreſs he brought its buſineſs to a concluſion in 1563. After this he obtained many ſees appropriated to the cardinals, as thoſe of Paleſtrina, Freſcati, Porto, and Oſtia. During the troubles of Genoa in 1575, he was ſent thither as legate by Gregory XIII. and contributed very much to the re-eſtabliſhment of tranquillity. He died at Rome in 1580, leaving behind him a very high character for integrity, and activity in the various ſervices which he undertook. Some Latin and Italian Letters; an Oration before the Council of Trent, and another before the emperor Ferdinand; Synodial Conſtitutions for Modena, and a Code of Laws for the government of Genoa; are proofs that his public occupations did not entirely prevent him from exerciſing his pen to uſeful purpoſes. *Tiraboſchi.*

MORONO'BEA, *ſ.* in botany. See SYMPHONIA.

MORO'SE, *adj.* [*morous*, Lat.] Ungovernable; licentious. *Not now in uſe in this ſenſe.*—Daily experience either of often lapſes, or *moroſous* deſires. *Sheldon's Miracles of Antichriſt*, 1616.—In this commandment are forbidden all that feeds this ſin, [adultery,] or are incentives to it; as luxurious diet; inflaming wines; an idle life; *moroſe* thoughts, that dwell in the fancy with delight.—*Bp. Nicholſon's Expoſure of the Catechiſm*, 1662.—Sour of temper; peeviſh; ſullen.—Without theſe precautions, the man degenerates into a cynick, the woman into a coquette; the man grows ſullen and *moroſe*, the woman impertinent. *Addiſon's Spectator.*—Some have deſerved cenſure for a *moroſe* and affected taciturnity, and others have made ſpeeches, though they had nothing to ſay. *Watts's Impr. of the Mind.*

MORO'SELY, *adv.* Sourly; peeviſhly.—Too many are as *moroſely* poſitive in their age, as they were childiſhly ſo in their youth. *Government of the Tongue.*

MORO'SENESS, *ſ.* Sourneſs; peeviſhneſs.—Take care that no ſourneſs and *moroſeneſs* mingle with your ſerious frame of mind. *Nelſon.*—Learn good humour, never to oppoſe without juſt reaſon; abate ſome degrees of pride and *moroſeneſs. Watts.*

MOROSI'NI (Andrew), a ſenator of Venice, was deſcended from James Moriſini, of a very illuſtrious family, and was born in 1558. He received an excellent education, and roſe through the different degrees of nobility to the rank of *ſavio graude*, and to a place in the council of ten. He was three times one of the reformers of the univerſity of Padua, had obtained much wiſdom by experience in public affairs, and was accompliſhed in every branch of polite literature. In 1598 he ſucceeded to the office of hiſtorian of the republic. He was employed in this taſk till his death, which happened in 1618; and he had not then put the laſt hand to it. This hiſtory was written in Latin, and is a continuation of that of Peter Bembo. It comprehends the period between 1531 and 1615. It was firſt publiſhed in 1623, and reprinted in 1719 at Venice, in the Collection of Venetian Hiſtorians. It has been ranked among the beſt performances of that age. He alſo publiſhed, in Latin, a volume of "Opuſcula and Epiſtles;" and a narrative, in Italian, of "Expeditions to the Holy Land, and the Acquiſition of Conſtantinople by the Venetian republic."

MORISI'NI (Paul), brother to the preceding, and likewiſe a Venetian ſenator, was appointed to the ſame poſt of public hiſtorian, after Nicholas Contrarini. He gave an entire hiſtory of the republic from its origin to the year 1487, in the Italian language. It was publiſhed in 1637. It is ſaid to be valuable for ſeveral notices omitted by other writers who preceded him. *Moreri.*

MORISI'NI (Francis), doge of Venice, and one of the greateſt commanders that the republic has poſſeſſed, was born in 1618. His father, Peter, was of the noble family of his name, and a procurator of St. Mark. Francis from the age of twenty, bore arms in the Venetian galleys; and, diſtinguiſhed himſelf ſo much againſt the Turks, that he obtained the command of a galley in 1645. His valour and ſucceſs raiſed him in 1650 to the poſt of general of the galleys. He was preſent at the ſea-fight between Paros and Naxos, in which the Venetians, who loſt their general, would probably have been defeated, had not Moroſini fallen upon the rear of the Turks, and entirely turned the fortune of the day. In conſequence of this victory, he was appointed to the command of a fleet in 1651, with which he performed ſeveral important ſervices. The government of Candia, which had for ſome time been beſieged by the Turks, was intruſted to him in 1656, where he ſoon brought the affairs of the iſland into a better ſtate. In 1658 he was advanced to the rank of generaliſſimo of the Venetian forces, and being joined by the Papal, Tuſcan, and Malteſe, galleys, took ſeveral places from the Turks in the Archipelago and Morea. In 1660, returning to Candia with a reinforcement of 4000 French, he carried a fortreſs ſword in hand, and took New Candia, which the Turks had built to block up the Old. His office expiring in 1661, he returned to Venice, where he had the chagrin of undergoing a charge of malverſation; but upon an inquiry he was honourably acquitted.

When Mahomet Cuprogli, the grand-vizier, went in perſon to puſh the ſiege of Candia, Moroſini was again ſelected by the ſenate for its defence; and, during twenty-eight months that the place ſtill held out, he ſuſtained fifty-ſix aſſaults, beſides a number of ſubterranean attacks, and deſtroyed a great multitude of the enemy. Being at length obliged to capitulate, he obtained conditions worthy of the eſteem his bravery inſpired in the Turkiſh commander. His reception at Venice was at firſt very favourable; but, in conſequence of a violent oration made againſt him in the ſenate, he was put under an arreſt. He was, however, ſo well defended, that his good ſervices were recogniſed, and he was reſtored to the office of procurator of St. Mark, conferred upon him a ſhort time before the ſurrender of Candia. When, in conſequence of a league between the republic, the emperor, and the king of Poland, war with the Turks was renewed, Moroſini was again nominated generaliſſimo. In 1684 he ſailed for Greece, where he took the iſland and town of Santa Maura. He afterwards made himſelf maſter of ſeveral places in the Morea, and gave the Turks a total defeat near the Dardanelles. The news of theſe ſucceſſes was ſo pleaſing to the ſenate, that this body conferred upon him the title of *The Peloponneſiac*, and erected a braſs ſtatue of him with this inſcription: "Franciſco Mauroceno Peloponneſiaco adhuc viventi Senatus poſuit, Anno 1687." He extended his conqueſts to Corinth, Sparta, and Athens; and from the latter ſent to Venice ſome figures of lions of extraordinary beauty, taken from the Temple of Minerva, which were placed in the arſenal. On the death of the doge Juſtiniani in 1688, Moroſini was elected to ſucceed him, to the general joy of the people; he was obliged, however, in that year to raiſe the ſiege of Negropont, and he returned ſick to Venice. The war ſtill continuing in the Levant, he was a fourth time choſen generaliſſimo at the age of ſeventy-five; and in 1693 departed for the army, and made the Turkiſh fleet fly before him. Fatigue, however, exhauſted his remaining vigour; and he died at Napoli de Romagna in January 1694. His body was brought to Venice and honourably interred under a monument raiſed by the ſenate to his memory. *Moreri.*

MOROS'ITY, *ſ.* Moroſeneſs; ſourneſs; peeviſhneſs.—The pride of this man, and the popularity of that; the levity of one, and the *moroſity* of another. *Clarendon.*—Is not a *moroſity* and ſingularity in ſuch things often made a veil and cover of licentiouſneſs in greater things? *Sprat.*

Some *moroſities*
We muſt expect, ſince jealouſy belongs
To age, of ſcorn, and tender ſenſe of wrongs. *Denham.*

MOROSQUIL'LO. See MORROSQUILLO.

MOROTO'I, or MOROKOI, one of the Sandwich Iſlands, in the Pacific Ocean. The number of inhabitants is eſtimated at 36,000. Lat. 21. 10. N. lon. 185. E.

MOROTOU'NA, a town of Hindooſtan: twenty-four miles eaſt of Tellicherry.

MOROZ'ZO, a town of France, in the department of the Stura: nine miles eaſt of Coni.

MOR'PETH, a market and borough town in the county of Northumberland, is ſeated on the northern and ſouthern banks of the Wonſbeck river, in the courſe of the great road from London to Edinburgh. It is a place of remote antiquity; and Camden informs us, that it was "burned down by its inhabitants in 1215, out of hatred to king John;" but the Chronicle of Melroſe aſſigns a more probable cauſe for the event, by aſſerting that the barons deſtroyed it, as they did many other towns, with the view of diſtreſſing that monarch, when on his march to puniſh their revolt. It was again viſited with ſimilar deſtruction in 1689, at which time the damage was eſtimated at 3500l. The preſent appearance of Morpeth is that of a ſmall neat town, ſituated between the woody banks of the Wonſbeck. Here are a county gaol for Northumberland, and an ugly town-houſe, built at the expenſe of the earl of Carliſle in 1714, from a deſign by Vanbrugh. The market-day is on Wedneſday, when there is uſually a very conſiderable ſhow of fat cattle and ſheep for the conſumption of Newcaſtle, Shields, and Sunderland: indeed it is reckoned the largeſt in England for live cattle, except Smithfield. This town has alſo the privilege of two yearly fairs, one of which is held on Holy Thurſday, the other on Magdalen-day.

The pariſh-church ſtands about a quarter of a mile from the town, on Kirk-hill; and there is, beſides, a chapel at the bridge end. Adjoining to this laſt, in an old chantry, is a free-ſchool, which was founded by king Edward VI. Here was formerly alſo an hoſpital for the ſick; and at about the ſame diſtance as the church, weſt of the town, appears the whole of a ſmall door-way, which anciently led into the New Minſter abbey, founded in 1139 by Ranulphus de Merlay, who placed in it monks of the Ciſtertian order. The abbots of this monaſtery were frequently ſummoned to parliament during the reign of Edward I.

Of Morpeth-caſtle, which was ſeated on a conſiderable eminence cloſe to the town, few veſtiges remain, except a portion of the gateway-tower, and ſome fragments of the outer walls. This fortreſs owed its erection to William lord Greyſtock in the year 1538, and is ſaid to be of ſome extent and conſequence as a baronial manſion. In the time of Leland, who ſays, "Morpeth-caſtle ſtandeth by Morpeth town," it was the property of lord Dacres, as huſband of Elizabeth baroneſs Greyſtock; and continued in his family till the reign of queen Elizabeth, when a daughter of Thomas lord Dacres conveyed it to lord William Howard of Naworth, anceſtor to the preſent earl of Carliſle, whoſe landed property nearly encircles the whole town. The north end of Morpeth, called Bullers-green, formerly belonged to New Minſter abbey. It was purchaſed by Thomas Wharton in 1677, and is now the property of Mrs. H. Burdon, his lineal deſcendant.

Morpeth is a borough by preſcription, governed by two bailifts and ſeven aldermen, annually elected out of the free burgeſſes, being inhabitants, and paying ſcot and lot. In the firſt year of the reign of queen Mary, 1553, it began to ſend members to parliament, who are now elected by the bailiffs and free burgeſſes, (including the aldermen,) and are returned by the bailiffs. The number of voters is about two hundred. This borough was under the abſolute controul of the earl of Carliſle, who is lord of the manor, and has conſiderable eſtates in the neighbourhood, till the year 1802, when William Ord, eſq. a gentleman who has alſo an extenſive property near the town, and who had been ſome years reviving an old family-intereſt, (his anceſtors having repreſented it from the years 1741 to 1754,) ſo far ſucceeded as to render it prudent to divide the political intereſt, and each to return a member. The influence has been eſtabliſhed here by letting the burgeſſes paſtures at a ſmall or nominal rent, and keeping the number of them as low as poſſible by oppoſing difficulties to their admiſſion, which nothing but an application to the court of King's Bench for a mandamus can remove. This was the principal ground of complaint in the petition of 1774, and remains a grievance ſtill unredreſſed.

Morpeth is ten miles ſouth of Felton, fourteen north of Newcaſtle, nineteen ſouth-eaſt of Alnwick, twenty-five north-eaſt of Hexham, and ninety-one ſouth of Edinburgh. Lat. 55. 12. N. lon. 1. 24. W.

Mitford, a village about two miles and a half ſouth-weſt from Morpeth, was formerly a market-town. The barony here was originally the property of a family which gave its name to the village; and, after changing maſters ſeveral times and in different ways, has, by an unuſual accident of fortune, returned to a collateral branch of its ancient owners, the Mitfords of Moleſden. The caſtle of this barony ſtood on a lofty natural eminence, on the ſouth bank of the Wonſbeck. When it was originally built is uncertain; but it is mentioned in hiſtory as having been deſtroyed by king John and his Rutars (a band of Flemiſh troops), when they laid waſte this part of the country in 1215. It was however rapidly rebuilt; for in the following year we find it beſieged by Alexander king of the Scots. Leland ſays, "it was beten downe by the king, becauſe one ſir Gilbert Middleton robby'd a cardinall cominge out of Scotland, and fled to his caſtle at Mitford." The ruins of this fabric, now remaining, are the keep-tower and the exterior walls, which have a deep ditch on the ſouth and eaſt ſides, cut out of the ſolid rock. Near the caſtle ſtands the preſent manor-houſe, the ſeat of Bertram Mitford, eſq. and alſo the pariſh-church. On a hill, immediately above the village, is St. Leonard's

Hoſpital, founded by ſir William Bertram in the reign of Henry I. and now converted into a family-reſidence called The Spital, the reſidence of —— Bullock, eſq.

Above three miles eaſt of Morpeth, on the banks of the Wonſbeck, are ſome remains of Bothal-caſtle, built by ſir Robert Bertram in the time of Edward III. According to a ſurvey of it, taken in 1576, the circumference of the walls was 490 feet. Theſe were flanked, on the north, by two polygonal towers fifty-three feet high, and on the ſouth-weſt angle by a ſquare turret whoſe height meaſured ſixty feet. In the church, which adjoins the caſtle, may be ſeen a curious tomb of one of the barons and his lady. It is made of alabaſter, and exhibits the recumbent figures of the deceaſed, with a variety of emblematical figures and armorial devices.

Four miles and a half ſouth-eaſt of Morpeth is Hartford, the ſeat of William Burdon, eſq. author of Materials for Thinking, &c. The houſe, a plain ſubſtantial building of yellow ſtone, conſiſts of a centre and two wings; and was completed, in the year 1803, on the ſcite of an old manſion. Near its principal front is the channel of the river Blyth, which meanders through a romantic and pictureſque valley. The open country abounds with coal-pits, and the ſoil is moſtly a ſtrong clay. The general aſpect is dreary and unpleaſant.

To the north of Morpeth are ſeveral other ſeats and ruins not unworthy of notice.—Cockle-park tower, or Cockley-tower, is a curious remnant of antiquity, in the faſhion of the old border manſions.—Weddrington-caſtle was formerly a moſt diſtinguiſhed edifice, though the work of different ages; but was pulled down about thirty years ago, with the exception of an octangular embattled tower, to which a ſquare modern building has been ſince added.—Felton-hall, north-weſt of Weddrington, is diſtinguiſhed as the place where the barons of Northumberland aſſembled in the reign of king John, and did honour to Alexander king of Scotland. A few miles down the river Coquet, on which this manſion ſtands, is Guyzance, once remarkable for a nunnery built by Richard Tyſon; and at Brinkburn was a priory founded by Roger Bertram, baron of Mitford, in the reign of Henry I. This building ſtands on the north brink of the river above-mentioned, finely ſheltered by lofty banks and hanging woods. The ſhell of the church ſtill remains entire. Its architecture is in the plain pointed ſtyle, but the north and ſouth doors are charged with very rich Saxon ornaments.—The ſmall but pleaſant river Cocket or Coquet, juſt mentioned, abounds with trout and ſalmon, and empties itſelf into the ſea oppoſite to an iſland to which it gives name. This iſland abounds with lime-ſtone, of which much lime is made.

At Wingate, a village in the pariſh of Longporſley, about eight miles north of Morpeth, was diſcovered a few years ago, on the eſtate of Walter Trevelyan and Thomas Witham, eſqrs. a mineral ſpring, now called Wingate Spa; which has performed many cures in ſcrophulas, external inflammations, ſtomach-complaints, ſcurvy, debility, hæmorrhages, &c. From a chemical analyſis of this water, it is found to be the ſtrongeſt chalybeate ſpring known in Europe, as an Engliſh pint of it contains ſix grains of iron, fourteen grains of alum, and nine of an ochre earth. At this ſpa there is an elegant and commodious bath, &c. *Wilkes's Britiſh Directory. Beauties of England and Wales. Pennant's Tour in Scotland. Oldfield's Repreſentative Hiſt.* 1816.

MORPHÆ'A, *ſ.* With phyſicians, a morphew; a kind of ſcurf on the ſkin.

MORPHAS'MUS, *ſ.* [Greek.] Among the ancients, a kind of dance, in which, by a great many figures, they imitated the transformations of Proteus.

MOR'PHEUS, a miniſter of the god Somnus, who naturally imitated the grimaces, geſtures, words, and manners, of mankind. He is ſometimes called the god of ſleep. He is generally repreſented as a ſleeping child of a great corpulence, and with wings. He holds a vaſe in one hand, and in the other are ſome poppies. *Ovid. Met.* xi.

MOR'PHEW, *ſ.* [*morphæa,* low Lat. *morfea,* Ital.] A ſcurf on the face.—We ſhall then ſee the ſhameful wrinkles and foul *morphews* of our ſoul. *Bp. Hall.*

To MOR'PHEW, *v. a.* To cover with ſcurf.—And ſullen rags bewray his *morphew'd* ſkin. *Bp. Hall.*

MOR'PHO, a town of the iſland of Cyprus; the reſidence of an aga and a cadi: thirty-three miles weſt of Nicoſia.

MOR'RA, a town of Naples, in Abruzzo Ultra: thirty-two miles north-eaſt of Aquila.

MOR'RA, a town of Hindooſtan, in Bahar: eight miles north of Arrah.

MOR'RA, a town of France, in the department of the Tanaro: three miles eaſt of Cheraſco.

MOR'RHA. See MYRRHA.

MOR'RICE, or MORRICE-DAN'CE, *ſ.* A dance in which bells are gingled, or ſtaves or ſwords claſhed.—I took delight in pieces that ſhewed a country village, *morrice-dancing*, and peaſants together by the ears. *Peacham.*

The ſounds and ſeas, with all their finny drove,
Now to the moon in wavering *morrice* move. *Milton.*

Mr. Strutt is of opinion that the Spaniſh *moreſque-dance* is quite different from our Engliſh *morrice,* or *morris, dance;* which laſt he derives from the *fool's dance,* of which he gives the following account. "The fool's dance, or a dance performed by perſons equipped in the dreſſes appropriated to the fools, is very ancient, and originally, I apprehend, formed a part of the pageant belonging to the feſtival of fools; (ſee vol. xiii. p. 664.) This feſtival was a religious mummery, uſually held at Chriſtmas-time; and conſiſted of various ceremonial mockeries, not only exceedingly ridiculous, but ſhameful and impious. A veſtige of the fool's dance is preſerved in a manuſcript written and illuminated in the reign of king Edward III. 1344. and is copied upon the middle of Strutt's ſixteenth plate. In this repreſentation of the dance, it ſeems conducted with ſome degree of regularity; and is aſſiſted by the muſic of the regals and the bagpipes; the dreſs of the muſicians reſembles that of the dancers, and correſponds exactly with the habit of the court-fool at that period. I make no doubt the *morris-dance,* which afterwards became exceedingly popular in this country, originated from the fool's dance; and thence we trace the bells which characteriſed the morris-dancers.

"The word *morris* applied to the dance is uſually derived from *Moriſco,* which in the Spaniſh language ſignifies a *Moor,* as if the dance had been taken from the Moors; but I cannot help conſidering this as a miſtake, for it appears to me that the *Moriſco* or Moor dance is exceedingly different from the morris-dance formerly practiſed in this country; it being performed with the caſtanets, or rattles, at the end of the fingers, and not with bells attached to various parts of the dreſs. See MORESQUE-DANCE, vol. xv. p. 801.

"The morris-dance was ſometimes performed by itſelf, but was much more frequently joined to proceſſions and pageants, and eſpecially to thoſe appropriated for the celebration of the May-games. On theſe occaſions, the *hobby-horſe,* or a dragon, with Robin Hood, the maid Marian, and other characters, ſuppoſed to have been the companions of that famous outlaw, made a part of the dance. In latter times, the morris was frequently introduced upon the ſtage. The garments of the morris-dancers, as obſerved before, were adorned with bells, (not with caſtanets like the Spaniſh dance;) and theſe were not placed there merely for the ſake of ornament, but were to be ſounded as they danced. The bells were of unequal ſizes, and differently denominated; as the fore bell, the ſecond bell, the treble, the tenor or great bell; and mention is alſo made of double bells. The principal dancer in the morris was more ſuperbly habited than his companions, as appears from a paſſage in an old play, wherein it is ſaid of one of the characters, "He wants no cloths, for he hath a cloak laid on with gold lace, and an embroidered jerkin; and thus he is marching hither like the foreman of a morris." *Blind Beggar of Bednal Green*, 1659.

"I do not find that the morris-dancers were confined to any particular number: in the ancient repreſentation of this dance given by Strutt, there are five, excluſive of the two muſicians. A modern writer ſpeaks of a ſet of morris-dancers who went about the country, conſiſting of ten men who danced, beſides the maid Marian, and one who played upon the pipe and tabor." *Strutt's Sports and Paſtimes of the People of England*, p. 170.

Nine-Men's Morrice. A kind of play with nine holes in the ground. It is called alſo *merils*, and *five-penny morris*. The game is played with ſtones in England, but in France with pawns or men made on purpoſe, called *merelles*, which Mr. Tollet thinks "to have been originally *black*, and therefore ſo termed; as we call a black cherry a *morello*, and a ſmall black cherry a *merry;* perhaps from *Maurus*, a moor, or rather from *morum*, a mulberry."—*Nine-men's morris* is a game ſtill played by the ſhepherds, cowkeepers, &c. in the midland counties, as follows: A figure (of ſquares one within another), is made on the ground by cutting out the turf; and two perſons take each nine ſtones, which they place by turns in the angles, and afterwards move alternately, as at cheſs or draughts. He who can play three in a ſtraight line may then take off any one of his adverſary's, where he pleaſes, till one, having loſt all his men, loſes the game. *Alchorne's Note on Shakeſpeare.*

The folds ſtand empty in the drowned field,
And crows are fatted with the murrain flock;
The *nine-men's morris* is filled up with mud.
Shakeſpeare's Midſ. N. Dream.

MOR'RICE-DANCER, *ſ.* One who dances *à la moreſca*, the mooriſh dance.—There went about the country a ſet of *morrice-dancers*, compoſed of ten men, who danced a maid marian, and a tabor and pipe. *Temple.*

MORRICE-PI'KE, *ſ.* A Mooriſh pike; a formidable weapon uſed by the Moors.—The Engliſh mariners laid about them with brown-bills, halberts, and *morrice-pikes*. *Reynard's Deliv. of Chriſtians from the Turks.*—He that ſets up his reſt to do more exploits with his mace than a *morris-pike*. *Shakeſpeare's Com. of Err.*

MOR'RIS, a county of the ſtate of New Jerſey, with 17,750 inhabitants, of whom 775 are ſlaves.

MOR'RIS (Lewis), a Welſh antiquary and poet, was born in the iſle of Angleſey in 1702, and died in 1765 at Penhryn in Cardiganſhire. He ſurveyed the coaſt of Wales in 1737, by order of the admiralty-board; and his work was publiſhed in 1748. Some of his poetical pieces in the Welſh language have been printed; and he left above eighty volumes of manuſcripts of antiquity, now depoſited in the Welſh charity-ſchool, Gray's-inn-lane, London.

Richard Morris, brother of the above, was alſo a poet and critic in his native language. He was clerk in the navy pay-office, and ſuperintended the printing of two valuable editions of the Welſh Bible. He died in 1779.

William Morris, another brother, was a great collector of Welſh manuſcripts, and died comptroller of the cuſtoms at Holyhead in 1764. *Owen's Camb. Biog.*

MORRIS BA'Y, a bay on the weſt coaſt of the iſland of Antigua.

MORRISA'NIA, a town of New York, in a cove of Long-Iſland Sound. Lat. 40. 48. N. lon. 73. 54. W.

MOR'RISON, a town of North Carolina: forty miles north of Charlotteſburg.

MOR'RISON (Richard), a learned and accompliſhed gentleman, flouriſhed in the time of Henry VIII. who, in the year 1545, preſented to him the manor of Caſhio, or Watford. The date of his birth is not known, nor the place. Wood aſſigns that honour to Oxfordſhire, while Fuller places him among the worthies of Eſſex, upon the authority of Bale, though at the ſame time he acknowledges that this account is involved in great uncertainty. After ſpending ſeveral years at Oxford, during which time he made a conſiderable proficiency in philoſophical ſtudies, and in the Greek and Latin languages, he travelled into foreign parts; and, having acquired the character both of a learned and accompliſhed gentleman, attracted the notice of Henry the Eighth, who conferred upon him the honour of knighthood, and employed him in ſeveral embaſſies to the emperor Charles the Fifth, and other princes of Germany, in which he was attended by Roger Aſcham. He was employed in the ſame capacity in the reign of Edward the Sixth, and having manifeſted an ardent zeal for the proteſtant religion, was appointed by that prince one of the reformers of the univerſity of Oxford. After reſiding many years abroad, he returned to his native country, and began the houſe at Caſhiobury, near Watford, now belonging to the earl of Eſſex, his deſcendant in the female line. Upon the acceſſion of queen Mary to the throne, he ſought a voluntary exile in foreign parts, on account of his zealous adherence to the proteſtant religion; and died at Straſbourg on the 17th of March, 1556. He was author of the following works: 1. Apomaxis Calumniarum Convitiorumque, quibus Johannes Coclæus, homo theologus, exiguus artium profeſſor, &c. Henrici VIII. nomen obſcurare, rerum geſtarum gloriam fœdare, nuper edita, non tam ad regem, quam in regis invidiam, epiſtola ſtuduit; London, 1537, 4to. dedicated to Thomas Cromwell, ſecretary of ſtate. 2. An Exhortation to ſtir all Engliſhmen to the Defence of their Country; 1539, 8vo. 3. Invective againſt the great and deteſtable vice Treaſon, &c. 1539, 8vo. 4. Comfortable Conſolation for the Birth of Prince Edward, rather than Sorrow for the Death of Queen Jane. He alſo tranſlated into Engliſh the Epiſtle of Joh. Sturmius to the Cardinals and Biſhops that were choſen by the Biſhop of Rome to ſearch out the Abuſes of the Church; 1538, 8vo. and the Symboles of Ludovic Vives much about the ſame time; with other matters. *Wood's Athenæ Oxon.*

MOR'RISTOWN, a town of the ſtate of New Jerſey: fifty-ſeven miles north-north-eaſt of Philadelphia. Lat. 40. 45. N. lon. 74. 28. W.

MOR'RISVILLE, a town of Pennſylvania, on the Delaware: nine miles from Briſtol.

MOR'RO. See Moro.

MOR'RO, *ſ.* in geography, a term for headland or promontory on the coaſts of Chili and Peru in South America, and on the ſouth of the Pacific Ocean; of which the following are the moſt remarkable.

MOR'RO de BONIFA'CIO, a cape on the coaſt of Chili. Lat. 39. 25. S.

MOR'RO de CARAPU'CHO, a headland on the coaſt of Peru. Lat. 19. 35. S.

MOR'RO CHI'CO, a cape on the coaſt of Honduras. Lat. 15. 35. N.

MOR'RO COBI'R, a cape on the coaſt of Africa, in the Indian Sea. Lat. 8. 5. N.

MOR'RO de los DIAB'OLOS, a headland on the coaſt of Peru. Lat. 18. S.

MOR'RO HERMO'SO, a cape on the weſt coaſt of California. Lat. 27. 52. N. lon. 245. 7. E.

MOR'RO de St. JOR'GE, a cape on the weſt coaſt of America. Lat. 24. S.

MOR'RO de St. JO'SEF, a headland on the coaſt of Peru. Lat. 24. S.

MOR'RO MORE'NA, a cape on the coaſt of Chili. Lat. 23 10. S.

MOR'RO-MOR'RO, a town of the government of Buenos Ayres, in the dioceſe of La Plata: forty miles north-eaſt of Cocha.

MOR'RO de PUER'COS, a cape on the weſt coaſt of Mexico. Lat. 7. 35. N.

MOR'RO QUEMA'DO, a headland on the coaſt of Peru. Lat. 14. 20. S.

MOR'RON, a town of the iſland of Cuba: forty miles north-weſt of Villa del Principe.

MORRO'NE, a town of Naples, in Lavora: eight miles eaſt of Capua.

MOR'ROPE, a town of Peru, near the coaſt of the Atlantic, in the biſhopric of Truxillo, and juriſdiction of Sana: 105 miles north-weſt of Truxillo, near the Pacific Ocean.

MORROSQUIL'LO, a bay of the Spaniſh main, on the coaſt of South America. Lat. 9. 20. N. lon. 75. 40. W.

MOR'ROW, *ſ.* [See the etymology of MORN. The original meaning of *morrow* ſeems to have been *morning*, which, being often referred to on the preceding day, was underſtood in time to ſignify the whole day next following.] Morning: *the primary meaning.*—She's white as *morrow's* milk, or flakes new blown. *Bp. Hall.*

As the pale roſe her colour loſt renews
  With the freſh drops fall'n from the ſilver *morrow*,
So ſhe revives, and cheeks impurpled ſhews
  Moiſt with their own tears. *Fairfax's Taſſo.*

The day after the preſent day.—The Lord did that thing on the *morrow*. *Exod.* xi. 6.

To-morrow you will live, you always cry,
In what far country doth this *morrow* lie,
That 'tis ſo mighty long e'er it arrive?
Beyond the Indies doth this *morrow* live?
'Tis ſo far fetch'd this *morrow*, that I fear
'Twill be both very old and very dear.
To-morrow will I live, the fool does ſay.
To-day itſelf's too late, the wiſe liv'd yeſterday. *Cowley.*

To-MOR'ROW, *adv.* On the day after this current day:

To-morrow comes; 'tis noon; 'tis night;
  This day like all the former flies;
Yet on he runs to ſeek delight
  To-morrow, till to-night he dies. *Prior.*

TO-MORROW is ſometimes, improperly perhaps, uſed as a ſubſtantive.—*To-morrow* is the time when all is to be rectified. *Spectator.*

Our yeſterday's *to-morrow* now is gone,
And ſtill a new *to-morrow* does come on.
We by *to-morrows* draw out all our ſtore,
Till the exhauſted well can yield no more. *Cowley.*

MORS, DEATH, one of the infernal deities, born of Night, without a father. She was worſhipped by the ancients with great ſolemnity, and repreſented not as an actually-exiſting power, but as an imaginary being. Euripides introduces her in one of his tragedies on the ſtage. The moderns repreſent her as a ſkeleton armed with a ſcythe.

MORS, an iſland of Denmark, ſituated in Lymfiord gulf, of a very irregular form; in length about eighteen miles from north to ſouth, its breadth various, from one mile to eleven. It has on it ſeveral towns and numerous villages; the chief place is Nikioping. Lat. 56. 50. N. lon. 8. 47. E.

MORS. See MEURS.

MORS'CHANSK, a town of Ruſſia, in the government of Tambov, on the Tzna: fifty-ſix miles north of Tambov. Lat. 53. 40. N. lon. 41. 34. E.

MOR'SE, *ſ.* The ſea-horſe. See TRICHECUS roſmarus.—That which is commonly called a ſea-horſe is properly called a *morſe*, and makes not out that ſhape. *Brown.*—It ſeems to have been a tuſk of the *morſe* or waltron, called by ſome the ſea-horſe. *Woodward on Foſſils.*

MOR'SEL, *ſ.* [*morceau*, Fr. *morſellus*, low Lat. from *morſus*, a bite.] A piece fit for the mouth; a mouthful.—Every *morſel* to a ſatisfied hunger, is only a new labour to a tired digeſtion. *South's Sermons.*

Yet cam'ſt thou to a *morſel* of this feaſt,
Having fully din'd before. *Shakeſpeare's Coriolanus.*

And me his parent would full ſoon devour
For want of other prey, but knows that I
Should prove a bitter *morſel*, and his bane. *Milton's P. L.*

A wretch is priſoner made,
Whoſe fleſh, torn off by lumps, the ravenous foe
In *morſels* cut to make it farther go. *Tate's Juvenal.*

A piece; a meal.—A dog, croſſing a river with a *morſel* of fleſh in his mouth, ſaw, as he thought, another dog under the water, upon the very ſame adventure. *L'Eſtrange.*

On theſe herbs, and fruits, and flowers,
Feed firſt; on each beaſt next, and fiſh and fowl,
No homely *morſels!* *Milton's P. L.*

A ſmall quantity. *Not proper.*—Of the *morſels* of native and pure gold, he had ſeen ſome weighed many pounds. *Boyle.*

MORSE'LE, a town of France, in the department of the Lys: eight miles eaſt of Ypres.

MORSEL'LI, or MOR'SULI, *ſ.* Denominations given to thoſe forms of medicine intended to be ſucked in the mouth, as a lozenge; the word ſignifying "a little mouthful."

MORSIGL'IA, a town of the iſland of Corſica: twenty-one miles north-north-weſt of Baſtia.

MOR'SKOM, a town of Sweden, in the province of Nyland: ſixteen miles north of Borgo. Lat. 60. 39. N. lon. 25. 49. E.

MORSO'NA, a town of Naples, in the county of Moliſe: fourteen miles north-eaſt of Moliſe.

MOR'STORFF. See MERSTORF and MORTARA.

MOR'SULI. See MORSELLI.

MOR'SURE, *ſ.* [*morſure*, Fr. *morſura*, Lat.] The act of biting.

MOR'SUS, *ſ.* [Latin.] A bite.

MOR'SUS DIAB'OLI, *ſ.* in botany. See SCABIOSA.

MOR'SUS GALLI'NÆ. See ALSINE and LAMIUM.

MOR'SUS RA'NÆ. See HYDROCHARIS.

MORT, *ſ.* [French.] A tune ſounded at the death of the game:

To be making practis'd ſmiles,
As in a looking-glaſs, and to ſigh, as 'twere
The *mort* o'the deer; oh, that is entertainment
My boſom likes not. *Shakeſpeare's Winter's Tale.*

[*Morgt,* Icelandic.] A great quantity. Not in elegant uſe, but preſerved colloquially in many parts. A ſalmon in the third year of its growth, ſo called by fiſhermen in ſome parts of England.

MORT (La), a lake of Upper Canada, where the traders have a poſt to purchaſe furs of the Indians: forty miles north-north-weſt from Sturgeon Lake.

MORT D'AN'CESTOR, *ſ.* [law Fr.] The title of a writ to be ſued out in certain caſes.—If an abatement happened on the death of the demandant's father or mother, brother or ſiſter, uncle or aunt, nephew or niece, the remedy is by an aſſiſe of *mort d'anceſtor*. *Blackſtone.*—See ASSISE, vol. ii. p. 287.

MOR'TA, a lake of Italy, in the Treviſan: five miles north of Ceneda.

MORTA'GNE, a town of France, in the department of the north, at the conflux of the Scarpe and the Scheldt: eight miles north-north-weſt of Condé, and eight ſouth-eaſt of Tournay.

MORTA'GNE, a town of France, in the department of the Vendée. In a battle fought here in 1793, between the royaliſts and republicans, the former are ſaid to have loſt 20,000 men. It is twenty-ſeven miles eaſt-ſouth-eaſt of Nantes, and thirty-three north-north-eaſt of Luçon.

MORTA'GNE, a town of France, in the department of the Lower Charente: twelve miles ſouth-ſouth-weſt of Saintes, and twelve weſt of Pons.

MORTA'GNE, a town of France, and principal place of a diſtrict, in the department of the Orme. It contains about 5000 inhabitants. It is fifteen miles eaſt-ſouth-eaſt of Sees, and eighteen eaſt-north-eaſt of Alençon. Lat. 48. 31. lon. N. lon. 0. 27. E.

MORTA'IN, a town of France, and principal place of a diſtrict, in the department of the Channel: thirty miles ſouth-ſouth-eaſt of Coutances, and ſixteen eaſt of Avranches. Lat. 48. 39. N. lon. 0. 51. W.

MOR'TAL, *adj.* [*mortalis*, Lat. *mortel*, Fr.] Subject to death; doomed ſome time to die.—This corruptible muſt put on incorruption, and this *mortal* muſt put on immortality. 1 *Cor.* xv. 53.

The day thou eat'ſt thereof, my ſole command
Tranſgreſs'd, inevitably thou ſhalt die;
From that day *mortal;* and this happy ſtate?
Shalt loſe. *Milton's Paradiſe Loſt.*

Heavenly powers, where ſhall we find ſuch love!
Which of ye will be *mortal* to redeem
Man's mortal crime, and juſt, the unjuſt to ſave? *Milton.*

Deadly; Deſtructive; procuring death.—Some circumſtances have been great diſcouragers of trade, and others are abſolutely *mortal* to it. *Temple.*

Which of ye will be mortal to redeem
Man's *mortal* crime, and juſt, the unjuſt to ſave? *Milton.*

Bringing death:

Safe in the hand of one diſpoſing power,
Or in the natal or the *mortal* hour. *Pope.*

Inferring divine condemnation; not venial.—Though every ſin of itſelf be *mortal*, yet all are not equally *mortal;* but ſome more, ſome leſs. *Perkins.*—Human; belonging to man.—No one enjoyment but is liable to be loſt by ten thouſand accidents, out of all *mortal* power to prevent. *South.*

The voice of God
To *mortal* ear is dreadful; they beſeech,
That Moſes might report to them his will,
And terrour ceaſe. *Milton.*

Extreme; violent. *A low word.*—The birds were in a *mortal* apprehenſion of the beetles, till the ſparrow reaſoned them into underſtanding. *L'Eſtrange.*

The nymph grew pale, and in a *mortal* fright,
Spent with the labour of ſo long a flight;
And now deſpairing, caſt a mournful look
Upon the ſtreams. *Dryden.*

MOR'TAL, *ſ.* Man; human being.—Warn poor *mortals* left behind. *Tickell.*—This is often uſed in ludicrous language:

I can behold no *mortal* now,
For what's an eye without a brow? *Prior.*

MORTAL'ITY, *ſ.* [from *mortal.*] Subjection to death; ſtate of a being ſubject to death.—I point out miſtakes in life and religion, that we might guard againſt the ſprings of error, guilt, and ſorrow, which ſurround us in every ſtate of *mortality.* *Watts's Logick.*

When I ſaw her die,
I then did think on your *mortality.* *Carew.*

Death:

I beg *mortality*
Rather than life preſerv'd with infamy. *Shakeſpeare.*

Power of deſtruction:

Mortality and mercy in Vienna
Live in thy tongue and heart. *Shakeſp. Meaſ. for Meaſ.*

Human nature.—A ſingle viſion ſo tranſports them, that it makes up the happineſs of their lives; *mortality* cannot bear it often. *Dryden.*

Take theſe tears, *mortality's* relief;
And, till we ſhare your joys, forgive our grief. *Pope.*

Frequency of death.—The riſe of keeping thoſe accounts [the bills of mortality] firſt began in the year 1592, being a time of great *mortality.* *Graunt.*

Bills of MORTALITY, are accounts or regiſters ſpecifying the numbers born, married, and buried, in any pariſh, town, or diſtrict. In general they contain only theſe numbers; and, even when thus limited, are of great uſe, by ſhowing the degrees of healthineſs and prolificneſs, and the progreſs of population, in the places where they are kept. It is therefore much to be wiſhed, that ſuch accounts had been always correctly kept in every kingdom, and regularly publiſhed at the end of every year. We ſhould then have had under our inſpection the comparative ſtrength of every kingdom, as far as it depends on the number of inhabitants, and its increaſe or decreaſe at different periods. But ſuch accounts are rendered more uſeful, when they include the ages of the dead, and the diſtempers of which they have died. In this caſe they convey ſome of the moſt important inſtructions, by furniſhing us with the means of aſcertaining the law which governs the waſte of human life, the values of annuities dependent on the continuance of any lives, or any ſurvivorſhips between them, and the favourableneſs and unfavourableneſs of different ſituations to the duration of human life.

The ancients do not appear to have kept any exact mortuary regiſters; at leaſt no account of any regiſters of that kind, with the ages of the deceaſed, have come down to us; and although, in the Roman *cenſus*, firſt eſtabliſhed by Servius Tullius, both the ages and ſexes of the people were diſtinguiſhed, we have no exact account of theſe particulars in any one of their enumerations. Indeed, the principal object of the cenſus among that warlike people, was the levying of men and money for the purpoſes of conqueſt: the duration of human life appears to have occupied very little of their attention; and their proficiency in the ſcience of quantity was not ſufficient either to ſhow them what the neceſſary *data* were, or to enable them to draw juſt inferences from them, had they been in their poſſeſſion. A good account of what the ancient Romans did in this way, with references to the original authorities, may be found in the Italian tranſlation of Demoivre's Treatiſe of Annuities on Lives, by Gaeta and Fontana, which was publiſhed at Milan, in the year 1776.

The keeping of pariſh-regiſters commenced in England in the year 1538, in conſequence of an injunction iſſued in that year by Thomas lord Cromwell, who, after the abolition of the pope's authority in this kingdom, in the reign of Henry VIII. had been appointed the king's vicegerent in eccleſiaſtical affairs. See BILLS of MORTALITY, vol. iii.

Pariſh-regiſters in Germany appear to have commenced with the ſixteenth century; and in the Göttliche Ordnung of Süſſmilch, we are informed, that at the time of lord Cromwell's injunction, they had already old regiſters of that kind, both at Augſburgh and Breſlaw. However, the extracts he has given from the Augſburgh regiſters do not go back further than the year 1501, nor thoſe for Breſlaw beyond 1555. About the beginning of the ſeventeenth century, ſuch regiſters appear to have been eſtabliſhed in moſt parts of Europe; but it was not until the year 1662 that they began to attract public notice here, and to be conſidered as the ſources of valuable and intereſting information. In that year, John Graunt, a citizen of London (afterwards an officer in the trained bands of the city, and a fellow of the Royal Society), publiſhed his "Natural and Political Obſervations on the Bills of Mortality," principally thoſe for London. The London bills, or accounts of baptiſms and burials, appear to have been occaſioned by the plague, and to have been begun in the year 1592, a time of great mortality. They were afterwards diſcontinued; but were reſumed in 1603, after the great plague of that year. See the article LONDON, vol. xiii. p. 601. They have ever ſince been continued weekly; and an annual bill alſo has been regularly publiſhed. In 1629, the number of deaths by the different diſeaſes and caſualties were firſt inſerted in them, alſo the diſtinction of the ſexes; and theſe have been continued ever ſince. But it is in the totals only of the baptiſms and burials that the ſexes are diſtinguiſhed in theſe bills. They do not ſhow how many of each ſex died of each diſeaſe; neither have they, ſince 1728, when the diſtinction of the ages of the dead was firſt introduced, ſhown how many of each ſex died in ſuch interval of age, but only the total number of both ſexes.

This book of Graunt's, although the firſt, is alſo one of the beſt that have been publiſhed on the ſubject. It contains many judicious obſervations on the imperfections of the bills, on the proportions of the deaths from different diſeaſes and caſualties, and on their increaſe and decreaſe, with the probable cauſes of ſuch fluctuations. He alſo obſerved, that "the more ſickly the years are, the leſs fecund or fruitful of children alſo they be." Beſides the London bills, he gave one for a country-pariſh in Hampſhire, in the firſt edition of his book; and, in an appendix to the latter editions, two others, one for Tiverton, the other for Cranbrook in Kent, with a few obſervations on foreign bills. The book was favourably received by the public, and went through five editions in fifteen years; the two firſt in 4to, the three others in 8vo; the laſt of them, publiſhed in 1676, two years after the author's death, was edited by his friend ſir William Petty, who, in conſequence of having ſometimes ſpoken of this edition as his own, has by ſome writers been erroneouſly conſidered as the author.

Graunt's obſervations, like all others of a ſimilar kind, by ſhowing the uſefulneſs of pariſh-regiſters and bills of mortality, contributed to form a taſte for theſe inquiries among thinking men; and, conſequently, to improve both the regiſters and the bills derived from them; ſo that, from this time, the ſubject has been continually cultivated more and more. Pariſh-regiſters, in moſt parts of Europe, have been kept with more care; and a ſucceſſion of works of conſiderable merit has been publiſhed on the ſubject, containing an important part of the natural and political hiſtory of our ſpecies, and affording valuable materials for the ſcience of political economy.

As the ages at which the deaths took place were not inſerted in the London bills till 1728, Graunt could not avail himſelf of that important information, but made a fruitleſs attempt to determine the law of mortality without it. The Breſlaw bills appear to have been the firſt wherein the ages at which the deaths took place were inſerted; and the moſt important information which bills of mortality can afford, was firſt drawn from them by Dr. Halley; who, in 1692, conſtructed a table of mortality for Breſlaw from theſe bills for the five preceding years, and inſerted a paper on the ſubject in the Philoſophical Tranſactions, No. 196. In 1699, Dr. Davenant, in An Eſſay upon the probable Methods of making a People Gainers in the Ballance of Trade, publiſhed ſome extracts from "Natural and Political Obſervations and Concluſions upon the State and Condition of England," by permiſſion of their author, Gregory King, eſq. Lancaſter herald, who had completed them in 1696, though they ſtill remained in manuſcript; and the whole of this very curious production was publiſhed by Mr. Chambers at the end of his *Eſtimate* in 1802. Mr. King derived his information from the poll-books; from actual obſervations in particular places; from the aſſeſſments on marriages, births, and burials; and from the pariſh-regiſters. Many of his concluſions agree ſurpriſingly well, conſidering the time he wrote, with thoſe which are the reſults of a hundred years of further obſervations and inquiries.

From the publication of Davenant's eſſay, above mentioned, nearly forty years had elapſed without any thing further being done in this way, when M. Kerſeboom publiſhed an Eſſay, in the Dutch language, on the probable number of people in Holland and Weſt Friesland, which he deduced from the Bills of Mortality, (Hague, 1738, 4to.) and two others in 1740 and 1742. An account of the firſt of theſe three eſſays may be ſeen in the Philoſophical Tranſactions, No. 450. and of the two others in No. 468.

In 1742 was publiſhed the firſt edition of the celebrated work, entitled "Die Göttliche Ordnung in den Veränderungen des Menſchlichen Geſchlechts aus der Geburt, dem Tode und der Fortpflanzung deſſelben erwieſen von Johann Peter Süſſmilch." The ſecond edition appeared in 1761, enriched with the materials which had been laid before the public through various channels in the interim; the third in 1765; and in 1775 a fourth edition of the two volumes of Süſſmilch was publiſhed by Chriſtian Jacob Baumann, to which this editor himſelf added, in 1776, a third volume, conſiſting of additions to the other two, and remarks upon them, with many new tables, and a copious index. The laſt edition of this work was publiſhed in 1798, but it does not appear to have been augmented or improved ſince 1776. It contains long diſſertations on every thing (not mathematical) connected with the ſubject; and, beſides original information, includes the ſubſtance of all the other publications on it previous to 1776; with an immenſe collection of materials, which, when borrowed, are often better arranged, and rendered more convenient for reference, than they will be found to be in the works they were extracted from; beſides, the original ſources of information are always referred to; and theſe advantages, with that of a full index, render it a valuable work for occaſional reference. The three thick 8vo. volumes contain upwards of 2300 pages, cloſely printed with a ſmall type; and the tables alone occupy 330 pages.

In 1746 was publiſhed the Eſſai of M. Deparcieux. Information much wanted on this ſubject, was there given in a very clear and popular manner; and the work no doubt contributed greatly to the advancement of the ſcience.

In 1750 appeared, in 8vo. "New Obſervations, natural, moral, civil, political, and medical, on City, Town, and Country, Bills of Mortality; to which are added, large and clear Abſtracts of the beſt Authors who have written on that ſubject; with an Appendix of the Weather and Meteors, by Thomas Short, M.D." which he had "had on the anvil" for eighteen years, as he informs us in the Preface to his Hiſtory of Air, Weather, &c. This author, with incredible labour, collected extracts from the mortuary and baptiſmal regiſters in a great many market-towns and country-pariſhes in England, chiefly in the northern counties, in almoſt every variety of ſoil and ſituation; and reduced them into tables in various ways, ſo as to enable him to draw uſeful inferences from them. He informs us, that lord Cromwell's injunction in 1538 was but little regarded in many places till the year 1559, when another was iſſued for the ſame purpoſe by queen Elizabeth; nevertheleſs, he had procured ſeveral exact country-regiſters, commencing with 1538, and continued, without one chaſm, for more than two hundred years; and the regiſters before 1644 he conſidered to be much more valuable than afterwards, on account of the increaſe of diſſenters from that time. He likewiſe procured both the numbers of families and of ſouls in ſeven of the market-towns, and fifty-four of the country pariſhes, for which he had regiſters; and thus arrived at ſatisfactory information on ſeveral points, which, till then, had been very imperfectly underſtood. But the ſexes were not diſtinguiſhed in his enumerations; neither were the ages, in any of the enumerations or regiſters he has given accounts of, except in the London bills of mortality, and what he has taken from Dr. Halley reſpecting thoſe for Breſlaw.

In 1751 was firſt printed a tract by Corbyn Morris, entitled, "Obſervations on the paſt Growth and preſent State of the City of London," with the moſt convenient and inſtructive tables of the London bills that have been printed: they contained the annual baptiſms and burials from the year 1603, the number of annual deaths by each diſeaſe from 1675, and of each age from 1728; all brought down to the year 1750. This tract was reprinted in 1758, with a continuation of the tables to the end of 1757; theſe alſo contain uſeful annual averages and proportions. Mr. Morris's obſervations are generally very judicious; but he was one of thoſe authors who appear to have laboured under much miſconception with regard to the evils to be apprehended from the mortality of London, and what they conſidered to be its baneful effects in drawing recruits from the country. Theſe writers did not perceive, or did not ſufficiently conſider, that the natural procreative power is much more than adequate to ſupply any waſte of that kind, and that the real obſtacle to the increaſe of the people is the limited means of ſubſiſtence. This had been obſerved by Dr. Halley in his "Further Conſiderations on the Breſlaw Bills of Mortality," (Phil. Tranſ. 1693.) though it there alſo appears, that he had not ſufficiently conſidered the mode of its operation. This was firſt fully illuſtrated by Dr. Franklin in his excellent "Obſervations on the Increaſe of Mankind, Peopling of Countries, &c." written in Philadelphia in 1751, the ſame year in which Mr. Morris's pamphlet was firſt publiſhed. The author alſo pointed out in that pamphlet, material defects in the bills of mortality, and propoſed a better method of keeping them, not only in London, but throughout the kingdom. This gave occaſion to a paper by Mr. James Dodſon, which was inſerted in the Phil. Tranſ. for that year (1751), wherein he ſhowed the importance of their being ſo kept as to afford the means of valuing annuities on lives; and propoſed other alterations which appeared to him calculated to fit them for the purpoſe.

Nicolaas Struyck of Amſterdam, who, in his "Introduction to General Geography," publiſhed there in 1740, had inſerted "*Giſſingen over den ſtaat van't Menſchelyk Geſlagt;* Conjectures on the State of the Human Species;" publiſhed at the ſame place in 1753, a quarto volume, the firſt half of which is aſtronomical, the other is entitled "*Nader Ontdekkingen noopens den ſtaat van het Menſchelyk Geſlagt;* Further Diſcoveries concerning the State of the Human Species." It contains ſtatements of actual enumerations of the people in many Dutch villages, principally in North Holland, wherein the ſexes are diſtinguiſhed, and the numbers in childhood, celibacy, marriage, and widowhood; but with reſpect to their ages, it is only ſtated for each ſex, how many were under ten years, and how many of the unmarried were above that age; except in two inſtances, wherein the number of each ſex is given in each interval of five years of age, from birth to the extremity of life: they amount all together to 2728, of whom not one was above the age of eighty-five, and only four above eighty. He generally gives, for each place, the names and profeſſions or occupations of the perſons who made the enumeration, and the preciſe day on which it was made; or, if it occupied the parties more days than one, thoſe on which it was commenced and completed are given; a practice which ſhows a laudable ſolicitude about particulars, and a title to our confidence, the want of which we have great cauſe to lament in too many other writers. Extracts from many pariſh-regiſters are alſo given; in theſe, too, the ages are ſeldom noticed; but in a few caſes they are given very minutely, eſpecially in that of Weſtzaandam, for which, the number who died in each interval of five years of age, from birth to the extremity of life, are given; alſo the number in each year of age under fifteen, the number in each month of the firſt year of age, even the number that died in the firſt hour from birth, in the firſt twenty-four hours, and in each day of the firſt week of their age. During a term of nineteen years, the whole number of deaths thus regiſtered was 3328; but the ſexes were not diſtinguiſhed under fifteen years of age, which Struyck himſelf lamented. The work alſo contains much information reſpecting the population and pariſh-regiſters of Amſterdam, Haerlem, &c. with ſome accounts of other countries, and of other works on the ſubject.

In 1759 was publiſhed, at London, in 4to, "A Collection of the Yearly Bills of Mortality, from 1657 to 1758 incluſive, together with ſeveral other Bills of an earlier date; to which were ſubjoined Captain Graunt's Obſervations; Another Eſſay in Political Arithmetic, by Sir William Petty; the Obſervations of Corbyn Morris, Eſq. and A Comparative View of the Diſeaſes and Ages, with a Table of the Probabilities of Life for the laſt Thirty Years, by J. P. Eſq. F.R.S." This is a valuable compilation, and has been generally attributed to Dr. Birch, the ſecretary and hiſtorian of the Royal Society. But the fact is, that the bills were collected into a volume by the late Dr. Heberden: he procured, likewiſe, obſervations from ſeveral of his friends, rectors of ſome large pariſhes, or others likely to give him information; particularly from Bps. Moſs, Green, Squire, and Dr. Birch. Theſe, together with ſome of his own remarks, were thrown into the form of a preface; and the whole was committed to the care of Dr. Birch. To make the calculations which appear at the end of the book, Dr. Heberden employed James Poſtlethwayt, eſq. a very diſtinguiſhed arithmetician.

In the year 1766, this branch of knowledge was enriched with new materials, of more value than all that had previouſly been laid before the public. Theſe were contained in three publications, of which we ſhall firſt notice the "Recherches ſur la Population des généralités d'Auvergne, de Lyon, de Rouen, et de quelques Provinces et Villes du Royaume. Par M. Meſſance, Receveur des Tailles de l'Election de Saint Etienne." Moſt of the political writers in France, for ſome years previous to the date of this publication, had aſſerted confidently that the kingdom was *depopulated*, but without producing any proofs. The object of M. Meſſance was, to enable his readers to judge of the merit of ſuch aſſertions, and to pronounce leſs vaguely on a ſubject in itſelf ſo intereſting, the knowledge of which can only be obtained by a great number of facts and actual obſervations. The work, accordingly, is filled with tables, exhibiting the reſults of actual enumerations of the people, and of extracts from the pariſh-regiſters. They ſhow, for each ſex, how many were under fourteen, or in celibacy above that age; thoſe in the ſtates of marriage and of widowhood; and the number of domeſtic ſervants. The numbers of families are alſo ſtated; and the enumerations of the eccleſiaſtics, properly claſſed, are given ſeparately. But the author has alſo given the general reſults of his tables, and the proportions they afford, very diſtinctly; and among theſe reſults, the *increaſe of the population* during the preceding ſixty years, to which his reſearches were generally limited, is clearly aſcertained. The work likewiſe contains many intereſting tables, in which the rate of mortality, and the produce of manufacturing labour, are compared with the contemporaneous prices of grain, in various places, generally for periods of twenty years each.

The ſecond work we have alluded to was publiſhed at Yverdon in 8vo. it was entitled "Mémoire ſur l'Etat de la Population, dans le Pays de Vaud, qui a obtenu la prix propoſé par la Société Œconomique de Berne. Par M. Muret, premier Paſteur à Vevey, et Secretaire de la Société Œconomique du Vevey." The Pays de Vaud contains 112 pariſhes, and the population at that time was about 113,000 ſouls. M. Muret wrote for information to all the clergymen in the country, who made him returns of the numbers of baptiſms and burials in their reſpective pariſhes, for different periods, from ten to forty years, in many of which both the ages and ſexes were diſtinguiſhed; and from about two-thirds of them he obtained alſo the numbers of marriages and families actually ſubſiſting; alſo the number of ſouls, "or at leaſt of communicants," in their pariſhes: but neither the ages nor ſexes were diſtinguiſhed in any of the enumerations of the living. This performance does much credit both to the author's induſtry and judgment; but it has alſo material defects. He gave upwards of fifty tables, by which he intended to ſhow the probabilities and expectations of life till five years of age, and at every fifth year after that, in different pariſhes and places, under various circumſtances of ſoil and ſituation, and for people of different habits and occupations; alſo for the two ſexes ſeparately. Theſe muſt have coſt him a good deal of labour, and would have been extremely valuable had they been correct; but, unfortunately, he did not underſtand the conſtruction of ſuch tables, and they are not to be depended upon. He alſo took conſiderable pains to determine the rates of mortality among married and ſingle women, conſidered ſeparately, and thought he had proved that it was leſs among the married; but the proofs he adduced were not concluſive. Yet this Memoir generally, and the Tables in particular, have been praiſed for their extreme accuracy, in a very good abridgment of them, inſerted in the ſecond volume of a book, entitled "*De Re Ruſtica*, or the Repoſitory," 8vo. Lond. 1770.

The diſadvantages of her ſoil and climate neceſſarily keep Sweden thinly peopled in compariſon with the countries which, in theſe reſpects, are more happily circumſtanced; and, ſince the year 1748, the ſtate of the population has been an object of anxious ſolicitude with the government; which, in 1749, eſtabliſhed what, in this country, would probably be called a Board of Population, but is there denominated *Tabellvärket*, for reducing into convenient forms the extracts from the pariſh-regiſters, and the returns from the magiſtrates of the numbers of the people, which the governors of the different provinces are required to ſtate to the commiſſioners appointed for theſe purpoſes. The extracts from the regiſters are made and tranſmitted annually, but the enumerations only once in three years. M. Wargentin, who was one of the commiſſioners of the tabellvärket, inſerted in the Tranſactions of the Royal Academy of Sciences at Stockholm, for the years 1754 and 1755, papers on the uſefulneſs of annual regiſters of births and deaths in a country; which, like all his other productions, were written with much judgment and modeſty. In the ſame Tranſactions, for the year 1766, he inſerted a paper on the mortality in Sweden, wherein he gave tables exhibiting the number of the living of each ſex in each interval of age, in the years 1757, 1760, and 1763; alſo the number of annual deaths of each age and ſex during a period of nine years, commencing with 1755, both for all Sweden and Finland, and for Stockholm ſeparately; with other intereſting reſults of the regiſters and enumerations, and many judicious obſervations upon them. This paper of M. Wargentin's is more valuable than all that had previouſly been publiſhed on the ſubject; it is alſo to be found in the French abridgment of the Stockholm Tranſactions.

The firſt edition of Dr. Price's Obſervations on Reverſionary Payments appeared in 1771, and contained "Obſervations on the Expectations of Lives, the Increaſe of Mankind, the Number of Inhabitants in London, and the Influence of Great Towns on Health and Population," which had been publiſhed in the Phil. Tranſ. for 1769, and added conſiderably to the information on thoſe ſubjects which had been previouſly before the public.

In the Philoſophical Tranſactions for the years 1774 and 1775, were inſerted two excellent papers by Dr. Haygarth of Cheſter, wherein he gave the bills of mortality for that city, for the years 1772 and 1773 reſpectively, in a form calculated to exhibit, at one view, the moſt uſeful and intereſting information ſuch bills can afford without calculation, and preſenting to the calculator *data* that are eſſential to the ſolution of the moſt important queſtions reſpecting the ſtate of the population. Three papers by Dr. Percival (alſo of conſiderable merit) appeared in the ſame Tranſactions about this time, relating principally to the population of Mancheſter and its neighbourhood.

In 1778 was publiſhed, at Paris, in 8vo. the work entitled "Recherches et Conſidérations ſur la Population de la France, par M. Moheau." This book is agreeably written, in a way entirely popular, and will probably be peruſed with more pleaſure, by the generality of readers, than any other on the ſubject of population. It contains a great number of tables, for many of which he was indebted to other writers, eſpecially to M. Meſſance; but he has alſo given many that are original, derived from the bills of mortality and actual enumerations of the people, though without explaining in a ſatisfactory manner how he obtained his information, which, if it be correct, muſt have coſt great labour. In his preface he ſays, "Il eſt tel page de ce livre qui a coûté néceſſairement deux mois de travail, et un volume de chiffres."

In 1786 was publiſhed, at Peterſburgh, in the Acts of the Academy of Sciences there, for the year 1782, an eſſay by M. Krafft, on the marriages, births, and burials, at St. Peterſburgh, during a period of ſeventeen years, from 1764 to 1780, preceded by a general expoſition of the uſes ſuch tables might be applied to, if the obſervation they record were extended over entire governments in Ruſſia. This paper contains ſeventeen tables, which ſhow the number of deaths at each age, and by each of the principal diſeaſes, together with the numbers of marriages and baptiſms; the numbers, in each caſe, being given for each of the ſeventeen years ſeparately, as well as for the whole term; and the ſexes are always diſtinguiſhed; as are likewiſe foreigners from the native Ruſſians.

During a period of nine years, commencing with 1779, and ending with 1787, Dr. Heyſham of Carliſle kept accurate regiſters of the births, and of the deaths at all ages, in the two pariſhes which comprehend that city and its environs; alſo the diſeaſes or caſualties which the deaths at each age were occaſioned by; and the ſexes were in all caſes diſtinguiſhed. Theſe excellent regiſters were kept with great care and ſkill on the plan of Dr. Haygarth above-mentioned, and included all diſſenters within the two pariſhes. Dr. Heyſham publiſhed them from year to year as they were made, and accompanied them with valuable obſervations on the ſtate of the weather and diſeaſes in each year. Their value was greatly enhanced by two enumerations of the people within the two pariſhes, the one made in January 1780, the other in December 1787, in both of which the ages were diſtinguiſhed, but not the ſexes of each age, though the totals of each ſex were. Theſe documents, printed in convenient forms, with further information reſpecting them, and many uſeful tables deduced from them, may be found in Mr. Milne's Treatiſe on Annuities, of which we ſhall have occaſion to take farther notice.

In the years 1799, 1800, and 1801, M. Nicander inſerted eight different memoirs among thoſe of the Royal Academy of Sciences at Stockholm, exhibiting the ſtate of population and mortality in all Sweden and Finland, from the year 1772 to 1795 incluſive. Theſe contain a great number of tables, which preſent the moſt intereſting reſults of the *Tabellvärket* during that period; the ages and ſexes, both of the living and the dead, are diſtinguiſhed with ſufficient minuteneſs, and the number of deaths of each ſex by every diſeaſe is given. The information in theſe papers is much more complete and ſatisfactory than any other yet collected reſpecting the ſtate of the population of a whole kingdom, or even of any particular part of it, if we except the obſervations of Dr. Heyſham, which were confined to Carliſle and its neighbourhood. M. Nicander was a member of the Royal Academy of Sciences at Stockholm, alſo one of the commiſſioners of the tabellvärket, and their ſecretary.

In the year 1800 was publiſhed, at Paris, in 8vo. under the title of *Eſſai de Statiſtique*, a memoir by J. A. Mourgue, on the births, marriages, and deaths, that took place in Montpellier during a period of twenty-one years, ending with 1792, with the ages at which the deaths happened; the ſexes are alſo diſtinguiſhed; and the population of the place appears to have been nearly ſtationary. The tables and obſervations of M. Mourgue appear to be more valuable than any others relative to the population of France, that have yet been publiſhed, except thoſe of M. Déparcieux, which related only to ſelect orders of the people. This memoir was read at a meeting of the French National Inſtitute in 1795.

An enumeration of the people in Spain was made by royal authority in the years 1768 and 1769, and again in 1787; a minute account of this laſt was printed at Madrid, ſhowing, for each province ſeparately, the numbers of pariſhes, cities, towns, and villages, &c. &c. with the number of people in each claſs, according to their ranks, profeſſions, occupations, &c. and the monaſtic orders of both ſexes were particularly diſtinguiſhed: to theſe was prefixed a ſummary of the cenſus of 1768 and 1769, together with the ages, the diſtinction of the ſexes was given; in the firſt, the married were only diſtinguiſhed from ſingle; but that of 1787 ſhowed how many of each ſex, and in each interval of age, were in the ſtates of celibacy, marriage, and widowhood. A third enumeration of the people in Spain and the Spaniſh poſſeſſions in Europe and Africa, including the Canary Iſlands, was made in 1797; and a full account of it, occupying nearly fifty large tables, was printed at Madrid in 1801.

In 1801 were publiſhed (in 4to.) "Obſervations on the Increaſe and Decreaſe of different Diſeaſes, and particularly of the Plague, by William Heberden, jun. M.D. F.R.S." containing ſome tables, chiefly deduced from the London bills. We are alſo indebted to the ſame ingenious phyſician for other intereſting obſervations on the mortality in London, inſerted in the Phil. Tranſ. for 1796. and in thoſe of the London College of Phyſicians, vol. iv.

In the ſame year (1801) was publiſhed (in 12mo.) another valuable work, entitled, "Reports on the Diſeaſes in London, particularly during the years 1796, 1797, 1798, 1799, and 1800, by Robert Willan, M.D. F.A.S." part of theſe had been previouſly inſerted in ſome periodical publications; the author's obſervations were made both on the bills of mortality, and on the caſes that occurred in his own practice.

In reading the writings of the phyſicians who have treated theſe ſubjects, it is impoſſible not to regret, that they have been ſo little attended to by the medical profeſſion in general; and that bills of mortality have not been more generally kept in ſuch a way, as to throw the lights which they alone can, on the cauſes of the increaſe and decreaſe of different diſeaſes, and of the great differences that are found between the degrees of mortality in different ſituations, and among different claſſes of the people. The information of this kind already before the public clearly ſhows, that the general cauſes which tend to ſhorten life do alſo embitter it; and that, where the people are the moſt happy, uſeful, and reſpectable, in their ſeveral ſtations, there alſo, *cæteris paribus*, they are the longeſt lived. And theſe inquiries, we think, are of more importance to governments, and better worth their attention, than ſtateſmen are generally aware of.

The laſt publication upon this ſubject we have to notice is a very recent one, namely, "A Treatiſe on Annuities and Aſſurances, by Joſhua Milne, Eſq. 1815." This is a very uſeful work. It contains clear abſtracts of the moſt important ſtatements that have been publiſhed ſince Dr. Price's time. Mr. Milne is actuary to the Sun Life-aſſurance Society; and in his work, and alſo in the Supplement to the Encyclopædia Britannica, he has made ſome very judicious remarks on the forms of bills of mortality, and on the means by which they might be improved. With a few of his obſervations we ſhall conclude this part of the ſubject.

"Of all the ſtatements derived from bills of mortality and enumerations of the people, which we have mentioned, only thoſe for Sweden and Finland, and Dr. Heyſham's for Carliſle, have been given in the proper form, and with ſufficient correctneſs to afford the information, which is the moſt important object of them all—that which is neceſſary for determining the *law of mortality*. To effect this, it is only neceſſary to know the mean number of the living and of the annual deaths, in ſufficiently-ſmall intervals of age, throughout the extent of life, for a period of time ſufficient to allow of the accidental fluctuations ariſing from more or leſs fruitful years, and other cauſes, compenſating each other: ſuch periods, probably, ſhould not be leſs than eight or ten years; but the neceſſary length will depend upon the climate, the number of the people, their general modes of life, and their political circumſtances. Theſe *data* being obtained, it is not difficult to determine the proportion of the annual deaths to the number of the living in each year of age. Then, aſſuming any number of births, as 1000 or 10,000, it is eaſy to ſhow how many would die in each year of their age; and conſequently, how many would ſurvive that year; which numbers of ſurvivors and of annual deaths, when arranged in the order of the ages, conſtitute the deſired Table of Mortality, by which all the moſt important queſtions reſpecting the duration of human life may be eaſily reſolved. For want of underſtanding the principles upon which the proper conſtruction of ſuch tables depends, moſt of the writers on this ſubject, many of them men of great merit and induſtry, have taken much pains to little purpoſe, and, after exceſſive labour, have arrived at falſe concluſions. Hardly any of them appear to have been aware of the neceſſity of obtaining the number of the living, as well as of the annual deaths, in each interval of age; or that would greatly enhance the value of bills of mortality, by extending their uſeful applications. Dr. Price's Eſſay on the proper Method of conſtructing Tables of Mortality, already mentioned, was intended to ſhow how ſuch tables might be conſtructed from regiſters of the *deaths only* at all ages; but the hypotheſes he proceeded upon can hardly obtain in any real caſe; and, even if they did, his method would only determine the number of the living in the place, at every age; therefore, if it could be put in practice (which it never can), it would only ſuperſede the neceſſity of actual enumerations; and, with the numbers ſo obtained, we ſhould have to proceed as above. That Eſſay of Dr. Price was an amplification of what Mr. Simpſon had previouſly advanced on the ſubject, with his accuſtomed accuracy, and contains many juſt obſervations on the defects of the tables of mortality that had previouſly been publiſhed; but ſo far as it contributed to induce a belief that the determination of the number of the living in every interval of age, by actual enumeration, was not neceſſary to the conſtruction of accurate tables, it muſt have done harm." (Milne, ch. iii.) Mr. Milne then proceeds to give his propoſed new forms for keeping bills of mortality; but for theſe we muſt refer to his book, which contains every thing that can be deſired on the ſubject.

The utility of bills of mortality is twofold, private and public. Their *private* uſe is to enable perſons to calculate the value of annuities of every kind, how they may be granted or purchaſed, and upon what terms thoſe who have any valuable contingency which ceaſes at their death may inſure their lives, ſo as to ſecure the payment of a ſum of money to their heirs. Under the article LIFE-ANNUITIES, vol. xii. p. 642. we have given a very extenſive Table of the probabilities of life in eleven different parts of Europe, collected from the various authorities referred to in this article; and accompanied with calculations of the value of annuities for ſingle and joint lives, founded thereon. But this may be deemed a public uſe alſo, ſince the government has made the granting of life-annuities a national meaſure; and accordingly we have given, under the ſame article, (p. 647-50.) the Tables publiſhed by authority for that purpoſe, with an explanation of them.

But the more peculiar *public* uſe of bills of mortality, is, like the cenſus of the ancient Romans, to aſcertain the ſtrength of the nation, for the purpoſe of taxation and warlike levies; this has been lately done upon a great ſcale in the American ſtates, and more recently in this country, under what is called the *population-act*, 41 Geo. III. c. 15. in purſuance of which, an enumeration of the people in Great Britain was made in 1801; alſo returns of the baptiſms and burials in England and Wales, during the year 1700, and every tenth year after that till 1780, then for every year to 1800 incluſive, with the number of marriages in each year from the commencement of 1754 to the end of 1800. Large and clear abſtracts of the anſwers and returns to this act were printed by order of the houſe of commons in 1800, and occupy more than 1000 pages folio. In 1811, another act (51 Geo. III. c. 6.) was paſſed, "for taking an account of the population of Great Britain, and the increaſe or diminution thereof;" in conſequence of which, returns were that year made to parliament, of the number of perſons in every part of Great Britain; alſo of the numbers of baptiſms, burials, and marriages, in England and Wales, during each of the preceding ten years; very ſatisfactory abſtracts of theſe were alſo printed by order of parliament in 1812, with ſome preliminary obſervations, in which corrections of the preceding returns are given. The ſexes were diſtinguiſhed both in theſe enumerations and extracts from the regiſters, but the ages in none of them; and the proportions of males to females among the living are not to be depended upon, a number of males in the army and navy, which it is difficult to eſtimate, not being natives of Great Britain, nor uſually reſident there. The returns of baptiſms and burials were alſo defective, but few regiſters of diſſenters having been included in them. Theſe abſtracts are, however, with reſpect to the objects they extend to, more minute and ſatisfactory than any other accounts of the ſame kind that have been publiſhed in this kingdom; and it is very deſirable that ſuch returns ſhould continue to be made, and abſtracts of them printed, at regular intervals; for nothing is ſo well calculated to ſhow the influence of different cauſes on the proſperity of a nation, as the compariſon of the different ſtates of the population, and the rate of its progreſs or declenſion, under different circumſtances: beſides, the value of the abſtracts we already have, will be much enhanced by the publication of others of a ſimilar kind hereafter; for the increaſe of more than a million of perſons, in England alone, between 1801 and 1811, may be accounted for perhaps, not ſo much from a real decreaſe of mortality to that amount, as from the imperfections and omiſſions of a firſt return under a new act.

Mortality, however, we may ſafely affirm, has decreaſed within the laſt fifty years, not only in Great Britain, but in moſt civilized countries. The benefits of cleanlineſs, both in ſtreets and in houſes, is better underſtood; inoculation has occaſioned the ſmall-pox to be no longer a plague; and the medical treatment of fevers and moſt other diſorders has alſo wonderfully improved. In the remarks with which we ſhall conclude this article, we ſhall confine ourſelves chiefly to the city of London.

Hiſtory affords us abundant evidence of the filthineſs of the metropolis, and of the exiſtence of thoſe ſources of miaſmata which prevail in camps, and which, by the putrefaction and evaporation occaſioned by the autumnal heats and rains, were the conſtant ſource of diſeaſes, not only before, but even ſubſequent to, the great fire in 1666. In the fourteenth and following centuries, the ſtreets were filled with common lay-ſtalls of all manner of filth and garbage, which the people were in vain ordered to remove from their own doors; the ſewers were in a very neglected ſtate; the drains all ran above ground; in many ſtreets there was no pavement at all, and the acceſs of pure air was prevented by the projecting houſes almoſt meeting at top, the intervening ſpace being filled with enormous ſigns. Nor was the internal ſtructure and economy of the houſes more favourable to health. Eraſmus, in a letter to the phyſician of cardinal Wolſey, aſcribes the ſweating-ſickneſs, and the plague, from which the Engliſh were hardly ever free, in a great meaſure to the incommodious form and bad expoſition of their houſes, to the filthineſs of the ſtreets, and to the ſluttiſhneſs within doors: "The floors," he ſays, "are commonly of clay, ſtrewed with ruſhes, which are occaſionally renewed, but underneath lies unmoleſted an ancient collection of beer, greaſe, fragments of fiſh, ſpittle, the excrements of dogs and cats, and every thing that is naſty." Even the floor of the preſence-chamber of queen Elizabeth in Greenwich-palace, was, according to Hentzner, "ſtrewed with hay, after the Engliſh faſhion." See Heberden's Obſ. on the Increaſe of Diſeaſes, 1801.

We are enabled to form ſome judgment of the effect of this ſtate of the metropolis upon the health of the inhabitants, by conſidering the nature of the diſeaſes which were then prevalent, as well as the comparative mortality of thoſe, and of our own times. In the early part of our hiſtory, a great number of years are ſpecified as plague-years. See the article LONDON, vol. xiii. p. 65, 6, 71–8, 81–4, 90. In the 14th, 15th, and 16th, centuries, there ſcarcely paſſed ten years without a conſiderable plague; and, although only four great plagues are commonly mentioned in the 17th century, viz. in the years 1603, 1625, 1636, and 1665; yet Maitland, in his Hiſtory of London, declares that, for five-and-twenty years before the great fire of 1666, the city had never been clear from the plague; and from the year 1603, when the regiſter begins, till 1670, the bills of mortality exhibit only three years entirely free. The other diſeaſes, which were frequently epidemic in London, were ſuch as commonly originate in ſwampy countries and in camps; namely, intermittent, remittent, and ſpotted, or malignant, fevers, and dyſentery. Of the great prevalence of theſe diſeaſes, down to the time of the great fire in 1666, we have already given ample evidence in the article quoted above.

On the other hand, the progreſſive improvement in the public health, will be found to be not leſs manifeſtly ſynchronous with the refinements in the arts of life, and the improvements in the economy of the metropolis, if we compare the varying progreſs of the annual mortality as exhibited in the bills. Soon after the great fire of 1666, the plague altogether ceaſed, and has never ſince recurred; but the other epidemics above mentioned, although ſomewhat diminiſhed in numbers, ſtill occurred to a great and fatal extent; ſo that, in proportion to the actual population, the annual mortality was exceedingly great. This will appear in ſtrong colours, when it is ſtated that the actual mortality was greater at the beginning of the 18th century than at the end of it, notwithſtanding the increaſe both in the number and extent of the out-pariſhes, included in the bills of mortality. The annual average of deaths in the firſt ten years of the century was twenty-one thouſand and upwards; in the laſt decade of years, only nineteen thouſand and upwards. The mortality and quantity of diſeaſe, in proportion to the population, therefore, was incalculably greater than at preſent. The principal amelioration in the health of the metropolis, however, ſeems to have been more particularly brought about within the laſt ſixty years. Until nearly the middle of the laſt century, the mortality kept pace, in ſome meaſure, with the increaſing population; for, in the third and fourth decades, that is, from 1720 to 1740, the annual average of burials was from twenty-ſix to twenty-eight thouſand; and the deaths in 1741, were 32,414, while the chriſtenings were only 14,957. From this time the diminution of the mortality has been progreſſive; and, in the paſt year, 1816, (notwithſtanding the vaſt increaſe of buildings in the courſe of ſeventy-five years,) the burials were only 20,316, while the chriſtenings amounted to 23,581.

But it is to be obſerved, that, although very conſiderable improvements were made in the city when it was rebuilt after the conflagration of 1666, yet it continued highly incommodious, and retained many of its unſalutary peculiarities, for a century afterwards. For it was not until the year 1766, that the example of reform, which had been ſet by the inhabitants of Weſtminſter, was adopted by parliamentary ſanction in the city. Fleet-ditch was then firſt covered in; the ſtreets were paved with large ſquared ſtones; the ſigns, gates, and bars, were taken down, and a free ventilation admitted; openings were made in the incommodious parts of the ſtreets; and the accumulation of filth and other ſources of miaſmata farther prevented by the more active employment of ſcavengers, the increaſed ſupply of water, &c. which ſyſtem has been purſued, and is ſtill continued, to the great ornament of the metropolis, as well as to the ſubſtantial benefit of its inhabitants. From this time, the remittent and intermittent fevers and dyſentery rapidly diminiſhed in frequency and fatality; the two former now ſcarcely ever originating in London, and the latter being ſeldom general or epidemic. Malignant fevers became leſs prevalent in gaols, and in the cloſe habitations of the poor; and Newgate is no longer viſited by its annual typhus, which is now ſeldom found committing its ravages, even in the abodes of poverty.

Among the various operations ſubſervient to the arts and manufactures in this great city, there are many which contribute to diffuſe in the atmoſphere certain effluvia or vapours, ſome of which are diſagreeable in their ſmell, or difficult to reſpire; and others, though not ſo obvious to the ſenſes, are nevertheleſs prejudicial to health. On the whole, however, the public health is not much affected by ſuch effluvia. For, in the firſt place, a diſagreeable ſmell is by no means a certain criterion of an unwholeſome atmoſphere; and, in the ſecond, the volatilization of poiſonous metals by fire, which conſtitutes one of the moſt probable means of contaminating the air, may be ſo managed, by connecting with the works proper chimneys, and other condenſing apparatus, as to obviate altogether the danger which might thence ariſe to the public. Many miſtakes have been committed by writers on this ſubject, and conſiderable difference in principle has been manifeſted in legal deciſions reſpecting the degree of nuiſance in ſuch caſes. In the 17th century, the ſmoke from coal-fires was deemed, both by natives and foreigners, one of the principal cauſes of the unhealthineſs of London. This was ſtated in ſtrong terms by major Graunt, Obſ. on Bills of Mortality, before quoted; and Evelyn, who publiſhed a pamphlet in 1661, entitled *Fumifugium*, indignantly laments the "clouds of ſmoke and ſulphur, ſo full of ſtink and darkneſs, in which this glorious and ancient city wraps her ſtately head;" and he affirms, that in the year 1664, Newcaſtle was beſieged, and coals not to be procured in London, "divers gardens and orchards, planted in the very heart of London (as, in particular, my lord marquiſſe of Hartford's, in the Strand, and my lord Bridgewaters', and ſome others, about Barbican), were obſerved to bear ſuch plentiful and infinite quantities of fruits, as they never produced the like, either before or ſince, to their great aſtoniſhment." In refutation of ſuch notions, however, it is ſufficient to remark, that, while this ſuppoſed cauſe of unhealthineſs has been augmented to an incalculable degree, the actual condition of the metropolis, in point of ſalubrity, has been greatly improved.

In like manner, the manufactories, in which various effluvia are diſengaged from animal and vegetable matters, in conſequence of putrefaction or fermentation, are no longer prejudicial to the public health, when they are conducted with care and prudence. Thus in breweries, in ſtarch and colour manufactories, as of turnſol and indigo, in paper-mills, &c. the fumes, which ariſe from the fermenting and decompoſing matters, can be dangerous only to thoſe employed about the works, and in the immediate vicinity of the veſſels and apparatus. They ceaſe to be deleterious the moment they are diffuſed and combined with the external air, and cannot affect the inhabitants of neighbouring dwellings. Even where animal matters are liable to putrefy, as in the manufactories of cat-gut, tanneries, and ſlaughter-houſes, the effects of theſe corrupted exhalations, which, when diffuſed in the neighbourhood, form an atmoſphere very diſagreeable to breathe, may be obviated by proper care. Moſt commonly ſuch putrefaction is not neceſſary to the operations going on, and only occurs from the animal ſubſtances being allowed to remain too long in the manufactory, or in too high a temperature. It is only neceſſary, therefore, to cauſe the materials to be frequently renewed, in order to prevent their corruption, and to keep the place clean. In this reſpect ſlaughter-houſes are attended with ſome inconvenience; but this is by no means of ſo ſerious a nature as to demand their baniſhment without the limits of cities. A ſlaughter-houſe, indeed, when the filth and blood are collected in heaps to putrefy, is peſtilence itſelf; but, when the offal is regularly removed, it ceaſes to be a nuiſance. Hence a little attention on the part of the magiſtrates, that butchers do not throw out the blood and refuſe of the animals which they kill, nor ſuffer them to accumulate, is ſufficient to obviate any diſguſting and unhealthy effects ariſing from ſlaughter-houſes.

Of the manufactories in which effluvia are driven off by fire, thoſe of the mineral acids, which were formerly deemed extremely injurious, have been found by experience to be deſtitute of danger; and even thoſe effluvia, which are diſengaged in the preparations of mercury, lead, copper, antimony, and arſenic, and which are really dangerous to thoſe who inhabit and aſſiſt in the works, can never injure thoſe who reſide in the neighbourhood, except when proper chimneys, that may convey the vapours out of the reach of reſpiration, or condenſe them, are omitted to be uſed. Hence the magiſtracy ought chiefly to confine its attention to the adoption of meaſures of precaution, and to direct ſcience towards the improvements of which theſe proceſſes are ſuſceptible with regard to health, inſtead of haſtily baniſhing ſuch manufactories from their cities. See a Report of the Nat. Inſtitute of Paris, 1806. Annales de Chimie, tom. liv. Edinburgh Med. and Surg. Journal, vol. ii. p. 290.

The diminution of mortality, then, as appears from the foregoing ſtatements, is greatly dependent upon a ſyſtem of cleanlineſs and ventilation, carried on upon an extenſive ſcale; and this ſyſtem has effected what quarantines, peſt-houſes, &c. in vain attempted to accompliſh. Indeed, from the conſtant exiſtence of the plague in London during the 17th century, it can ſcarcely be ſuppoſed to have been *imported* at the particular periods when it raged ſo deſtructively; and, on the other hand, our quarantine-laws, however rigid and ſevere they may be, are by no means adequate to the excluſion of all contagion. See Howard on Lazarettos; Heberden on Increaſe, &c. of Diſeaſes. But the laſt mentioned author obſerves, "That the plague was ever actually bred in London, it might be odious to aſſert, and would be impoſſible to prove; yet, to any one who reflects upon its frequent returns in this capital until the latter end of the 17th century, and its total abſence ſince, notwithſtanding the great increaſe of our trade, by which it was ſuppoſed to be imported, it muſt, I think, appear probable, that, if its origin were derived from foreign contagion, at leaſt its propagation ought, in a great meaſure, to be attributed to ſome prediſpoſition of the town in thoſe days, which has ſince been corrected."

As for thoſe epidemic diſeaſes by which mortality is at times extenſively and fatally increaſed, and which appear to originate, not in miaſmata or in the effluvia from the human body in confined ſituations, but in a ſpecific contagion (ſuch as the ſmall-pox, meaſles, and ſcarlet-fever), the means of public ſecurity are not ſo much within our reach. For the two laſt mentioned maladies, indeed, we know of no preventive means; ſo that the inhabitants of large cities muſt probably undergo them once in the courſe of life. But, for the ſmall-pox, the direct peſtilence that viſits mankind, a method of amelioration has been reſorted to, for nearly a century, in Europe, by which the lives of multitudes have been preſerved, but by which alſo death has been inflicted upon multitudes of others, whom prejudice, careleſſneſs, or miſinformation, have led to neglect the employment of the preventive, ſince it has been an artificial ſource of continued contagion; we mean *inoculation*. Similar prejudice, negligence, or miſtaken views, continue to be fatal to the public health, by encouraging the propagation of this dire contagion, even after an experience of twenty years has eſtabliſhed the efficacy of the invaluable diſcovery of Dr. Jenner, the cow-pock, in ſuperſeding the influence of ſmall-pox, while it does not contribute to generate any contagion which may injure the health of others. When theſe unfortunate errors in public opinion ſhall be removed, and inoculation or vaccination ſhall be generally received, the public health will have attained a degree of perfection and permanency, beyond which, perhaps, it cannot be expected to advance, while the paſſions, wants, and occupations, of men, neceſſarily expoſe them to various cauſes of mortality.

We ſhall conclude with a very ſhort and very ſtriking exemplification of the title of our article.

"It is generally ſuppoſed that this earth is inhabited by one thouſand millions of men, and that thirty-three years make a new generation; and, therefore, that in thirty-three years there die one thouſand millions. Thus the number of thoſe who die on earth amounts to,

Each year, Thirty millions.
Each day, Three thouſand four hundred.
Each minute, Sixty. Each ſecond, One.

This calculation muſt neceſſarily ſtrike us. If the mortality be ſo great every year and every hour, is it not probable that he who reflects on it, may himſelf be one of thoſe ſoon to ſwell the liſt of the dead? It is at leaſt certain, that it ought to lead us to think ſeriouſly and often on this ſubject. Now, at this very moment, one of our fellow-creatures is going out of the world; and before another hour is paſt, more than three thouſand ſouls will have entered into an eternal ſtate!"

To MOR'TALIZE, *v. a.* To make mortal:

We know you're fleſh and blood as well as men,
And, when we will, can mortalize and make you ſo again.
A. Brome.

MOR'TALLY, *adv.* Irrecoverably; to death.—In the battle of Landen you were not only dangerouſly, but in all appearance *mortally*, wounded. *Dryden.*—Extremely; to extremity. *A low word.*—Adrian *mortally* envied poets, painters, and artificers, in works wherein he had a vein to excel. *Bacon's Eſſays.*

Know all, who would pretend to my good grace,
I *mortally* diſlike a damning face. *Granville.*

MOR'TAR, *ſ.* [moꞃꞇeꞃe, Sax. *mortarium*, Lat. *mortier*, Fr.] A ſtrong veſſel in which materials are broken by being pounded with a peſtle.—Except you could bray Chriſtendom in a *mortar*, and mould it into a new paſte, there is no poſſibility of an holy war. *Bacon.*—The action of the diaphragm and muſcles ſerves for the comminution of the meat in the ſtomach by their conſtant agitation upwards and downwards, reſembling the pounding of materials in a *mortar*. *Ray on Creation.*

Mortars have the form of an inverted bell. The matter intended to be pounded is to be put into them, and there it is to be ſtruck and bruiſed by a long inſtrument called a *peſtle*. The motion given to the peſtle ought to vary according to the nature of the ſubſtances to be pounded. Thoſe which are eaſily broken, or which are apt to fly out of the martar, or which are hardened by the ſtroke of the peſtle, require that this inſtrument ſhould be moved circularly, rather by grinding or bruiſing than by ſtriking. Thoſe ſubſtances which are ſoftened by the heat occaſioned by rubbing and percuſſion, require to be pounded very ſlowly. Laſtly, Thoſe which are very hard, and which are not capable of being ſoftened, are eaſily pounded by repeated ſtrokes of the peſtle. They require no bruiſing but when they are brought to a certain degree of fineneſs. But theſe things are better learned by habit and practice than by any directions.

As mortars are inſtruments which are conſtantly uſed in chemiſtry, they ought to be kept of all ſizes and materials; as of marble, copper, glaſs, iron, gritſtone, and agate. The nature of the ſubſtance to be pounded, determines the choice of the kind of mortar. The hardneſs and diſſolving power of that ſubſtance are particularly to be attended to. As copper is a metal which is ſoluble by almoſt all menſtrua, and hurtful to health, this metal is rarely or never employed for the purpoſe of making mortars. One of the principal inconveniences of pulverization in a mortar proceeds from the fine powder which riſes abundantly from ſome ſubſtances during the operation. If theſe ſubſtances be precious, the loſs will be conſiderable; and, if they be injurious to health, they may hurt the operator. Theſe inconveniences may be remedied, either by covering the mortar with a ſkin, in the middle of which is a hole, through which the peſtle paſſes; or by moiſtening the matter with a little water when this addition does not injure it; or, laſtly, by covering the mouth and noſe of the operator with a fine cloth, to exclude this powder. Some ſubſtances, as corroſive ſublimate, arſenic, calces of lead, cantharides, euphorbium, &c. are ſo noxious, that all theſe precautions ought to be uſed, particularly when a large quantity is pounded.

Large mortars ought to be fixed upon a block of wood, ſo high, that the mortar ſhall be level with the middle of the operator. When the peſtle is large and heavy, it ought to be ſuſpended by a cord or chain fixed to a movable pole placed horizontally above the mortar: this pole conſiderably relieves the operator, becauſe its elaſticity aſſiſts the raiſing of the peſtle.

MOR'TAR, *ſ.* in the military art, a ſhort piece of ordnance, thick and wide, proper for throwing bombs, carcaſes, ſhells, ſtones, bags filled with grape-ſhot, &c. See the articles ARTILLERY, BOMB, GUN, GUNNERY, &c.

Thoſe arms, which for nine centuries had brav'd
The wrath of time on antique ſtone engrav'd,
Now torn by *mortars* ſtand yet undefac'd
On nobler trophies by thy valour rais'd. *Granville.*

MOR'TAR, *ſ.* [*morter*, Dut. *mortier*, Fr.] In architecture, is a preparation of lime and ſand mixed up with water, ſerving as a cement, and uſed by maſons and bricklayers in building of walls of ſtone and brick.—Wolfius obſerves, that the ſand ſhould be dry and ſharp, ſo as to prick the hands when rubbed, yet not earthy, ſo as to foul the water it is waſhed in: he alſo finds fault with maſons and bricklayers as committing a great error in letting their lime ſlacken and cool before they make up their *mortar*, and alſo in letting their *mortar* cool and die before they uſe it; therefore he adviſes, that if you expect your work to be well done, and to continue long, to work up the lime quick, and but a little at a time, that the *mortar* may not lie long before it be uſed. *Johnſon.*—Lime hot out of the kiln mixed ſoft with water, putting ſand to it, will make better *mortar* than other. *Mortimer.*—I will tread this unbolted villain into *mortar*, and daub the wall of a jakes with him. *Shakeſpeare's K. Lear.*

Under the article MINERALOGY, in the preceding volume, p. 448, we noticed an approved method of compounding mortar, promiſing to reſume the ſubject in this place.

The improvement of mortar is certainly an object of great importance; and different ſchemes have been ſuggeſted for giving it that degree of durability for which the mortar uſed by the ancients is ſo juſtly celebrated. The lime uſed in the ancient mortar, is ſaid to have been burnt from the hardeſt ſtones, or often from fragments of marble. De Lorme obſerves, that the beſt mortar is that made of pozzolana for ſand; adding, that this penetrates black flints, and turns them white. See PUTEOLANA.

Mr. Rich, who lately viſited the ruins of Babylon, ſpeaking of a vaſt pile of brickwork which ſtill remains, obſerves, "ſo admirable is the cement, *which appears to be lime-mortar*, that, though the layers are ſo cloſe together, that it is difficult to obſerve what ſubſtance is between them, it is nearly impoſſible to extract one of the bricks whole." (Obſ. on the Ruins of Babylon, p. 36.) But in another place Mr. Rich ſpeaks of the *bitumen* with which theſe Babylonian bricks were cemented together, which was plentifully produced in the neighbourhood of Babylon, and which binds ſtronger than mortar, and in time becomes harder than the brick itſelf. It was alſo impenetrable to water, as to the early deſcendants of Noah was well known, for both the outſide and the inſide of the ark was incruſted with it. (Gen. vi. 14.) It may be proper to add here, that the bitumen, to deprive it of its brittleneſs and render it capable of being applied to the brick, muſt be boiled with a certain proportion of oil, and that it retains its tenacity longeſt in a humid ſituation. Mr. Rich informs us, that it is "at preſent principally uſed for caulking boats, coating ciſterns, baths, and other places that uſually come in contact with water. The fragments of it ſcattered over the ruins of Babylon are black, ſhining, and brittle, ſomewhat reſembling pit-coal in ſubſtance and appearance:" p. 64.

Mr. Worledge obſerves, that fine ſand makes weak mortar, and that the larger the ſand the ſtronger the mortar. He therefore adviſes, that the ſand be waſhed before it is mixed; and adds, that dirty water weakens the mortar conſiderably. Vitruvius tells us, that foſſile ſands dry ſooner than thoſe taken out of rivers. Whence he adds, the latter is fitted for the inſides, the former for the outſides, of a building. He ſubjoins, that foſſile ſand, lying long in the air, becomes earthy. Palladio takes notice, that of all ſands white ones are the worſt; and the reaſon is owing to their want of aſperity.

The proportion of lime and ſand in our common mortar is extremely variable: Vitruvius preſcribes three parts of pit-ſand, and two of river-ſand, to one of lime; but the quantity of ſand here ſeems to be too great. The proportion moſt commonly uſed in the mixing of lime and ſand is, to a buſhel of lime, a buſhel and a half of ſand; i. e. two parts of lime and three of ſand; though the common mortar, in and about London, has more ſand in it than according to this proportion. But it ſtill remains a deſideratum to aſcertain the due proportion of ſand which is neceſſary, as both writers and practical maſons diſagree in opinion on this matter, as well in their directions about the mode of mixing the materials, as of applying the mortar; ſome of the more modern, eſpecially, aſcribing extraordinary effects to a ſmall variation in theſe particulars, while others deny that theſe circumſtances have any ſenſible effect on the durability and firmneſs of the mortar.

It is conceived that theſe different and contradictory opinions ariſe from an imperfect knowledge of the nature of quick-lime, and the variations it may admit of; for theſe variations are ſo very great, as to render it impoſſible to afford any general rules that can poſſibly apply in all caſes. It is therefore conceived to behove thoſe who are deſirous of acquiring any conſiſtent and ſatisfactory knowledge on this head, to endeavour to aſcertain, in the firſt place, the circumſtances which render calcareous ſubſtances *at all* capable of becoming a cement, and then to trace the ſeveral changes that may be produced upon it by other extraneous cauſes.

Lime, which has in any way abſorbed its full quantity of air from the atmoſphere and become mild, is altogether unfit for becoming a cement; and of courſe it is evident, that a great change may be produced upon the quality of any lime, by having allowed leſs or more of it to be in this ſtate before it is worked up into mortar. And further, if a large quantity of water be put to freſh ſlaked quick-lime, and beat up with it into a thin ſort of paſte, the water diſſolves a ſmall portion of the lime, which, as it gradually abſorbs its air, is converted into cryſtals; between the particles of which cryſtals, that part of the lime which was not diſſolved, and the other extraneous matters which may have been mixed with it, are entangled, ſo as to form a firm coherent maſs of the whole. The paſty ſubſtance formed in this manner, is the well-known article mortar; and this heterogeneous, imperfectly ſemi-cryſtallized, maſs, conſtitutes the common cement employed in building ordinary walls or other erections. Theſe circumſtances, therefore, being known, it is thought that it will not be difficult to comprehend what are the particulars that are neceſſary to form the moſt perfect cement of this nature. Since lime becomes a cement only in conſequence of a certain degree of cryſtallization taking place in the whole maſs, it is ſufficiently obvious that the firmneſs and perfection of that cement muſt depend upon the perfection of the cryſtals, and the hardneſs of the matters that are entangled among them; for, if the cryſtals are ever ſo perfect and hard of themſelves, if they are ſeparated from one another by any brittle incoherent medium, it is evident that the whole maſs muſt remain in ſome degree brittle and incoherent. Now, as water can only diſſolve a very ſmall proportion of lime, even when in its moſt perfect ſaline or cauſtic ſtate, or while it remains deprived of its carbonic acid gas, and, as happens in other ſimilar caſes, no more of the lime can be reduced to a cryſtalline maſs than has been actually diſſolved in the water; it happens of courſe, that, if mortar be made of pure lime and water alone, a very ſmall proportion only can be diſſolved by that ſmall quantity of water that is added to it; and, as this ſmall proportion alone can afterwards be cryſtallized, all the remaining undiſſolved particles of the lime will be entangled among the few cryſtals that are formed. And, as the undiſſolved lime in this maſs will in time abſorb its air, and be converted into *mild* calcareous earth without having had a ſufficiency of water to allow it to cryſtallize, it muſt concrete into a friable maſs exactly reſembling chalk; it follows, that this kind of mortar, when as dry as it can be made, and in its higheſt degree of perfection, will always be ſoft, and eaſily crumbled into powder.

But if, inſtead of forming the mortar of pure lime alone, a large proportion of ſand be added to it, the water will in this caſe diſſolve as much of the lime as in the former; and the particles of hard ſand, like ſticks or threads when making ſugar-candy or other cryſtals, while ſurrounded by the watery ſolution, will help to forward the cryſtallization, and render it more perfect than it otherwiſe would have been, ſo as firmly to cement the particles of ſand to one another. And, as the granules of ſand are perfectly hard of themſelves, ſo as not to admit of being broken down like the particles of chalk, it neceſſarily follows, that the cement made of theſe materials muſt be much more perfect in every reſpect than the former.

After conſidering a variety of circumſtances in regard to the ſolubility of lime in water, and its cryſtallization, it is remarked, that, when a large quantity of ſand is mixed in the mortar, that ſand will of courſe bear a great proportion to the whole maſs; ſo that the water that may be mixed with the mortar will be much greater, in proportion to the quantity of lime contained in this mortar, than if the whole had conſiſted of pure calcareous matter; and that, as the ſand abſorbs none of that water, that water, now pure, is at liberty to act once more upon thoſe few particles of cauſtic lime that may ſtill remain in the mortar, which will be diſſolved and converted into cryſtals in their turn. In this way it may happen, in ſome circumſtances, that a very large proportion of the lime may become cryſtallized; ſo that the mortar will conſiſt almoſt entirely of ſand enveloped in cryſtalline matter, and become in due time as hard as ſtone itſelf; whereas mortar, conſiſting of pure lime, without ſand, can hardly ever be much harder than chalk. It is not, however, to be ſuppoſed, that in any caſe this dried mortar will aſſume that tranſparent cryſtalline form, or the compact firmneſs of ſome ſorts of calcareous matters, ſuch as marble and lime-ſtone. In mortar, in ſpite of the utmoſt care that can ever be taken, a very conſiderable quantity of the lime muſt remain undiſſolved; which undiſſolved lime, although it may be ſo much ſeparated by the ſand and cryſtalline lime-ſtone as not much to affect the hardneſs of the mortar, yet it muſt ſtill retain its white chalk-like appearance. As marble and lime-ſtone are, however, always formed by thoſe particles of lime that have been wholly diſſolved in water, and from which they have been gradually ſeparated by a more ſlow and more perfect mode of cryſtallization, they have nothing

thing of that opaque calx-like appearance, but aſſume other colours, and appear more firm, uniform, and compact; the ſand and other matters that may be enveloped in them, being entirely ſurrounded with a pure cryſtalline matter.

To obtain the moſt perfect kind of mortar, it is not, however, enough that a large proportion of ſand ſhould be employed, and that the ſand ſhould be intimately mixed with the lime; it is alſo of the utmoſt importance that a large proportion of water be added; for without this it is impoſſible that a large proportion of the lime can be cryſtallized; and the mortar, in that caſe, would conſiſt only of a mixture of chalky matter and ſand, which could hardly be made to unite at all, and would be little more coherent than ſand by itſelf, and leſs ſo than pure chalk. In that caſe, pure lime alone muſt afford rather a firmer cement than lime with ſand. It is alſo of very great importance that the water be retained as long in the mortar as poſſible; for if it be ſuddenly evaporated, it will not only be prevented from acting a ſecond time upon the lime, after a part of what was firſt diſſolved has been cryſtallized, but even the few cryſtals that would be formed when the water was ſuddenly evaporating, would be of themſelves much more imperfect than they otherwiſe moſt certainly would have been. In proof of which, inſtances of the cryſtallization of common ſalt, lump-ſugar, and ſugar-candy, may be adduced; after which, every one knows what a difference there is between the firmneſs of the different ſubſtances; and that as great muſt be the difference between the firmneſs of that cement which has been ſlowly dried, and that which has been haſtily hardened by the powerful action of a warm air. It is contended, that it is owing to this circumſtance that the lime, which remains all winter in a mortar-tub filled with water, is always found to be much firmer and more coherent than the mortar that was taken from the ſame tub and uſed in any work of maſonry, although in this caſe the materials were exactly the ſame. From the ſame cauſe, any work cemented with lime under water, if it has been allowed to remain undiſturbed and uninjured until it has once become hard, is always much firmer than that which is above the ſurface of the water.

In order to render the force of the above reaſoning more ſtrong and convincing, lime-cement or mortar may be compared to a maſs of matter conſiſting of a congeries of ſtones cloſely compacted together, and united by a ſtrong cementing matter that had, while in a fluid ſtate, pervaded all the interſtices between the ſtones, and afterwards become a ſolid indiſſoluble ſubſtance. If the cementing matter be exceedingly hard and coherent, and if the ſtones bedded among it be alſo very hard and firm, the whole maſs will become like a ſolid rock, without fiſſures, that can hardly be broken to pieces by the power of man. But, although the cement ſhould be equally firm, if the ſtone, of which it conſiſts, be of a ſoft and friable nature, ſuppoſe chalk or ſand-ſtone, the whole maſs will never be capable of attaining ſuch a degree of firmneſs as in the former caſe; for, when any force is applied to break it in pieces, although the cement ſhould keep its hold, the ſolid matter cemented by it would give way, and the whole would be eaſily broken to pieces. Whereas in mortar, the ſand that is added to it repreſents the ſtones of a ſolid matter in the compoſition, the particles of which are united together by the lime which had been formerly diſſolved, and now cryſtallized, which becomes an exceedingly ſolid and indiſſoluble concretion. And as the particles of ſand are of themſelves exceedingly hard, and the cement by which they are united equally ſo, it is plain that the whole concretion muſt be extremely firm, ſo as to require very great force to diſunite any particle of it from the whole maſs. But if, inſtead of employing ſand, the only ſolid body that is entangled among the cementing matter ſhould be chalk, (as in all caſes where the mortar conſiſts of pure lime alone,) or any other ſlightly-cohering ſubſtance, let the cementing particles of that compoſition be ever ſo perfect, it is impoſſible that the whole can ever attain a great degree of firmneſs, as theſe chalky matters will be eaſily broken aſunder.

It has already been noticed, that a variety of conjectures have been made about the nature of the lime-cement employed by the ancients. It has been thought that they poſſeſſed an art of making mortar, which has been long ſince entirely loſt; as the cement in the walls which have been built by them, appears to be, in many caſes, much firmer than that which had been made in modern times. Yet, when the mortar of theſe old buildings is analyſed, it is found to conſiſt of the ſame materials, and nearly in the ſame proportions, in which they are now made uſe of: and it is thought probable, that their only ſecret conſiſted in mixing the materials more perfectly than the rapidity or avarice of modern builders will permit; in employing their mortar in a much more fluid ſtate than is done now; and in allowing it to dry more ſlowly, which the immoderate thickneſs of many of their walls would naturally produce, without any preconcerted deſign on their part. Tradition has even handed down to the preſent times the memory of the moſt eſſential of theſe particulars; as the lower claſs of people, in every part of the nation, at this moment invariably ſuppoſe and believe that theſe old walls were compoſed of a mortar ſo very thin, as to admit of its being poured, like a fluid, between the ſtones, after they were laid in the wall; and the appearance of theſe old walls, when taken down, ſeems to favour this popular tradition. Nor is it doubted but that this may have been the caſe. The ſtones in the outer part of the wall, it is thought, were probably bedded in mortar nearly as is practiſed at preſent; and the heart, after being packed well with irregular ſtones, might have the interſtices between them entirely filled up with fluid mortar; which would inſinuate itſelf into every cranny, and in time adhere as firmly as the ſtones themſelves, or even more ſo, if the ſtones were of a ſandy friable nature. And that, as theſe walls were uſually of very great thickneſs, it might often happen, that the water in this mortar, by acting ſucceſſively upon different particles of cauſtic lime, would at length be entirely abſorbed by ſucceſſive cryſtallizations, ſo as to become perfectly dry, without any evaporation at all; in which caſe, a very large proportion of the original lime muſt have been regularly cryſtallized in a ſlow and tolerably-perfect manner, ſo as to attain a firmneſs little inferior to lime-ſtone or marble itſelf.

It is ſuppoſed that upon theſe principles it is eaſy to account for the ſuperior hardneſs of ſome old cements, when compared with that of modern times, in which a practice very different is uſually followed, without having recourſe to any wonderful *arcana* whatever. There are unqueſtionably, however, many doubtful and myſterious circumſtances connected with this matter, which require the aid of further trials and experience for their full explanation.

There are moreover a few other circumſtances that may influence the quality of common lime-mortar. If lime-ſtone be ſufficiently calcined, it is deprived of all its moiſture, and of all its carbonic acid gas, or fixed air. But experience ſhows, that lime-ſtone will fall to powder on the effuſion of water upon it, when it is much leſs perfectly calcined, and while it ſtill retains almoſt the whole of its fixed air. And, as maſons have hardly any other rule for judging whether lime-ſtone be ſufficiently calcined, except this ſingle circumſtance of its falling to a powder when water is poured upon it, it may thus eaſily be perceived, that the ſame lime may be more or leſs fitted for making good mortar, according to a circumſtance that, in a great meaſure, eludes the obſervation of operative maſons; for, if it ſhould happen that all the pieces of lime drawn from a kiln at one time were juſt ſufficiently calcined to make it fall to a powder with water, *and no more*, that powder would be altogether unfit for making mortar of any kind. This is a caſe that can ſeldom happen; but, as there are a great many intermediate degrees between that ſtate and perfect calcination, it muſt
often

often happen that the ſtone will approach nearer to one of theſe extremes at one time than at another; ſo that the mortar may be much more perfect at one time than at another, owing to a variation in this particular.

All thoſe who have written on the ſubject of lime as a cement, have endeavoured to aſcertain what is the due proportion of ſand for making the moſt perfect cement. But a little attention to the matter will ſhow, that all rules, which could be preſcribed as to this particular, muſt be ſo vague and uncertain, as to be of little utility to the practical maſon; as, beſides the variation which may ariſe from a more or leſs perfect degree of calcination as above, it is a certain fact, that ſome kinds of lime-ſtones are much more pure, and contain a much ſmaller proportion of ſand, than others do; ſome being found almoſt perfectly pure, while others contain eleven-twelfths of ſand, and all the intermediate proportions of it. Therefore it would be abſurd to ſay that pure lime would require as ſmall a proportion of ſand to make it into mortar, as that which originally contained in itſelf a much larger proportion of ſand than any writer has ever ventured to propoſe for being put into mortar. Beſides, there are differences cauſed by the different nature of the calcination in the different ſorts of lime-ſtone; from which it may, upon the whole, be concluded, that about one-tenth of *pure* lime-ſtone is not enough calcined to admit of being made into mortar; and that, of the moſt impure ſorts of lime-ſtone, not above one-fourth part of the lime contained in it is ſo much calcined as to be in a cauſtic ſtate. The variation that is produced by theſe means in regard to the proportion of ſand that will be required to the lime in the one or the other caſe, is found to be ſo extremely great as hardly to be conceived. It is, however, ſtated, that the beſt mortar that has been ſeen made, was formed of lime which had been found to contain eleven parts of ſand to one of lime: to this there was added between twice and thrice its whole bulk of ſand *by meaſure;* which may be allowed to have been at leaſt three times its quantity *by weight*. Therefore, ſuppoſing that every particle of that lime had been ſo perfectly calcined as to be in a cauſtic ſtate, there could not be leſs than forty-ſeven parts of ſand to one of lime. As much may, however, be allowed for the uncauſtic part of the lime as is pleaſed, and the calculation made accordingly. But it is hardly poſſible to ſuppoſe that above one-hundredth part of this maſs, independent of the water, conſiſted of pure cauſtic calcareous earth.

On theſe conſiderations, it is conceived that it is impoſſible to preſcribe any determinate proportion of ſand to lime, as that muſt vary according to the nature of the lime and other incidental circumſtances, which would form an infinity of exceptions to any general rule. But it would ſeem that it might be ſafely inferred, that the moderns in general rather err in giving too little ſand, than in giving too much. It deſerves, however, to be noticed, that the ſand, when naturally in the lime-ſtone, is more intimately blended with the lime than can poſſibly be ever effected by any mechanical operation; ſo that it would be in vain to hope to make good mortar artificially from pure lime, with ſuch a ſmall proportion of cauſtic calcareous matter as may ſometimes be effected when the lime naturally contains a very large proportion of ſand. But there ſeems to be no doubt, that if a much larger proportion of ſand were employed, and if that were more carefully blended and expeditiouſly worked than is common, the mortar would be much more perfect than is uſual in modern times, as has been proved by actual trials.

It is ſtated by ſir Humphry Davy, in his work on "Agricultural Chemiſtry," that there are two modes in which lime acts as a cement; in its combination with water, and in its combination with carbonic acid. When quicklime is rapidly made into a paſte with water, it ſoon loſes its ſoftneſs, and the water and the lime form together a ſolid coherent maſs, which conſiſts of 17 parts of water to 55 parts of lime. When this hydrat of lime, while it is conſolidating, is mixed with red oxyd of iron, alumina, or ſilica, the mixture becomes harder and more coherent than when lime alone is uſed; and it appears that this is owing to a certain degree of chemical attraction between hydrat of lime and theſe bodies; and they render it leſs liable to decompoſe by the action of the carbonic acid in the air, and leſs ſoluble in water. The hardneſs of the mortar in very old buildings is alſo thought to depend upon the perfect converſion of all its parts into carbonat of lime. The pureſt lime-ſtones are the beſt adapted, it is ſaid, for making this kind of mortar. The magneſian lime-ſtones make excellent water-cements, but act with too little energy upon carbonic acid gas to make good common mortar. The Romans, on Pliny's authority, made their beſt mortar a year before it was uſed, ſo that it is ſuppoſed it was partially combined with carbonic acid gas before it was employed.

Mr. Doſſie, in the ſecond volume of the Memoirs of Agriculture, gives the following method of making mortar impenetrable to moiſture, acquiring great hardneſs, and exceedingly durable, ſimilar to that uſed by the ancients, which was diſcovered by a gentleman of Neufchatel: Take of unſlaked lime and of fine ſand, in the proportion of one part of the lime to three parts of the ſand, as much as a labourer can well manage at once; and then, adding water gradually, mix the whole well together with a trowel, till it be reduced to the conſiſtence of mortar. Apply it immediately, while it is hot, to the purpoſe, either of mortar, as a cement to brick or ſtone, or of plaſter to the ſurface of any building. It will then ferment for ſome days in dry places, and afterwards gradually concrete, or ſet, and become hard: but in a moiſt place it will continue ſoft for three weeks or more; though it will, at length, attain a firm conſiſtence, even if water have ſuch acceſs to it as to keep the ſurface wet the whole time. After this, it will acquire a ſtone-like hardneſs, and reſiſt all moiſture. The perfection of this mortar depends on the ingredients being thoroughly blended together; and the mixture being applied immediately after to the place where it is wanted. The lime for this mortar muſt be made of lime-ſtone, ſhells, or marl; and the ſtronger it is, the better the mortar will be; beſides, the lime ſhould be carefully kept from the acceſs of air, or wet; otherwiſe, by attracting moiſture, it will loſe proportionably that power of acting on the ſand, by which the incorporation is produced. It is proper alſo to exclude the ſun and wind from the mortar for ſome days after it is applied; that the drying too faſt may not prevent the due continuance of the fermentation, which is neceſſary for the action of the lime on the ſand. When very great hardneſs and firmneſs are required, the uſing of ſkimmed milk inſtead of water, either wholly or in part, will produce the deſired effect, and render the mortar extremely tenacious and durable.

M. Loriot's mortar, the method of making which was announced by order of his majeſty at Paris in 1774, is made in the following manner: Take one part of brick-duſt finely ſifted, two parts of fine river-ſand ſkreened, and as much old ſlaked lime as may be ſufficient to form mortar with water, in the uſual method, but ſo wet as to ſerve for the ſlaking of as much powdered quicklime as amounts to one-fourth of the whole quantity of brick-duſt and ſand. When the materials are well mixed, employ the compoſition quickly, as the leaſt delay may render the application of it imperfect or impoſſible. Another method of making this compoſition is to form a mixture of the dry materials, i. e. of the ſand, brickduſt, and powdered quicklime, in the preſcribed proportion; which mixture may be put in ſacks, each containing a quantity ſufficient for one or two troughs of mortar. The above-mentioned old ſlaked lime and water being prepared apart, the mixture is to be made in the manner of plaſter, at the inſtant when it is wanted, and is to be well chafed with the trowel. With reſpect to this method, Dr. Higgins obſerves, that M. Loriot corrects the bad quality of the old and effete lime, which conſtitutes the baſis of his mortar, and which has regained a part of the fixed air that had been expelled from it, by the addition of freſh and non-efferveſcent lime, haſtily added to it, at the time of uſing the compoſition, which muſt undoubtedly improve the imperfect maſs. And he adds, that, when an ignorant artiſt makes mortar with whiting inſtead of lime, he can mend it conſiderably by adding lime to it; but his mortar will ſtill be defective.

Dr. Higgins has made a variety of experiments, in conſequence of the modern diſcoveries relating to fixed air, for the purpoſe of improving the mortar uſed in our buildings. According to this author, the perfection of lime prepared for the purpoſe of making mortar, conſiſts chiefly of its being totally deprived of its fixed air. On examining ſeveral ſpecimens of the lime commonly uſed in building, he found that it is ſeldom or never ſufficiently burned; for they all efferveſced, and yielded more or leſs fixed air, on the addition of an acid, and ſlaked ſlowly, in compariſon with well-burned lime. Dr. Higgins alſo relates ſome experiments, which ſhow how very quickly lime imbibes fixed air from the atmoſphere; on its expoſure to which, it by degrees ſoon loſes thoſe characters which chiefly diſtinguiſh it from mere limeſtone or powdered chalk; by ſoon attracting from thence that very principle, to the abſence of which it owes its uſeful quality as a cement, and which had before been expelled from it in the burning. Hence he concludes, that, as lime owes its excellence to the expulſion of fixed air from it in the burning, it ſhould be uſed as ſoon as poſſible after it is made, and guarded from expoſure to the air, as much as poſſible, before it is uſed. It is no wonder, therefore, he ſays, that the London mortar is bad, if the imperfection of it depended ſolely on the badneſs of the lime; ſince the lime employed in it is not only bad when it comes freſh from the kiln, becauſe it is inſufficiently burned, and the air has acceſs to it, but becomes worſe before it is uſed, by the diſtance and mode of its conveyance; and, when ſlaked, is as widely different from good lime as it is from powdered chalk. For a ſimilar reaſon, every other cauſe, which tends to reſtore to the lime the fixed air of which it had been deprived in the burning, muſt deprave it. It muſt receive this kind of injury, for inſtance, from the water, ſo largely uſed, firſt in ſlaking the lime, and afterwards in making it into mortar, if that water contains fixed air, from which few waters are perfectly free, and which will greedily be attracted by the lime. The injury ariſing from this cauſe is prevented by the ſubſtitution of lime-water, ſo far as may be practicable or convenient.

From other experiments, made with a view of aſcertaining the beſt relative proportions of lime, ſand, and water, in the making of mortar, it appeared that thoſe ſpecimens were the beſt which contained one part of lime in ſeven of the ſand: for thoſe which contained leſs lime, and were too ſhort whilſt freſh, were more eaſily cut and broke, and were pervious to water; and thoſe which contained more lime, although they were cloſer in grain, did not harden ſo ſoon, or to ſo great a degree, even when they eſcaped cracking by lying in the ſhade to dry ſlowly. It appeared farther, that mortar, which is to be uſed where it muſt dry quickly, ought to be made as ſtiff as the purpoſe will admit, or with the ſmalleſt practicable quantity of water; and that mortar will not crack, although the lime be uſed in exceſſive quantity, provided it be made ſtiffer, or to a thicker conſiſtence than mortar uſually is.

Dr. Higgins has alſo ſhown, that though the ſetting of mortar, as it is called by the workmen, chiefly depends on the exſiccation of it, yet its induration, or its acquiring a ſtony hardneſs, is not cauſed by its drying, as has been ſuppoſed, but is principally owing to its abſorption of fixed air from the atmoſphere, and is promoted in proportion as it acquires this principle; the acceſſion of which is indiſpenſably neceſſary to the induration of calcareous cements. In order to the greateſt induration of mortar, therefore, it muſt be ſuffered to dry gently, and ſet; the exſiccation muſt be effected by temperate air, and not accelerated by the heat of the ſun or fire; it muſt not be wetted ſoon after it ſets; and afterwards it ought to be protected from wet as much as poſſible, until it is completely indurated; the entry of acidulous gas muſt be prevented as much as poſſible, until the mortar is finally placed and quieſcent; and then it muſt be as freely expoſed to the open air as the work will admit, in order to ſupply acidulous gas, and enable it ſooner to ſuſtain the trials to which mortar is expoſed in cementitious buildings, and incruſtations. Dr. Higgins has alſo enquired into the nature of the beſt ſand or gravel for mortar, and into the effects produced by bone-aſhes, plaſter-powder, charcoal, ſulphur, &c. and he deduces great advantages from the addition of bone-aſhes, in various proportions, according to the nature of the work for which the compoſition is intended.

In the xxxviith vol. of the Phil. Tranſ. we have ſome methods of making mortar at Madras in the Eaſt Indies, communicated by Iſaac Pyke, eſq. at that time governor of St. Helena.

1. Take fifteen buſhels of freſh pit-ſand, well ſifted: add to it fifteen buſhels of ſtone-lime: let it be moiſtened or ſlacked with water in the common manner, and ſo laid two or three days together. Then diſſolve twenty pounds of *jaggery*, which is coarſe ſugar, or thick molaſſes, in water, and, ſprinkling this liquor over the mortar, beat it up together till all is well mixed and incorporated; and then let it lie by in a heap. Then boil a peck of *gram* (which is a ſort of grain like a tare, or between that and a pea) to a jelly, and ſtrain it off through a coarſe canvas, preſerving the liquor that comes from it. Take alſo a peck of myrabolans, and boil them likewiſe to a jelly, preſerving that water alſo as the other; and, if you have a veſſel large enough, you may put theſe three waters together, that is, the jaggery-water, the gram-water, and the myrabolan. The Indians uſually put a ſmall quantity of fine lime in it, to keep their labourers from drinking it. The mortar beaten up, and, when too dry, ſprinkled with this liquor, proves extraordinary good for laying brick or ſtone, keeping ſome of the liquor always at hand for the workman to wet his bricks with; and, if this liquor prove too thick, dilute it with freſh water. Obſerve alſo, that the mortar here is not only to be well beaten and mixed together, but alſo laid very well, and every brick, or piece of brick, fluſhed in with the mortar, and every cranny filled up, yet not in thick joints, like the common Engliſh mortar; and alſo over every courſe of bricks, ſome to be throwed on very thin; and where the work has ſtood, though but for a breakfaſt or a dining time, before you begin again, wet it well with this liquor with a ladle, and then lay on your freſh mortar; for this mortar, notwithſtanding its being thus wetted, dries much ſooner than one not uſed to it would conceive, eſpecially in hot weather.

2. For ſome very ſtrong work, the ſame mortar above is improved as follows: Take coarſe tow, and twiſt it looſely into bands as thick as a man's finger, (in England ox-hair is uſed inſtead of this tow;) then cut it into pieces of about an inch long, and untwiſt it ſo as to lie looſe; then ſtrew it lightly over the other mortar, which is at the ſame time to be kept turning over, ſo that this ſtuff be beaten into it, keeping labourers continually beating in a trough, and mixing it till it be well incorporated with all the parts of the mortar. And, as it will be ſubject to dry very faſt, it muſt be frequently ſoftened with ſome of the aforeſaid liquor of jaggery, gram, and myrabolans, and ſome freſh water; and, when it is ſo moiſtened and beaten, it will mix well; and with this they build (though it be not uſual to build common houſe-walls thus) when the work is intended to be very ſtrong, as for inſtance, Madras church ſteeple, which was

building when Mr. Pyke was laſt there; and alſo for ſome ornaments, as columns, good arched work, or imagery ſet up in gardens, it is thus made.

For the common buildings about Madras, where the rainy ſeaſon holds not above three months in the year, and ſometimes leſs, they uſually lay all the common brick-work in a loamy clay, and plaſter it over on both ſides with this mortar, which is yet further to be improved.

3. Having the mortar thus prepared, as above, ſeparate ſome of it, and to every half-buſhel take the white of five or ſix eggs, and four ounces of *ghee*, or ordinary unſalted butter, and a pint of butter-milk, beaten all well together: mix a little of the mortar with this, till all the ghee, whites of eggs, and butter-milk, be ſoaked up; then ſoften the reſt well with plain freſh water, and ſo mix all together, and let it be ground, a trowel-full at a time, on a ſtone with a ſtone roller, in the ſame manner that chocolate is uſually made or ground in England; and let it ſtand by in a trough for uſe. When you uſe it, in caſe it be too dry, moiſten it with ſome water, or the before-mentioned liquor. This is the ſecond coat of plaſtering.

When the firſt coat of plaſtering is laid on, let it be well rubbed on with a hardening-trowel, or with a ſmooth brick, and ſtrewed with a gritty ſand, moiſtened, as occaſion requires, with water, or the before-mentioned liquor, and then well hardened on again; which, when half dry, take the laſt-mentioned compoſition for the fine plaſtering; and, when it is almoſt dry, lay on the whitening varniſh; but, if the work ſhould be quite dry, then the chinam-liquor muſt be waſhed over the work with a bruſh.

The beſt ſort of whitening varniſh is thus made: Take one gallon of toddy, a pint of butter-milk, and as much fine chinam, or lime, as ſhall be proper to colour it; add to it ſome of the chinam-liquor, waſhing it gently over with it; and, when it is quite dried in, do the ſame again. A plaſter thus made is more durable than ſome ſoft ſtone, and holds the weather better in India than any of the bricks they make there. In ſome of the fine chinam that is to endure the weather, and where it is likely to be ſubject to much rain, they put gingerly oil [oleum ſeſami] inſtead of ghee; and alſo in ſome they boil the bark of the mango-tree, and other barks of aſtringent natures, and aloes, which grow here in great plenty by the ſea-ſhore; but to all of the fine chinam, for outſide plaſtering, they put butter-milk, which is here called *toyre*. And for inſide-work, they uſe glue made very thin and weak, inſtead of ſize, for white-waſhing; and ſometimes they add a little gum to it.

As ſeveral of the ingredients here mentioned are not to be had in England, it may not be amiſs to ſubſtitute ſomething of the ſame nature. As to all the aſtringent barks, oak-bark may be as good as any. Inſtead of aloes, either turpentine, or the bark and branches of the ſloe-tree. Though turpentine be not ſo ſtrong, yet, if uſed in greater quantity, it may ſerve to the ſame purpoſe. Inſtead of myrabolans, juice of ſloes may be uſed; inſtead of jaggery, coarſe ſugar, or molaſſes, will do; as to toddy, which is a ſort of palm-wine, the liquor from the birch-tree comes near to it.

In China, and ſome other parts, they temper their mortar with blood of any ſorts of cattle; but the ingredients before mentioned are ſaid to be as binding, and do full as well, and do not make the mortar of ſo dark a colour. The plaſtering above deſcribed, is thought in India vaſtly to exceed any ſort of ſtucco-work, or plaſter of Paris; and Mr. Pyke has ſeen a room done with this ſort of terras-mortar, that has fully come up to the beſt ſort of wainſcot-work, in ſmoothneſs and beauty. *Phil. Tranſ.* 1732.

When mortar is to come in contact with wood, the following particulars muſt be attended to. Mortar made of lime from burnt chalk is much more deſtructive to timber than ſtone-lime, or that burnt from lime-ſtone. Chalk-lime attracts moiſture; and, communicating it to any timber which it touches, occaſions its decay. Sea-ſand is alſo prejudicial, if made into mortar, from a ſimilar quality of attracting moiſture from the atmoſphere: this may in ſome degree be corrected by waſhing the ſand well in freſh water, where good ſand cannot be procured. Good mortar, where any is required to be in contact with timber, may be made from a mixture of ſtone-lime freſh burnt, and river-ſand, to which a very ſmall quantity of common brown or yellow iron-ochre ſhould be added, and well incorporated therewith. *Tranſ. of the Soc. of Arts*, vol. xxi. 1802.

On the other hand, it may be readily conceived that a mortar, or cement, made of peculiar ingredients, might be invented, which not only would not injure the timber to which it might be applied, but which might tend to preſerve it from diſeaſe, or to cure it when diſeaſed. And accordingly we find that Mr. Joſeph Bramah, of Pimlico, has lately taken out a patent for applying the Mineral or Earth, called Parker's Cement, or Roman Cement, to Timber of all Deſcriptions, ſo as to prevent and cure the Dry-rot. The patent ſpecifies that "Parker's cement, or Roman cement, if applied to timber of all deſcriptions, as to the timbers of buildings, ſhips, and other places where timber is uſed, infected with the rot commonly called the dry-rot, will completely put a ſtop to the infection to which it ſhall be ſo applied, and will prevent its recurrence. The mode of application for this purpoſe is to mix the Parker's cement, in a pure and freſh ſtate, with water, ſo as to form a compoſition of the conſiſtency of white-waſh, or lime-waſh; to ſcrape the timbers infected as perfectly clean as poſſible, and then coat it with the mixture of the cement; and it will prevent the timber from being liable or ſubject to the dry-rot." *Repertory of Arts*, 1815.

M. Felibien obſerves, that the ancient maſons were ſo very ſcrupulous in the proceſs of mixing and blending their mortar, that the Greeks kept ten men conſtantly employed, for a long ſpace of time, to each baſon; this rendered the mortar of ſuch prodigious hardneſs, that Vitruvius tells us the pieces of plaſter falling off from old walls ſerved to make tables. The ſame Felibien adds, it is a maxim among old maſons to their labourers, that they ſhould dilute with the ſweat of their brow, i. e. labour it a long time, inſtead of drowning it with water to have done the ſooner.

But, in modern times, a mill has been contrived (by Mr. Supple), for the purpoſe of ſaving labour in the making up of mortar, as well as doing the buſineſs more effectually and at a trifling expenſe. It may alſo be uſeful in working clay, &c. The mode of doing it is thus deſcribed by the inventor: "A pit is dug in the ground, which is bricked at the bottom and ſides, into which the operator puts the lime. He has the command of a ſmall ſtream of water, which is conveyed at pleaſure into the pit, and in a few days the lime is ſufficiently ſlaked; he then puts the lime and ſand, or gravel, into the mill, which not only mixes both together, but incorporates them in a very effectual manner; and, as the lime is ſufficiently moiſt when taken out of the pit, no more water is required for the mortar. If for preſent uſe, the quantity he makes at a time is ſix buſhels, as he finds, when more is put in, it is apt to ſtrain the cogs, if not made very ſtrong. If the mortar is made with ſand alone, the ſpace between the cogs need not be made ſo wide as three inches. He has a ſecond ſhaft, with cloſer cogs, in order to give the mortar another working; the ſpace between theſe cogs is but two inches; but it does not anſwer well till after the firſt ſhaft has been uſed, nor is it neceſſary, unleſs for very nice work." He adds, that he "made 200 barrels of lime into mortar laſt ſummer, and has now the like quantity of lime in the pit for the ſame purpoſe. He made ſix barrels of mortar in a day with eaſe; a boy of ſeven years old drives the horſe, and the moſt indifferent one is good enough for the purpoſe, the draught being ſo eaſy." This machine may be wrought by any other power, as water, wind, or ſteam.

The ſalt-petre workers in France uſing the mortar of old buildings for extracting that ſalt, M. Petit has thought it worthy a peculiar attention, and has made ſeveral trials, by way of analyſis of mortar, to determine whether it really and eſſentially contains nitre in it, or whether it be only ſerviceable in that mixture of ſalts from which nitre is produced.

The common managers of the ſalt-petre works are of opinion, that mortar contains in it all the ſalt-petre they procure from it; and that the wood-aſhes, and other ſubſtances they uſe with it, only ſerve to abſorb the fat or oily parts, and to ſet the ſalt-petre at liberty to ſhoot. This they pretend to affirm upon experience; but they do not conſider, that, though they can procure ſalt-petre from the rubbiſh or mortar without the addition of wood-aſhes, yet it is not pure mortar that they make their experiments upon, but ſuch as is taken from their own heaps, upon which they always throw all the reſiduum of their former works, and all that liquor which will ſhoot no more cryſtals, but which they call the mother-water of ſalt-petre. This gentleman, therefore, very properly judged, that to make a regular trial of the mortar or rubbiſh alone, he muſt not take it from their ſtores, uſed in the ſalt-petre works, but pick it himſelf from the ruins of old buildings.

The mark the ſalt-petre workers have to know good mortar for their purpoſe is, that it taſtes acrid and ſalt when applied to the tongue; but to this it may be alſo added, that it ought to be of a greyiſh colour, and ſuch as, when powdered and ſprinkled upon burning charcoal, yields ſome ſparks of fire; and the more ſparks it gives, the better it is for the purpoſe: and another character of the goodneſs is, that theſe well-impregnated mortars have a certain unctuoſity or fattineſs to the touch, which other kinds have not.

The fineſt of all kinds of mortar for ſalt-petre work is ſuch as is had from the ruins of old buildings in a low ſituation, and out of the way of much ſun-ſhine; where there has been no great quantity of fire kept, and eſpecially ſuch as has ſerved for the cements of the walls of ſtables, or the like. M. Petit choſe from ſuch a wall twelve pounds of old mortar; this he had beaten to powder, and poured upon it eighteen pints of water; the whole was then ſet over the fire, and ſtirred from time to time for three or four hours, that the water might be well tinctured from the mortar; after this the water was filtered through paper, and was then found to be tinctured to a pale yellow tranſparent bitter, and ſomewhat acrid to the taſte.

The impregnation may be made without heat, by only ſtirring the mortar about for nine or ten days in cold water; and the quantity of ſalt taken up will be according to the goodneſs of the mortar and the quantity of water employed. The common ſpecific gravity of this liquor to water is as 32 to 31, or thereabout. M. Petit, having procured the tincture of fifty pounds of mortar, by ſeveral impregnations, in 72 French pints of water, evaporated it ſo far till it appeared highly charged with ſaline particles, taſting very acrid and bitter, and being of a browniſh-red colour; and its ſpecific gravity was in this ſtate to water as 4 to 3, there being more in quantity than about four pints. This was ſtill limpid, and of a duſky colour; and was afterwards evaporated over a gentle fire, to the conſiſtence of an extract, which, as it cooled, became much thicker and firmer, reſembling butter. This, being left open to the air, ſoon relented into a liquor of the conſiſtence of a ſyrup: its ſpecific gravity was now to water as 5 to 3; but, in leaving it open to the air, it continually attracted freſh humidity, and became leſs ſpecifically heavy. Experiments made with this extract ſucceeded in the following manner:

1. It turned the common blue paper to a fine deep red. The impregnations in water uninſpiſſated do this alſo in different degrees, according to their ſtrength.

2. Mixed in equal quantities with ſpirit of nitre and with ſpirit of ſea-ſalt, it made no efferveſcence or alteration in either.

3. A leaf of gold, being put into the mixture of this impregnation with ſpirit of nitre, was immediately diſſolved; and, in an hour or two afterward, the liquor was much clearer than before. A leaf of gold, being put into the mixture of this impregnation and ſpirit of ſea-ſalt, was in the ſame manner diſſolved in a few minutes. It is generally ſuppoſed, indeed, that the ſpirit of ſalt alone will diſſolve gold; but there ſeems to be an error in this, founded on the inaccuracy of the preparation of ſuch ſpirit of ſalt; for Meſſrs. Geoffroy and Boulduc have at different times produced before the French Academy ſpirit of ſalt carefully prepared by themſelves, which would not at all diſſolve gold, not even with the aſſiſtance of heat: even ſuch ſpirit of ſalt would, however, be made to diſſolve gold, by mixing this impregnation with it; ſo that it has the power of diſſolving gold in a great degree.

4. A leaf of ſilver being diſſolved in ſpirit of nitre, and this impregnation of mortar added to the ſolution, the whole became turbid, and a precipitation happened, part of the matter being thrown to the bottom, and part remaining ſuſpended in form of a white cloud, which kept its place without falling.

5. The impregnation being mixed in equal quantities with oil of vitriol formed a coagulum, and made a great efferveſcence, with copious red vapours, and a ſtrong ſmell of aqua fortis; and theſe vapours appeared at any time, on ſtirring the mixture, for ſeveral days together. If a larger quantity of oil of vitriol be added to this coagulum, it all becomes fluid, but ferments violently; and finally, there will be a white matter precipitated to the bottom of the clear liquor; and, if a leaf of gold be brought near this mixture, it will be diſſolved even by the vapour which exhales from it. Spirit of nitre has no effect upon this mixture, either in its ſtate of coagulum, or when reduced by more oil of vitriol into a clear liquor; but the volatile ſpirit of urine ferments violently, without the leaſt heat with it.

6. Oil of tartar *per deliquium* being added to the impregnation, the liquors would not readily mix, but remained ſeparate, the impregnation ſinking to the bottom; but, on ſtirring them thoroughly together, they finally were made to unite into a white ſubſtance like butter, with a ſtrong urinous ſmell. If a ſmall quantity of corroſive ſublimate be added to this mixture, the urinous ſmell ceaſes; and, if oil of vitriol be added, there is a violent fermentation occaſioned; and, in fine, a large quantity of precipitate.

7. This impregnation of mortar being mixed with an equal quantity of a ſolution of corroſive ſublimate, there is nothing remarkable produced, though the mixture be ever ſo much ſhaken; but, if a little oil of tartar *per deliquium* be added to this, the mixture becomes turbid, and, on ſtirring all together for ſome time, it becomes white and thick like butter. If to this, more corroſive ſublimate be added in ſolution, it becomes orange-coloured: and, on more ſtirring, this becomes again white; and finally gives a white precipitate at the bottom of a tranſparent liquor.

8. If, inſtead of oil of tartar, an equal quantity of lime-water be added, this in the ſame manner gives an urinous ſmell; and the whole difference is, that the mixture will not become thick with this, as it will with oil of tartar.

9. The impregnation of mortar produced the ſame coagulum in mixing with ſpirit of urine, that it did with oil of tartar *per deliquium;* but it made no coagulation with ſpirit of ſal ammoniac with lime: the occaſion of this difference is, that the ſpirit of urine contains a great deal of volatile ſalt, and the other but little. It is a

common error to ſuppoſe that the ſpirit of ſal ammoniac, which is moſt pungent, contains the greateſt quantity of ſalt; but this is not the caſe, for the ſpirit made with lime is much more pungent than that with ſalt of tartar, though the laſt is well known to contain a much larger portion of ſaline particles.

10. If a piece of paper or linen be wetted in this impregnation, and afterwards dried, it takes fire very violently, and ſparkles with the ſame violence as if it were impregnated with ſalt-petre.

From theſe experiments it is abundantly proved, that the impregnation of mortar contains a large quantity of a ſaline and nitrous ammoniac ſalt; for a diſſolution of ſal ammoniac and ſpirit of nitre, mixed together, are found to produce all the changes in the different bodies before named, that the impregnation does. On the whole, though it has been ſuppoſed by Mr. Tournefort and others, that mortar contained ſalt-petre, ſea-ſalt, and a fixed alkali; yet there does not appear any proof of its containing any of theſe ſalts: no fixed alkali can even be ſeparated from the impregnation of it; and, though the linen or paper, wetted in the impregnation of it, ſparkled when on fire, yet it is not nitre, but merely a nitrous ſal ammoniac, which occaſions that phenomenon. The ſame effect is produced, if the linen or paper be wetted with a mixture of ſpirit of urine and ſpirit of nitre. And the ſeveral experiments before recited prove, that there is in mortar a ſpirit of nitre and a ſpirit of ſea-ſalt, which, with the volatile urinous ſalts, form a nitrous or a ſaline ammoniac. *Mem. Acad. Scienc. Par.* 1734.

Beſides the common mortar uſed in laying of bricks and ſtones, there are ſeveral other kinds. Thus, for inſtance, the mortar uſed in making water-courſes, ciſterns, &c. is very hard and durable, being made of lime and hogs-greaſe, ſometimes mixed with the juice of figs, and ſometimes with liquid pitch; and, after application, is waſhed over with linſeed-oil. For this purpoſe, mortar made of terras, pozzolana, tile-duſt, or cinders, is mixed and prepared in the ſame manner as common mortar: only that theſe ingredients are mixed with lime, inſtead of ſand, in a due proportion, which is about half and half. The lime ſhould be made of ſhells or marble; and in works which are ſometimes dry and ſometimes wet, inſtead of terras, which is very dear, tile-duſt or cinder-duſt may be uſed.

PLASTER, otherwiſe called *white mortar*, uſed in coating walls and ceilings. It conſiſts of ox or cow hair mixed with lime and water, without any ſand. The common method of making this mortar is one buſhel of hair to ſix buſhels of lime. But, in this caſe, it is of great importance to have every particle of the lime-ſtone ſlaked before it is worked up; for, as ſmoothneſs of the ſurface is the moſt material point, if any particles of lime ſhould be beaten up in it, and employed in work before ſufficiently fallen, the water, ſtill continuing to act on them after it was worked up, would infallibly ſlake ſuch particles, which, forcibly expanding themſelves, would produce thoſe excreſcences on the ſurface of the plaſter commonly termed *bliſters*. Conſequently, in order to obtain a perfect kind of plaſter that will remain ſmooth on the ſurface and free of bliſters, there is an abſolute neceſſity to allow the lime to lie for a conſiderable time macerating or *ſouring* in water, before it is worked up. And the ſame ſort of proceſs is neceſſary for the lime when intended for uſe as mortar, though not ſo abſolutely. Great care is, however, required in the management in this reſpect; the principal things being the getting of well-burnt lime, and the allowing it to macerate, or *ſour*, with the water, for only a *very ſhort time* before it is uſed; but that which is the beſt burnt will require the maceration of ſome days in the water before it is ſufficiently ſlaked in the whole maſs for this purpoſe.

It were much to be wiſhed that the art of plaſtering could be again brought to its ancient perfection. In our beſt buildings the plaſtered walls and ceilings crack and fly, and in a little time grow damp, or moulder to decay. The Romans had an art of rendering their works of this kind much more firm and durable; and there is no reaſon to deſpair of reviving this art by proper trials. The ancient plaſtering of theſe people, preſerved to this time, where it has not met with violent blows or injuries from accidents, is ſtill found as firm and ſolid, as free from cracks or crevices, and as ſmooth and poliſhed on the ſurface, as if made of marble. The bottoms and ſides of the Roman aqueducts were made of this plaſtering, and endured many ages without hurt, unleſs by accidents; witneſs that whereof ſome yards are ſtill to be found on the top of the Pont de Gard, near Niſmes, for the ſupport of which that famous bridge was built to carry water to the ſaid town. The roofs of houſes, and the floors of rooms, at Venice, are covered with a ſort of plaſter, made of later date, and yet ſtrong enough to endure the ſun and weather for ſeveral ages, without cracking or ſpoiling, and without much injury from the people's feet. The ſecret of preparing this Venetian plaſter is not among us; but it would be worth while to try whether ſuch a ſubſtance might not be made by boiling the powder of gypſum dry over the fire, for it will boil in the manner of water; and, when this boiling or re-calcining was over, the mixing with it reſin or pitch, or both together, with common ſulphur, and the powder of ſea-ſhells. If theſe were all mixed together, the water added to it hot, and the matter all kept hot upon the fire till the inſtant of its being uſed, ſo that it might be laid on hot, it is poſſible this ſecret might be hit upon. Wax and oil of turpentine may be alſo tried as additions; theſe being the common ingredients in ſuch cements as we have accounts of as the firmeſt. Strong ale-wort is by ſome directed to be uſed, inſtead of water, to make mortar of limeſtone of a more than ordinary ſtrength. It is poſſible, that the uſe of this tenacious liquor to the powdered ingredients of this propoſed plaſter, might greatly add to their ſolidity and firmneſs. *Phil. Tranſ.* No. 93.

STUCCO is a very curious and ornamental kind of plaſter, which has been in modern times brought to great perfection. Generally ſpeaking, it is a compoſition of white marble pulverized, and mixed with plaſter or lime; the whole ſifted and wrought up with water; to be uſed like common plaſter. This is what Pliny means by *marmoratum opus*, and *albarium opus*. Of this are made ſtatues, buſts, baſſo relievos, and other ornaments of architecture.

A ſtucco for walls, &c. may be formed of the grout or putty, made of good ſtone-lime, or the lime of cockle-ſhells, which is better, properly tempered and ſufficiently beat, mixed with ſharp grit-ſand, in a proportion which depends on the ſtrength of the lime: drift-ſand is beſt for this purpoſe, and it will derive advantage from being dried on an iron plate or kiln, ſo as not to burn; for thus the mortar would be diſcoloured. When this is properly compounded, it ſhould be put up in ſmall parcels againſt walls, or otherwiſe, to *mellow*, as the workmen term it; reduced again to a ſoft putty, or paſte, and ſpread thin on the walls without any under-coat, and well trowelled. A ſucceeding coat ſhould be laid on, before the firſt is quite dry, which will prevent joints of brick-work appearing through it. Much depends upon the workmen giving it ſufficient labour, and trowelling it down. If this ſtucco, when dry, is laid over with boiling linſeed-oil, it will laſt a long time, and not be liable, when once hardened, to the accidents to which common ſtucco is liable.

Liardet's, or, as it is commonly called, *Adam's-oil, cement*, or ſtucco, is prepared in the following manner: For the firſt coat, take twenty-one pounds of fine whiting, or oyſter-ſhells, or any other ſea-ſhells calcined, or plaſter of Paris, or any calcareous material calcined and pounded, or any abſorbent material whatever, proper for the purpoſe; add white or red lead at pleaſure, deducting from the other abſorbent materials in proportion to the white or red lead added; to which put four quarts, beer-meaſure, of oil; and mix them together with a grinding-mill, or any levigating machine: and afterwards mix and beat up the ſame well with twenty-eight quarts, beer-meaſure, of any ſand or gravel, or of both, mixed and ſifted, or of marble or ſtone pounded, or of brick-duſt, or of any kind of metallic or mineral powders, or of any ſolid material whatever, fit for the purpoſe.

For the ſecond coat, take ſixteen pounds and a half of ſuperfine whiting, or oyſter-ſhells, or any ſea-ſhells calcined, &c. as for the firſt coat; add ſixteen pounds and a half of white or red lead, to which put ſix quarts and a half of oil, wine-meaſure, and mix them together as before: afterwards mix and beat up the ſame well with thirty quarts, wine-meaſure, of fine ſand or gravel ſifted, or ſtone or marble pounded, or pyrites, or any kind of metallic or mineral powder, &c. This compoſition requires a greater proportion of ſand, gravel, or other ſolids, according to the nature of the work, or the uſes to which it is to be applied. If it be required to have the compoſition coloured, add to the above ingredients ſuch a proportion of painters' colours as will be neceſſary to give the teint or colour required. In making the compoſition, the beſt linſeed or hempſeed, or other oils proper for the purpoſe, are to be uſed, boiled or raw, with drying ingredients, as the nature of the work, the ſeaſon, or the climate, requires; and, in ſome caſes, bees-wax may be ſubſtituted in place of oil: all the abſorbent and ſolid materials muſt be kiln-dried. If the compoſition is to be of any other colour than white, the lead may be omitted, by taking the full proportion of the other abſorbents; and alſo white or red lead may be ſubſtituted alone, inſtead of any other abſorbent material.

The firſt coat of this compoſition is to be laid on with a trowel, and floated to an even ſurface with a rule or darby, (i. e. a handle-float.) The ſecond coat, after it is laid on with a trowel, when the other is nearly dry, ſhould be worked down and ſmoothed with floats edged with horn, or any hard ſmooth ſubſtance that does not ſtain. It may be proper, previouſly to laying on the compoſition, to moiſten the ſurface on which it is to be laid by a bruſh with the ſame ſort of oil and ingredients which paſs through the levigating machine, reduced to a more liquid ſtate, in order to make the compoſition adhere the better. This compoſition admits of being modelled or caſt in moulds, in the ſame manner as plaſterers or ſtatuaries model or caſt their ſtucco-work. It alſo admits of being painted upon, and adorned with landſcape, or ornamental, or figure-painting, as well as plain painting. For the invention of this ſtucco, Mr. Liardet obtained a patent in 1773 for fourteen years, the term of which was extended to eighteen years, in conſequence of an act of parliament in 1776. For compoſitions very ſimilar to the preceding, patents were granted to Dr. Wark in 1765, Mr. Emerton in 1771, and to Mr. Rawlinſon in 1772.

Dr. Shaw informs us in his Travels, that the cement or mortar uſed in Barbary, which is apparently of the ſame conſiſtence and compoſition with thoſe of the ancients, is made in the following manner: They take two parts of wood-aſhes, three of lime, and one of fine ſand, which, after being well ſifted and mixed together, they beat for three days and nights inceſſantly with wooden mallets, ſprinkling them alternately and at proper times with a little oil and water, till they become of a due conſiſtence. This compoſition, he adds, is chiefly uſed in their arches, ciſterns, and terraces; but the pipes of their aqueducts are joined, by beating tow and lime together with oil only, without any mixture of water. Both theſe compoſitions quickly aſſume the hardneſs of ſtone, and ſuffer no water to prevade them: and will, therefore, anſwer the purpoſe of ſtucco.

Dr. Higgins deſcribes a water-cement, or ſtucco, of his own invention, for incruſtations internal and external, exceeding, as he ſays, Portland ſtone in hardneſs, for which he obtained his majeſty's letters patent in 1779. As for the materials of which this is made; drift-ſand, or quarry-ſand, or, as it is commonly called, pit-ſand, conſiſting chiefly of hard quartoſe flat-faced grains, with ſharp angles, the moſt free from clay, ſalts, and calcareous, gypſeous, or other, grains, leſs durable than quartz, containing the ſmalleſt quantity of pyrites, or heavy metallic matter, inſeparable by waſhing, and admitting the leaſt diminution in bulk by waſhing, is to be preferred to any other. The ſand is to be ſifted in ſtreaming clear water, through a ſieve which ſhall give paſſage to all ſuch grains as do not exceed one ſixteenth of an inch in diameter: and the ſtream of water and ſifting are to be ſo regulated, that all the ſand, which is much finer than the Lynn ſand, together with clay and other matter ſpecifically lighter than ſand, may be waſhed away with the ſtream; whilſt the purer and coarſer ſand, which paſſes through the ſieve, ſubſides in a convenient receptacle, whilſt the coarſe rubbiſh and ſhingle remain on the ſieve to be rejected. The ſubſiding ſand is then waſhed in clean ſtreaming water, through a finer ſieve, ſo as to be farther cleanſed and ſorted into two parcels: a coarſer, which will remain in the ſieve that is to give paſſage to ſuch grains of ſand only as are leſs than one-thirtieth of an inch in diameter, and which is to be ſaved apart under the name of coarſe ſand; and a finer, which will paſs through the ſieve and ſubſide in the water, and which is to be ſaved apart under the name of fine ſand. Theſe are to be dried ſeparately, either in the ſun, or on a clean iron plate ſet on a convenient ſurface, in the manner of a ſand-heat. Let the lime be choſen, which is ſtone-lime, which heats the moſt in ſlaking, and ſlakes the quickeſt when duly watered; which is the freſheſt made, and moſt cloſely kept; which diſſolves in diſtilled vinegar with the leaſt effervеſcence, and leaves the ſmalleſt reſidue inſoluble, and in this reſidue the ſmalleſt quantity of clay, gypſum, or martial matter. Let this lime be put in a braſs-wired fine ſieve, to the quantity of fourteen pounds. Let the lime be ſlaked by plunging it in a butt filled with ſoft water, and raiſing it out quickly and ſuffering it to heat and fume; and by repeating this plunging and raiſing alternately, and agitating the lime, until it be made to paſs through the ſieve into the water: reject the part of the lime that does not eaſily paſs through the ſieve; and uſe freſh portions of lime, till as many ounces of lime have paſſed through the ſieve as there are quarts of water in the butt. Let the water, thus impregnated, ſtand in the butt, cloſe covered, until it becomes clear; and, through wooden cocks placed at different heights in the butt, draw off the clear liquor, as faſt and as low as the lime ſubſides, for uſe. This clear liquor is called the cementing liquor. Let fifty-ſix pounds of the foreſaid choſen lime be ſlaked, by gradually ſprinkling on it, and eſpecially on the unſlaked pieces, the cementing liquor, in a cloſe clean place. Let the ſlaked part be immediately ſifted through the fine braſs-wired ſieve. Let the lime which paſſes be uſed inſtantly, or kept in air-tight veſſels, and let the part of the lime which does not paſs through the ſieve be rejected: the other part is called purified lime. Let bone-aſh be prepared in the uſual manner by grinding the whiteſt burnt bones; but let it be ſifted to be much finer than the bone-aſh commonly ſold for making cupels.

Having thus prepared the materials, take fifty-ſix pounds of the coarſe ſand, and forty-two pounds of the fine ſand: mix them on a large plank of hard wood placed horizontally: then ſpread the ſand ſo that it may ſtand to the height of ſix inches, with a flat ſurface on the plank; wet it with the cementing liquor; to the wetted ſand add fourteen pounds of the purified lime, in ſeveral ſucceſſive portions, mixing and beating them up together; then add fourteen pounds of the bone-aſh in ſucceſſive portions, mixing and beating all together. This Dr. Higgins calls the *water-cement coarſe-grained*, which is to be applied in building, pointing, plaſtering, ſtuccoing, &c. obſerving to work it expeditiouſly in all caſes, and in ſtuccoing to lay it on by ſliding the trowel upwards upon it; to well wet the materials uſed with it, or the ground on which it is laid, with the cementing liquor, at the time of laying it on; and to uſe the cementing liquor for moiſtening the cement and facilitating the floating of it.

If a cement of a finer texture be required, take ninety-eight pounds of the fine ſand, wet it with the cementing liquor, and mix it with the purified lime and the bone-aſh as above; with this difference, that fifteen pounds of lime are to be uſed inſtead of fourteen pounds, if the greater part of the ſand be as fine as Lynn ſand. This is called *water-cement fine-grained;* and is uſed in giving the laſt coating or the finiſh to any work, intended to imitate the finer-grained ſtones, or ſtucco.

More full information may be met with on this curious and intereſting ſubject in the firſt volume of Anderſon's Eſſays on Agriculture and Rural Affairs; in Doſſie's Memoirs of Agriculture, vol. ii. and in Sir Humphry Davy's Agricultural Chemiſtry. See alſo the Diſſertation on Limes, in Croſby's Builder's Price-Book, by Mr. John Phillips.

MORTA'RA, a town of Italy, in the Lumelline: ſeven miles north of Lumello.

MORTA'RIUM, *ſ.* See MORTER.

MOR'TE, a lake of the county of Tyrol: ten miles eaſt of Trent.

MORTE POIN'T, a cape of England, on the weſt coaſt of Devonſhire, at the entrance of the Briſtol Channel. Lat. 51. 10. N. lon. 4. 8. W.

MORTEAU', a town of France, in the department of the Doubs: twelve miles ſouth-eaſt of Pontarlier, and twenty-four eaſt-ſouth-eaſt of Beſançon.

MORTEL'LO. See MARTELLO, vol. xiv. p. 430.

MORTEMA'RT, a town of France, in the department of the Upper Vienne: ſix miles ſouth-ſouth-weſt of Bellac.

MOR'TER, an iſland in the Adriatic, near the coaſt of Dalmatia; on it are the ruins of a town, ſuppoſed to be the ancient Colentum, about thirteen miles in circumference. The iſland is chiefly inhabited by ſmugglers and pirates. A few farmers cultivate vines, but olives are abundant. Lat. 43. 57. N. lon. 15. 44. E.

MOR'TER, *ſ.* [*mortier,* Fr.] A lamp or light; a chamber-lamp. *Cotgrave.*

By that *morter* which that I ſee brenne,
Know I ful wel that day is not far henne. *Chaucer.*

Chambers has it MORTERE, *à mortarium,* a light or taper ſet in churches, to burn over the graves or ſhrines of the dead.

MORTE'RO, a ſmall iſland in the Mediterranean, near the coaſt of Sardinia. Lat. 41. 8. N. lon. 9. 45. E.

MORTERO'L, a town of France, in the department of the Upper Vienne: twelve miles eaſt-ſouth-eaſt of Le Dorat.

MOR'TES, a river of Braſil, which runs into the Parana.

MOR'TGAGE, *ſ.* [French.] A dead pledge; a thing put into the hands of a creditor.—The Romans do not ſeem to have known the ſecret of paper-credit, and ſecurities upon *mortgages. Arbuthnot.*

The eſtate runs out, and *mortgages* are made,
Their fortune ruin'd, and their fame betray'd. *Dryden.*

The ſtate of being pledged.—The land is given in *mortgage* only, with full intention to be redeemed within one year. *Bacon's Off. of Alienation.*

MORTGAGE, in law, is an obligation, whereby lands or tenements of a debtor are pawned or bound over to the creditor for money, or other effects, borrowed; peremptorily to be the creditor's for ever, if the money be not repaid at the day agreed on. In this ſenſe, *mortgage,* in the common law, amounts to much the ſame with *hypotheca* in the civil law. The creditor, holding ſuch land on ſuch agreement, is in the mean time called *tenant in mortgage.* He, who lays the pawn or gage, is called the *mortgager;* and he that takes it, the *mortgagee.* If a mortgage includes *exceſſive uſury,* it is prohibited by the ſtatute 37 Hen. VIII.

The French ſometimes uſe the word mortgage in the ſame ſenſe in their language; where it ſtands in contradiſtinction to a ſimple contract, which does not carry with it the mean profits, and which they call *vif-gage,* life-pledge.

Glanville defines mortgage, *mortuum vadium,* to be that *cujus fructus vel reditus interim percepti in nullo ſe acquietant.* Thus, it is called *mortgage,* i. e. "dead gage," of *mort,* death, and *gage,* pledge; becauſe, whatever profit it yields, yet it redeems not itſelf by yielding ſuch profit, except the whole ſum borrowed be likewiſe paid at the day; the mortgager being by covenant to receive the profits till default of payment. Others hold it called mortgage, becauſe, if the money be not paid at the day, the land, *moritur,* "dies" to the debtor, and is forfeited to creditor. Thus, if a man borrows of another a ſpecific ſum (e. g. 200l.) and grants him an eſtate in fee, on condition that if he, the mortgager, ſhall repay the mortgagee the ſaid ſum on a certain day mentioned in the deed, that then the mortgager may re-enter on the eſtate ſo granted in pledge; or, as is now the more uſual way, that the mortgagee ſhall reconvey the eſtate to the mortgager; in this caſe, the land, which is ſo put in pledge, is by law, in caſe of non-payment at the time limited, for ever dead and gone from the mortgager; and the mortgagee's eſtate in the lands is then no longer conditional, but abſolute. But, as it was formerly a doubt (Litt. 357. Cro. Car. 191.) whether by taking ſuch eſtate in fee it did not become liable to the wife's dower, and other incumbrances of the mortgage, though that doubt has been long ago over-ruled by our courts of equity, (Hard. 466.) it therefore became uſual to grant only a long term of years, by way of mortgage; with condition to be void on re-payment of the mortgage-money: which courſe has been ſince pretty generally continued, principally becauſe, on the death of the mortgagee, ſuch term becomes veſted in his perſonal repreſentatives, who alone are intitled in equity to receive the money lent, of whatever nature the mortgage may happen to be. As ſoon as the eſtate is created, the mortgagee may immediately enter on the lands; but is liable to be diſpoſſeſſed, upon performance of the condition by payment of the mortgage-money at the day limited. And, therefore, the uſual way is to agree, that the mortgager ſhall hold the land till the day aſſigned for payment; when, in caſe of failure, whereby the eſtate becomes abſolute, the mortgagee may enter upon it and take poſſeſſion, without any poſſibility, *at law,* of being afterwards evicted by the mortgager, to whom the land is now for ever dead. But here again the courts of *equity* interpoſe; and, though a mortgage be thus forfeited, and the eſtate abſolutely veſted in the mortgagee, at the common law, yet they will conſider the real value of the tenement compared with the ſum borrowed. And, if the eſtate be of greater value than the ſum lent thereon, they will allow the mortgager, *at any reaſonable time,* (leſs than 20 years,) to recal or redeem his eſtate; paying to the mortgagee his principal, intereſt, and expenſes; for, otherwiſe, in ſtrictneſs of law, an eſtate worth 1000l. might be forfeited for non-payment of 100l. or a leſs ſum. This reaſonable advantage, allowed to mortgagers, is called the *equity of redemption.* And this enables a mortgager to call on the mortgagee, who has poſſeſſion of his eſtate, to deliver it back, and account for the rents and profits received, on payment of his whole debt and intereſt; thereby turning the *mortuum* into a kind of *vivum vadium.* But, on the other hand, the mortgagee may either compel the ſale of the eſtate, in order to get the whole of his money immediately, or elſe call upon the mortgager to redeem his eſtate preſently, or in default thereof to be for ever *foreclosed* from redeeming the ſame, i. e. to loſe his equity of redemption without poſſibility of recal. And alſo in ſome caſes of fraudulent mortgages, ſpecified in 4 & 5 W. and M. c. 16. the fraudulent mortgager forfeits all equity of redemption whatſoever. It is not, however, uſual for mortgagees to take poſſeſſion of the mortgaged eſtate, unleſs where the ſecurity is precarious or ſmall; or where the mortgager neglects even the payment of intereſt. When the mortgagee is frequently obliged to bring an ejectment, and take the land into his own hands, it is in the nature of a pledge, or the pignus of the Roman law: whereas, while it remains in the hands of the mortgager, it more reſembles their hypotheca, which was, where the poſſeſſion of the thing pledged remained with the debtor. But, by 7 Geo. II. c. 20. after payment or tender by the mortgager of principal, intereſt, and coſts, the mortgagee can obtain no ejectment; but may be compelled to re-aſſign his ſecurities. ***Blackſt. Com.*** b. ii. c. 10.

The right of redemption is not confined to the mortgager, his heirs, executors, aſſignees, or ſubſequent incumbrances; but extends to all perſons claiming any intereſt whatever in the premiſes as againſt the mortgager; therefore a perſon claiming under a deed void (as being voluntary) againſt a ſubſequent mortgagee, may redeem; for the deed, though void as to the mortgagee, is binding on the mortgager. *A fortiori* may any perſon who has acquired for valuable conſideration an intereſt in the land, as a tenant under the mortgager; the crown may alſo redeem eſtates mortgaged, and afterwards forfeited by the treaſon, &c. of the mortgager.

As the heir at law is regularly entitled to the benefit of redemption, he is alſo entitled to the aſſiſtance of the perſonal eſtate of the mortgager for that purpoſe. And on this foundation it hath been frequently held, that if a man mortgage lands, and covenants to pay the money, and dies, the perſonal eſtate of the mortgager ſhall, in favour of the heir, be applied in exoneration of the mortgage. It has likewiſe been held, that the heir of the mortgager ſhall have the benefit of the perſonal eſtate to pay off the mortgage, though there be no covenant in the mortgage-deed for the payment thereof.

If any perſon, who ſhall once mortgage lands for valuable conſideration, ſhall again mortgage the ſame lands or any part thereof to any other perſon for valuable conſideration, (the former mortgage being in force,) and ſhall not diſcover to the ſecond mortgagee the former mortgage, in writing under his hand, ſuch mortgager, his heirs, &c. ſhall have no relief or equity of redemption againſt the ſecond or after mortgagee, &c. And ſuch ſecond or third mortgagees may redeem any former mortgage, upon payment of the principal debt, intereſt, and coſts of ſuit, to the proper mortgagee, &c. But the ſtatute does not bar any widow of any mortgager from her dower, who did not legally join with her huſband in ſuch mortgage, or otherwiſe lawfully exclude herſelf.

It hath been held, that this ſtatute extends to aſſignees of a mortgagee. A perſon, who will take advantage of the ſtatute, muſt be an *honeſt* mortgagee; therefore, if a man has uſed any fraud or practice in obtaining a ſecond mortgage, he ſhall not have the benefit of the ſtatute.

It has been ſaid to be an eſtabliſhed rule of equity, that a ſecond mortgagee, *who has the title-deeds*, without notice of any prior incumbrance, ſhall in all caſes be preferred; but lord Thurlow held, that a ſecond mortgagee in poſſeſſion of the title-deeds was preferred only in caſes where the firſt had been guilty of fraud or groſs negligence.

Whatever may be the value of the eſtate, it is of great importance to thoſe who lend money upon real ſecurity, to be certain that there is no prior mortgage upon the eſtate; for it has been long ſettled, that if a third mortgagee, who at the time of his mortgage *had no notice* of the ſecond, purchaſes the firſt mortgage, even pending a bill filed by the ſecond to redeem the firſt, both the firſt and third mortgages ſhall be paid out of the eſtate before any ſhare of it can be appropriated to the ſecond. But among mortgagees where none has the legal eſtate, the rule in equity is, *qui prior eſt tempore, potior eſt jure.*

As to the nature of the eſtates of the mortgager and mortgagee; it ſeems to be at length ſettled, that, as the mortgagee is conſidered as holding the eſtate merely in the nature of a pledge or ſecurity for payment of his money; a mortgage, though in fee, (the legal eſtate in which deſcends to the heir at law,) is conſidered, in equity, only as perſonal eſtate. By ſtat. 7 Will. III. c. 25, it is enacted, “ That no perſon or perſons ſhall be allowed to have any vote in election of members to ſerve in parliament, for or by reaſon of any truſt-eſtate or mortgage, unleſs ſuch truſtee or mortgagee be in actual poſſeſſion, or in receipt of the rents and profits of the ſame; but then the mortgager, or *ceſtui que truſt*, in poſſeſſion, ſhall and may vote for the ſame, notwithſtanding ſuch mortgage or truſt.” And by ſtat. 9 Ann. c. 5, which requires, that knights of the ſhire ſhould have 600l. per ann. and every other member 300l. per ann. it is enacted, “ That no perſon ſhall be qualified to ſit in the houſe of commons, within the meaning of the act, by virtue of any mortgage whereof the equity of redemption is in any other perſon; unleſs the mortgagee ſhall have been in poſſeſſion of the mortgaged premiſes for ſeven years before the time of election. ***Jacob's Law Dict.*** edit. 1810.

To MOR'TGAGE, *v. a.* To pledge; to put to pledge; to make over to a creditor as a ſecurity.—Their not abating of their expenſive way of living has forced them to *mortgage* their beſt manors. ***Arbuthnot.***

Some have his lands, but none his treaſur'd ſtore;
Lands unmanur'd by us, and *mortgag'd* o'er and o'er. ***Harte.***

MORTGAGEE', *ſ.* He that takes or receives a mortgage.—An act may paſs for publick regiſtries of land, by which all purchaſers or *mortgagees* may be ſecured of all monies they lay out. ***Temple's Miſcellanies.***

MOR'TGAGER, *ſ.* He that gives a mortgage.

MORTH, *ſ.* [Sax. death.] Murder.

MORTHLA'GA, *ſ.* A murderer; manſlayer.

MOR'THLAGE, *ſ.* Homicide; murder.

MORTI'ER, *ſ.* [French.] A badge or enſign of dignity, borne by the chancellors and great preſidents of the parliaments of Paris. That borne by the chancellor was a piece of cloth of gold, lined and turned up with ermine; that of the firſt preſident was a piece of velvet edged with gold lace; that of the other preſidents was only a piece of gold lace. They formerly bore it on their head, but afterwards in their hands; except in grand ceremonies, as at the entry of a king. Hence the denomination *preſidents à mortier.*

MORTIER BAN'K, a fiſhing-bank near the ſouth coaſt of Newfoundland. Lat. 47. 5. N. lon. 54. 48. W.

MORTIER'S ROC'KS, rocks on the ſouth coaſt of Newfoundland. Lat. 47. N. lon. 54. 55. W.

MORTIF'EROUS, *adj.* [*mortifer*, Lat.] Fatal; deadly; deſtructive.—What is it but a continued perpetuated voice from heaven, to give men no reſt in their ſins, no quiet from Chriſt's importunity, till they awake from the lethargick ſleep, and ariſe from ſo dead, ſo *mortiferous*, a ſtate, and permit him to give them life. ***Hammond on Fundamentals.***—Theſe murmurings, like a *mortiferous* herb, are poiſonous, even in their firſt ſpring. ***Gov. of the Tongue.***

MORTIFICA'TION, *ſ.* [*mortification*, Fr. from *mortify*.] The ſtate of corrupting, or loſing the vital qualities; gangrene.—It appeareth in the gangrene, or *mortification* of fleſh, either by opiates, or intenſe colds. ***Bacon's Nat. Hiſt.***

My griefs ferment and rage,
Nor leſs than wounds immedicable,
Rankle and feſter, and gangrene,
To black *mortification.* ***Milton's S. A.***

Deſtruction of active qualities.—Inquire what gives impediment to union or reſtitution, which is called *mortification;* as when quickſilver is mortified with turpentine. ***Bacon.***—The act of ſubduing the body by hardſhips and macerations.—A diet of ſome fiſh is more rich and alkaleſcent than that of fleſh, and therefore very improper for ſuch as practiſe *mortification*. *Arbuthnot on Aliments*.—Humiliation; ſubjection of the paſſions.—The *mortification* of our luſts has ſomething in it that is troubleſome, yet nothing that is unreaſonable. *Tillotſon*.—You ſee no real *mortification*, or ſelf-denial, no eminent charity, no profound humility, no heavenly affection, no true contempt of the world, no Chriſtian weakneſs, no ſincere zeal, or eminent piety, in the common lives of Chriſtians. *Law*.—Vexation; trouble.—It is one of the vexatious *mortifications* of a ſtudious man, to have his thoughts diſordered by a tedious viſit. *L'Eſtrange*.

MOR'TIFIEDNESS, *ſ*. Humiliation; ſubjection of the paſſions.—No way ſuitable to that Chriſtian ſimplicity, *mortifiedneſs*, modeſty, and humility, which thoſe times required. *Bp. Taylor*.

MOR'TIFIER, *ſ*. One who mortifies his paſſions. *Sherwood*.

To MOR'TIFY, *v. a.* [*mortifier*, Fr.] To deſtroy vital qualities.—If of the ſtem the froſt *mortify* any part, cut it off. *Evelyn*.—To deſtroy active powers, or eſſential qualities.—He *mortified* pearls in vinegar, and drunk them up. *Hakewill*.—Oil of tartar per deliquium has a great faculty to find out and *mortify* acid ſpirits. *Boyle*.—To ſubdue inordinate paſſions:

The breath no ſooner left his father's body,
But that his wildneſs, *mortified* in him,
Seem'd to die too. *Shakeſpeare's Hen.* V.

To macerate or haraſs, in order to reduce the body to compliance with the mind.—We *mortify* ourſelves with fiſh, and think we fare coarſely if we abſtain from fleſh. *Brown's Vulgar Errours*.

With faſting *mortify'd*, worn out with tears,
And bent beneath the load of ſeventy years. *Harte*.

To humble; to depreſs; to vex.—How often is the ambitious man *mortified* with the very praiſes he receives, if they do not riſe ſo high as he thinks they ought! *Addiſon*.

Let my liver rather heat with wine,
Than my heart cool with *mortifying* groans. *Shakeſpeare*.

To MOR'TIFY, *v. n.* To gangrene; to corrupt.—Try it with capon laid abroad, to ſee whether it will *mortify* and become tender ſooner; or with dead flies with water caſt upon them, to ſee whether it will putrify. *Bacon*.—To be ſubdued; to die away.—To practiſe religious ſeverities.—This makes him careful of every temper of his heart, give alms to all that he hath, watch, and faſt, and *mortify*, and live according to the ſtricteſt rules of temperance, meekneſs, and humanity. *Law*.

MOR'TIMER (John Hamilton), was born at Eaſt-Bourne in Suſſex, and very early in life exhibited a decided taſte and talent for painting. He was therefore placed by his parents with Hudſon; but did not ſtay long with him, nor with Pine, to whom he afterwards went to acquire the rudiments of art. He felt that he had talents, and probably choſe to take his own courſe in the direction of them. He accordingly went to draw from the antique in the gallery which the duke of Richmond munificently opened to artiſts in Privy Gardens, and afterwards was admitted a member of the academy in St. Martin's lane. By his ſtudies in theſe ſchools he acquired a conſiderable degree of knowledge of the human figure, but never enjoyed a feeling of the grand ſtyle.

Mortimer, endowed with the faculty of invention, did not allow it to lie unproductive in his mind, but compoſed a great variety of deſigns; which unfortunately he executed with too much facility, and was too eaſily ſatisfied with his labours, to carry them very far in the road to perfection. At the age of twenty-two he bore away the prize given by the Society for the Encouragement of Arts, &c. and gained great and merited applauſe for his performance, which conſidering his youth, was at that time an uncommon one. The ſubject was St. Paul preaching to the Britons, and it is now the altar-piece of the church at High-Wycombe. But his favourite ſubjects were of the groteſque or horrible kind; incantations, monſters, or repreſentations of banditti and ſoldiers in violent actions. The attempts at real character which he made (and of which he has left us etchings) from ſome of Shakeſpeare's moſt celebrated heroes, are weak and untrue; they leave us nothing to regret in his not having indulged himſelf in more of the like kind, except for the freedom with which they are executed. They were very highly extolled in his time, but the improvement in art and taſte which the country has ſince experienced has given us more accurate ideas of art, and more juſt diſcrimination between character and caricature. He ſometimes was ſtimulated to paint portraits, but was by no means ſucceſsful. He had no eye to colour, and had too much vivacity of imagination, or rather perhaps too little ſteadineſs of mind in the purſuit, to dwell ſufficiently long on matter ſo unintereſting as portraiture, when compared with the zeal and enthuſiaſm excited by hiſtorical painting. He poſſeſſed great perſonal activity, and was fond of athletic exerciſes; but unfortunately devoted too much time to habits of exceſs in pleaſurable indulgences, which brought on premature decline and death in the 39th year of his age, in February 1779.

The character which Mortimer left behind him (excepting the weakneſs of allowing the heat of youthful paſſions to overcome and miſlead him for a time) was highly eſtimable. He was generous and friendly, lively, engaging, and intellectual. Having once become aware of the folly of vicious indulgence, he determined to adopt a more correct courſe of life; but unfortunately his good reſolutions were excited too late, and the heavy hand of death fell on him before he or his friends were benefited by them, as far at leaſt as relates to the art he profeſſed.

MORTIMER's CROSS', a place of England, in the north-weſt part of the county of Hereford, a little to the ſouth-eaſt of Ludlow. In the year 1461, the Lancaſtrians, under the conduct of the earl of Pembroke, were defeated by the Yorkiſts, under the duke of York, with the loſs of near 4000 men. See the article ENGLAND, vol. vi. p. 617.

MOR'TINSPERG, a town of Auſtria: ten miles ſouth-ſouth-weſt of Zwetl.

MOR'TISE, *ſ*. [*mortaiſe*, *mortoiſe*, Fr. from *mordere*, Lat. to bite.] A hole cut into wood, that another piece may be put into it, and form a joint.—Under one ſkin are parts variouſly mingled, ſome with cavities, as *morteſſes* to receive, others with tenons to fit cavities. *Ray*.

What ribs of oak, when mountains melt on them,
Can hold the *mortiſe*. *Shakeſpeare's Othello*.

To MOR'TISE, *v. a.* To cut with a mortiſe; to join with a mortiſe:

'Tis a maſſy wheel,
To whoſe huge ſpoke ten thouſand leſſer things
Are *mortis'd* and adjoin'd. *Shakeſpeare's Hamlet*.

It ſeems in the following paſſage improperly uſed.—The one half of the ſhip being finiſhed, and by help of a ſcrew launched into the water, the other half was joined by great braſs nails *mortiſed* with lead. *Arbuthnot on Coins*.

MOR'TLAKE, a village and pariſh in the weſtern diviſion of the hundred of Brixton, in the county of Surrey, is ſituated on the ſouthern bank of the river Thames, at the diſtance of ſeven miles ſouth-weſt from London. The manor here at the time of the conqueſt, and from that period till the reign of Henry VIII. was the property of the archbiſhop of Canterbury, who occaſionally reſided at the manor-houſe. Archbiſhop Anſelm celebrated the feaſt of Whitſuntide in that manſion in the year 1099; and archbiſhops Peckham and Reynolds died there; the former A.D. 1292, and the latter in 1327. After the alienation of the manor by archbiſhop Cranmer, the king gave it to his newly-erected dean and chapter of Worceſter; at which time the manor-houſe was deſtroyed, and the manorial reſidence removed to Wimbledon.

This village is remarkable as the ſeat of the firſt manufactory of fine tapeſtry eſtabliſhed in the Britiſh dominions. The buildings of this manufactory, which owed its origin to the patriotic exertions of ſir Francis Crane, formerly occupied the ſcite of Queen's-head court. They are now wholly demoliſhed; but the houſe built for the reſidence of Mr. Francis Cleyne, the chief deſigner employed in the work, ſtill continues ſtanding on the oppoſite ſide of the road. A manufactory of delf, begun about ſeventy years ago by Mr. William Saunders, is now carried on by Wagſtaff and Coy. There is, beſides, in this village a ſmall manufactory of white ſtone-ware, the property of Mr. Joſeph Kiſhire. The alms-houſes here were firſt founded and endowed in 1628 by John Juxon, eſq. and his family, but the endowments were ſubſequently much augmented by Mrs. Elizabeth Heneage. The perſons maintained in theſe houſes are poor widows, each of whom receives 2s. 6d. per week; and clothes at ſtated periods. A charity-ſchool, which owes its foundation to a bequeſt by lady Capel, is now in a very flouriſhing condition; the funds having been ſo much increaſed of late by various donations, as to enable the truſtees to clothe and educate in it 12 boys and 12 girls.

Mortlake church appears, from a record ſtill extant, to have been originally erected about the year 1348; but no portion of that building now remains, except the outward door of the belfry. The other parts were rebuilt in 1543; and the ſouth aiſle again, even ſo late as the year 1725. This church is conſtructed of flint and ſtone chequered, and has a ſquare embattled tower of ſimilar workmanſhip at the weſt end. The interior is adorned with a very handſome front, which exhibits ſome rich tracery-work; and bears among other decorations the arms of archbiſhop Bourchier, who beſtowed it on the church in the time of Henry VI. Here are likewiſe, as well as in the churchyard, a number of neat monuments, ſome of them in honour of diſtinguiſhed public characters. Among theſe is one for Dr. Dee, who was remarkable in the reign of queen Elizabeth for his ſkill in the occult ſciences; (ſee Dee, vol. v. p. 651.) Another monumental memorial commemorates John Partridge, a celebrated phyſician and aſtrologer, who lived in the ſeventeenth century; a third for ſir John Barnard, alderman of London, within the ſame period; and a fourth for the late ſir Brook Watſon; are chiefly worthy of mention. The living here was at one time a rectory in the peculiar juriſdiction of the archbiſhop of Canterbury; but it is now a perpetual curacy, with a reſerved ſalary of 40l. per annum, paid out of the great tithes by the leſſee under the dean and chapter of Worceſter, who have the nomination of the curate.

The pariſh of Mortlake contains about 1400 acres, of which nearly 650 are incloſed in Richmond-park. Upwards of 100 acres are waſte lands. Of the remainder, 230 acres conſtitute garden-ground, including 31 acres cropped with aſparagus, and ten with lavender. The cultivation of the former of theſe plants has much decreaſed here within the laſt twenty years. At the extremity of the pariſh, towards Richmond, is a farm, conſiſting of about eighty acres, which had been long in the occupation of his majeſty, and is ſaid to be one of the beſt cultivated ſpots in England. The ſoil here conſiſts moſtly of ſand and gravel, but on ſome ſpots near the ſide of the river there is a conſiderable mixture of clay. On a ſmall hill within the park ſtands an elegant edifice called the Stone Lodge, which was begun by George I. after a deſign by the earl of Pembroke, but left in an unfiniſhed ſtate till completed by the princeſs Amelia, when ſhe became ranger of the park. This lodge was given, in 1803, to lord viſcount Sidmouth, in whoſe poſſeſſion it ſtill continues. Here alſo is a large ancient houſe, which is ſaid to have been the reſidence of Oliver Cromwell; but which was certainly the reſidence, in the laſt century, of that excellent man, Edward Colſton, eſq. the great benefactor of the city of Briſtol, who, in his life time, expended more than 70,000l. in charitable inſtitutions. The ſtory of his being preſerved, on his voyage home from the Indies, by means of a dolphin ſtopping a hole in the ſhip, is a popular one at Briſtol: at any rate, the boys educated at the ſchool in Briſtol wear a braſs dolphin on their breaſt. An enumeration of the *public* charities of this excellent man will be ſeen in vol. iv. p. 793, 4.

In this pariſh is the pleaſant hamlet of Eaſt Sheen, which commands ſome very beautiful views, from its poſition on an eminence cloſe to the Thames. Some highly-poetical paſſages in Maurice's poem of "Richmond," are alluſive to the ſcenery, hiſtory, &c. of Mortlake, Sheen, and the vicinity. *Lyſon's Environs of London. Ambulator,* 11th edition.

MOR'TLICH, or Murthlach, a village of Scotland, in the county of Bamff, on a ſmall river which runs into the Spey; once the ſee of a biſhop, founded by Malcolm II. in the year 1010, in commemoration of a great victory obtained by him over the Danes; the ſee continued 127 years, and was then removed to Aberdeen by David I. It is twelve miles ſouth-ſouth-weſt of Fochabers.

MORT'LING. See Morling, vol. xv. p. 815.

MORT'MAIN, *ſ.* [*morte* and *main*, Fr.] Such a ſtate of poſſeſſion as makes it unalienable; whence it is ſaid to be in a *dead hand*, in a hand that cannot ſhift away the property.—Lands in *mortmain* are a dead weight upon commerce. *Warburton.*

Mortmain, or *Alienation in Mortmain*, in law, is an alienation of lands or tenements to any corporation, ſole or aggregate, eccleſiaſtical or temporal; but, theſe purchaſes having been chiefly made by religious houſes, in conſequence whereof the lands became perpetually inherent in one dead hand, this hath occaſioned the general appellation of *mortmain* to be applied to ſuch alienations, and the religious houſes themſelves to be principally conſidered in forming the ſtatutes of mortmain. In deducing the hiſtory of theſe ſtatutes, it will be matter of curioſity to obſerve the great addreſs and contrivance of the eccleſiaſtics, in eluding from time to time the laws in being, and the zeal with which ſucceſſive parliaments have purſued them through all their fineſſes: how new remedies were ſtill the parents of new evaſions; till the legiſlature at laſt, though with difficulty, hath obtained a deciſive victory.

By the common law, any man might diſpoſe of his lands to any other private man at his own diſcretion, eſpecially when the feodal reſtraints of alienation were worn away. Yet in conſequence of theſe it was always, and is ſtill, neceſſary, for corporations to have a licenſe of mortmain from the crown, to enable them to purchaſe lands; for, as the king is the ultimate lord of every fee, he ought not, unleſs by his own conſent, to loſe his privilege of eſcheats and other feodal profits, by the veſting of lands in tenants that can never be attainted or die. And ſuch licenſes of mortmain ſeem to have been neceſſary among the Saxons above ſixty years before the Norman conqueſt. But, beſides this general licenſe from the king as lord paramount of the kingdom, it was alſo requiſite, whenever there was a meſne or intermediate lord between the king and the alienor, to obtain his licenſe alſo (upon the ſame feodal principles) for the alienation of the ſpecific land. And, if no ſuch licenſe was obtained, the king or other lord might reſpectively enter on the lands ſo alienated in mortmain, as a forfeiture. The neceſſity of this licenſe from the crown was acknowledged by the Conſtitutions of Clarendon, in reſpect of advowſons, which the monks always greatly coveted, as being the groundwork of ſubſequent appropriations. Yet ſuch were the influence and ingenuity of the clergy, that (notwithſtanding this fundamental principle) we find that the largeſt and moſt conſiderable donations of religious houſes happened within leſs than two centuries after the conqueſt. And, when a licenſe could not be obtained, their contrivance ſeems to have been this: That, as the forfeiture for ſuch alienations accrued in the firſt place to the immediate lord of the fee, the tenant who meant to alienate firſt, conveyed his lands to the religious houſe, and inſtantly took them back again to hold as tenant to the monaſtery; which kind of inſtantaneous ſeiſin was probably held not to occaſion any forfeiture; and then, by pretext of ſome other forfeiture, ſurrender, or eſcheat, the ſociety entered into thoſe lands in right of ſuch their newly-acquired ſigniory, as immediate lords of the fee. But, when theſe donations began to grow numerous, it was obſerved, that the feodal ſervices, ordained for the defence of the kingdom, were every day viſibly withdrawn; that the circulation of landed property from man to man began to ſtagnate; and that the lords were curtailed of the fruits of their ſigniories, their eſcheats, wardſhips, reliefs, and the like; and therefore, in order to prevent this, it was ordained by the ſecond of king Henry III's great charters, and afterwards by that printed in our common ſtatute-books, that all ſuch attempts ſhould be void, and the land forfeited to the lord of the fee.

But, as this prohibition extended only to religious houſes, biſhops and other ſole corporations were not included therein; and the aggregate eccleſiaſtical bodies found many means to creep out of this ſtatute, by buying in lands that were *bona fide* holden of themſelves as lords of the fee, and thereby evading the forfeiture; or by taking long leaſes for years, which firſt introduced thoſe extenſive terms, for a thouſand or more years, which are now ſo frequent in conveyances. This produced the *ſtatute of mortmain*, or *de religioſis*, 7 Edw. I. which provided, that no perſon, religious or other whatſoever, ſhould buy, or ſell, or receive under pretence of a gift, or term of years, or any other title whatſoever, nor ſhould by any art or ingenuity appropriate to himſelf, any lands or tenement in mortmain; upon pain that the immediate lord of the fee, or, on his default for one year, the lords paramount, and, in default of all of them, the king, might enter thereon as a forfeiture.

This ſeemed to be a ſufficient ſecurity againſt all alienations in mortmain; but, as theſe ſtatutes extended only to gifts and conveyances between the parties, the religious houſes now began to ſet up a fictitious title to the land, which it was intended they ſhould have, and to bring an action to recover it againſt the tenant; who, by fraud and colluſion, made no defence, and thereby judgment was given for the religious houſe, which then recovered the land by a ſentence of law upon a ſuppoſed prior title. And thus they had the honour of inventing thoſe fictitious adjudications of right, which are ſince become the great aſſurance of the kingdom, under the name of *common recoveries*. But upon this, the ſecond ſtatute of Weſtminſter, 13 Edw. I. c. 32. enacted, that in ſuch caſes a jury ſhall try the true right of the demandants or plaintiffs to the land; and, if the religious houſe or corporation be found to have it, they ſhall ſtill recover ſeiſin; otherwiſe it ſhall be forfeited to the immediate lord of the fee, or elſe to the next lord, and finally to the king, upon the immediate or other lord's default. And the like proviſion was made by the ſucceeding chapter, in caſe the tenants ſet up croſſes upon their lands (the badges of knights templars and hoſpitallers) in order to protect them from the feudal demands of their lords, by virtue of the privileges of thoſe religious and military orders. And ſo careful was this provident prince to prevent any future evaſions, that when the ſtatute of *quia emptores*, 18 Edw. I. aboliſhed all ſub-infeudations, and gave liberty for all men to alienate their lands to be holden of their next immediate lord, a proviſo was inſerted that this ſhould not extend to authoriſe any kind of alienation in mortmain. And, when afterwards the method of obtaining the king's licenſe by writ of *ad quod damnum* was marked out by the ſtatute 27 Edw. I. ſt. 2. it was farther provided by ſtat. 34 Edw. I. ſt. 3. that no ſuch licenſe ſhould be effectual without the conſent of the meſne or intermediate lords.

Yet ſtill it was found difficult to ſet bounds to eccleſiaſtical ingenuity; for, when they were driven out of all their former holds, they deviſed a new method of conveyance, by which the lands were granted, not to themſelves directly, but to nominal feoffees to the uſe of the religious houſes; thus diſtinguiſhing between the poſſeſſion and the uſe, and receiving the actual profits, while the ſeiſin of the land remained in the nominal feoffee; who was held by the courts of equity (then under the direction of the clergy) to be bound in conſcience to account to his *ceſtuy que uſe* for the rents and emoluments of the eſtate. And it is to theſe inventions that our practiſers are indebted for the introduction of uſes and truſts, the foundation of modern conveyancing. But, unfortunately for the inventors themſelves, they did not long enjoy the advantage of their new device; for the ſtatute 15 Richard II. c. 5. enacts, that the lands which had been ſo purchaſed to uſes ſhould be *admortiſed* by licenſe from the crown, or elſe be ſold to private perſons; and that, for the future, uſes ſhall be ſubject to the ſtatutes of mortmain, and forfeitable like the lands themſelves. And whereas the ſtatutes had been eluded by purchaſing large tracts of land adjoining to churches, and conſecrating them by the name of *church-yards*, ſuch ſubtle imagination is alſo declared to be within the compaſs of the ſtatutes of mortmain. And civil or lay corporations, as well as eccleſiaſtical, are alſo declared to be within the miſchief, and of courſe within the remedy provided by thoſe ſalutary laws. And laſtly, As during the times of popery lands were frequently given to ſuperſtitious uſes, though not to any corporate bodies; or were made liable in the hands of heirs and deviſees to the charge of obits, chauntries, and the like, which were equally pernicious in a well-governed ſtate as actual alienations in mortmain; therefore at the dawn of the Reformation, the ſtatute 23 Hen. VIII. c. 10. declares, that all future grants of lands for any of the purpoſes aforeſaid, if granted for any longer term than twenty years, ſhall be void.

But, during all this time, it was in the power of the crown, by granting a licenſe of mortmain, to remit the forfeiture, ſo far as related to its own rights; and to enable any ſpiritual or other corporation to purchaſe and hold any lands or tenements in perpetuity; which prerogative is declared and confirmed by the ſtatute 18 Edw. III. ſt. 3. c. 3. But, as doubts were conceived at the time of the Revolution how far ſuch licenſe was valid, ſince the king had no power to diſpenſe with the ſtatutes of mortmain by a clauſe of *non-obſtante*, which was the uſual courſe, though it ſeems to have been unneceſſary; and as, by the gradual declenſion of meſne ſigniories through the long operation of the ſtatute of *quia emptores*, the rights of intermediate lords were reduced to a very ſmall compaſs; it was therefore provided by the ſtatute 7 & 8 W. III. c. 37. that the crown for the future at its own diſcretion may grant licenſes to alienate or take in mortmain, of whomſoever the tenements may be holden.

After the diſſolution of monaſteries under Hen. VIII. though the policy of the next popiſh ſucceſſor affected to grant a ſecurity to the poſſeſſors of abbey-lands, yet, in order to regain ſo much of them as either the zeal or timidity of their owners might induce them to part with, the ſtatutes of mortmain were ſuſpended for twenty years by the ſtatute 1 & 2 P & M. c. 8. and during that time any lands or tenements were allowed to be granted to any ſpiritual corporation without any licenſe whatſoever. And long afterwards, for a much better purpoſe, the augmentation of poor livings, it was enacted by the ſtatute 17 Car. II. c. 3. that appropriators may annex the great tithes to the vicarages, and that all benefices under 100l. per annum may be augmented by the purchaſe of lands, without licenſe of mortmain in either caſe; and the like proviſion hath been ſince made in favour of the governors of Queen Anne's Bounty. It hath alſo been held, that the ſtatute 13 Hen. VIII. before-mentioned, did not extend to any thing but ſuperſtitious uſes; and that therefore a man may give lands for the maintenance of a ſchool, an hoſpital, or any other charitable uſes. But as it was apprehended, from recent experience, that perſons on their death-beds might make large and improvident diſpoſitions even for theſe good purpoſes, and defeat the political ends of the ſtatutes of mortmain ; it is therefore enacted by the ſtatute 9 Geo. II. c. 36. that no lands or tenements, or money to be laid out thereon, ſhall be given for or charged with any charitable uſes whatſoever, unleſs by deed indented, executed in the preſence of two witneſſes twelve calendar months before the death of the donor, and enrolled in the court of chancery within ſix months after its execution, (except ſtocks in the public funds, which may be transferred within ſix months previous to the donor's death ;) and unleſs ſuch gift be made to take effect immediately, and be without power of revocation ; and that all other gifts ſhall be void. The two univerſities, their colleges, and the ſcholars upon the foundation of the colleges of Eton, Wincheſter, and Weſtminſter, are excepted out of this act ; but ſuch exemption was granted with this proviſo, that no college ſhall be at liberty to purchaſe more advowſons than are equal in number to one moiety of the fellows or ſtudents upon the reſpective foundations.

It hath been determined, that, if a man deviſeth his land to truſtees, “ to be turned into money, and that money laid out in a charity,” it is not good within the laſt-cited act ; for it is an intereſt ariſing out of land. So a deviſe of a “ mortgage,” or of a “ term for years,” to a charity, is not good ; for the words of the ſtatute are, that the lands ſhall not be “ conveyed or ſettled, for any eſtate or intereſt whatſoever, or any ways charged or incumbered, in truſt or for the benefit of any charitable uſe.” So alſo, “ money given to be laid out in lands,” is expreſsly within the act ; but money given generally is not ; and, if money be given to be laid out “ in lands *or otherwiſe*,” to a charitable uſe, it hath been determined that ſuch deviſe is good, by reaſon of the words “ or otherwiſe.” By 43 Geo. III. c. 108. perſons may give, by deed enrolled in ſuch manner and within ſuch time as is directed in England by 27 Hen. VIII. or bequeath by will or teſtament, duly executed at leaſt three calendar months before their death, to any perſon or perſons, or body politic or corporate, and their heirs and ſucceſſors, land not exceeding five acres, or chattels not exceeding in value 500l. for or towards the erecting, repairing, purchaſing, or providing, any church or chapel, where the liturgy and rites of the ſaid church are or ſhall be uſed or obſerved, or any manſion-houſe for the reſidence of any miniſter of the ſaid united church, officiating or to officiate in any ſuch church or chapel, &c. &c. *Blackſtone's Com.* book ii. c. 18. *Highmore's Hiſt. of Mortmain.*

MORTON (James, Earl of), regent of Scotland, was born at Dalkeith in 1530, and educated under the famous Buchanan at Paris. He returned to Scotland in 1554, and greatly promoted the reformation ; but, being accuſed of a concern in the murder of Rizzio, and afterwards of lord Darnley, he fled to England. He was afterwards made chancellor of Scotland, and, in 1572, ſucceeded the earl of Mar as regent ; which office he reſigned in 1579. He was condemned for high treaſon in 1581 ; and, what is remarkable, was beheaded by a machine, the model of which he had ſeen in England. It was called the *maiden*, and reſembled the guillotine, ſince ſo much uſed in France. Morton was the firſt and laſt who ſuffered by it in Scotland. See the article SCOTLAND.

MORTON (Thomas), an eminent prelate of the church of England, was born at York in the year 1564. He was initiated in the rudiments of learning at his native city and at Halifax ; and in 1582 was ſent to St. John's college, Cambridge. Two years afterwards he was elected into a ſcholarſhip in that houſe, confined to natives of Yorkſhire. In 1586, he was admitted to the degree of B. A. and in 1590 to that of M. A. having performed the requiſite exerciſes on thoſe occaſions with diſtinguiſhed approbation and applauſe. In 1592, he ſtood candidate for a fellowſhip of his college, and proved ſucceſsful againſt ſeveral competitors ſolely on the ground of his ſuperior merit. About the ſame time he was choſen logical lecturer to the univerſity, and diſcharged the duties of that office with great diligence and ability. In the ſame year he was admitted into holy orders, and led a college-life for about five years afterwards, aſſiduouſly occupied in his private ſtudies, as well as the department of tutor. Having taken his degree of B. D. in 1598, he was preſented, about the ſame time, to the rectory of Long Marſton, near York. In 1602, when the plague raged violently at York, and the infected poor were removed out of the city into booths erected on an adjacent moor, Mr. Morton exhibited ſuch proofs of Chriſtian courage and true benevolence as ought to be recorded to his honour. For he would often repair to theſe abodes of contagion, where he preached and adminiſtered ſpiritual comfort to the wretched people ; and he alſo carried with him on his horſe large quantities of proviſions for their relief, not ſuffering any ſervant to attend him, but chooſing alone to run the riſk of ſuch a dangerous intercourſe. In the ſame or in the following year he embraced the opportunity which was offered him of viſiting foreign countries, by accepting the appointment of chaplain to lord Eure, queen Elizabeth's ambaſſador to the emperor of Germany and the king of Denmark ; by which means he was enabled to viſit ſome of the principal German univerſities, to collect valuable books, and to improve himſelf in the converſation of ſeveral of the moſt learned men of the times. Upon his return to England, he became domeſtic chaplain to the earl of Rutland ; and in 1606 proceeded D. D. at Cambridge. About the ſame time he was appointed chaplain in ordinary to king James I. and ſoon afterwards received from his majeſty a preſentation to the deanery of Glouceſter. In 1609 he was removed from Glouceſter to the deanery of Wincheſter, and collated by the biſhop of that ſee to the rectory of Alresford in Hampſhire. In 1610 he was made a prebendary of York ; and would have been choſen prolocutor of the lower houſe of convocation, had not his modeſty led him to decline that honour in favour of one of his friends. About this time he formed an intimate acquaintance with the learned Iſaac Caſaubon, which continued uninterrupted till the death of the latter, to whoſe memory Dr. Morton erected a monument in Weſtminſter-abbey.

In the year 1616 the king raiſed Dr. Morton to the epiſcopal rank, by nominating him to the ſee of Cheſter. When he came to his dioceſe, finding that it abounded in nonconformiſts, proteſtant as well as popiſh, after citing before him ſome of the leading men among the former, he endeavoured, in a public and ſolemn conference with them, to remove their ſcruples on various points, particularly, the uſe of the ſurplice, the croſs in baptiſm, and the ring in marriage. His efforts for this purpoſe, however, proved unſucceſsful ; but, conceiving that his arguments were of ſufficient weight to preſerve others within the pale of the church, he thought it his duty afterwards to publiſh a relation of this conference, with ſome additions, under the title of “ A Defence of the Innocency of the three Ceremonies of the Church of England,” &c. 1619, 4to. With reſpect to the papiſts, the biſhop adopted another method, which led the way to a project that, upon its revival in the reign of Charles I. produced convulſions in every part of the kingdom. Being perſuaded that it was the policy of the popiſh party to keep the people from church by dancing and other recreations, even in the time of divine ſervice, eſpecially on holy days, and the Lord's day in the afternoon, he deviſed an expedient for counteracting it, by authoriſing the practice of certain recreations after the time of ſervice, with reſtrictions, prohibiting papiſts from ſuch indulgence, as well as thoſe who were not preſent at the whole of divine ſervice, or who did not attend in their own pariſh-churches. On this ſubject he held conſultations with the king, and by his majeſty's command drew up that famous declaration which was publiſhed in 1618, and is generally known by the name of “ The Book of Sports.” This declaration was ordered to be read in all the churches of Lancaſhire, and it was intended that the example ſhould be followed in every part of England: but, at Croydon, the reading of it was expreſsly forbidden by archbiſhop Abbot; and it is probable that, if the king had inſiſted upon its being read throughout all the churches at this time, conſequences would have followed ſimilar to thoſe which took place in the reign of his ſon. In the year 1618 our prelate was tranſlated to the ſee of Lichfield and Coventry. One of the moſt remarkable circumſtances which occurred during biſhop Morton's continuance in this ſee, was his detecting the impoſture of the boy of Bilſon in Staffordſhire, who pretended to be poſſeſſed with a devil, and was made the inſtrument of carrying on the abominable forgeries of the jeſuits and popiſh prieſts.

In 1632 our prelate was tranſlated to the ſee of Durham, in which he conducted himſelf not only with great moderation and equity, but with the moſt extenſive beneficence and charity, till he was involved in the ruin of the church of England during the civil wars. Of the privations and ſufferings which the epiſcopal clergy ſuſtained in thoſe days of their calamity, biſhop Morton had an ample ſhare. Beſides the perſonal dangers to which he was expoſed from the mob, on account of his being a biſhop, his rents were ſeized by order of parliament in 1640; and in 1641 he was accuſed of high treaſon, and committed to the cuſtody of the uſher of the black-rod, for joining with eleven of his brethren in a proteſtation againſt certain proceedings of parliament. Upon his releaſe, after a confinement of about four months, he returned to his apartments in Durham-houſe, where he gave himſelf up to his ſtudies and devotions, under the preſſure of much inconvenience from the ſequeſtration of his revenues. In 1645 he was committed priſoner to the ſerjeant-at-arms, or to the Tower, during a term of ſix months, for refuſing to deliver up the ſeal of the county-palatine of Durham, and for having baptized a daughter of the earl of Rutland according to the form in the Common Prayer Book. When his revenues were wholly taken away upon the diſſolution of the biſhoprics, in 1646, parliament voted him an annuity of 800l. for life; but without any mention by whom, or out of what funds, that ſum ſhould be paid. Owing to this circumſtance, the vote proved ineffectual; and it was not without great difficulty that his friends ſucceeded in procuring for him a thouſand pounds from the treaſury of the parliament, with which he paid his debts, and purchaſed an annuity of 200l. during his life. Being turned out of Durham-houſe, in 1648, by the ſoldiers who came to garriſon it, he reſided for a ſhort time in the family of the earl of Rutland, at Exeter-houſe, in the Strand. Having, however, too independent a ſpirit to live at the expenſe of others, while he poſſeſſed the means of a frugal ſubſiſtence, he went to reſide at firſt in Hertfordſhire, afterwards in Bedfordſhire, and finally ſettled with ſir Chriſtopher Yelverton, at Eaſton-Mauduit in Northamptonſhire, in the capacity of tutor to his ſon, who was afterwards the very learned ſir Henry Yelverton. For his venerable preceptor the pupil entertained an affectionate regard, and, after the deceaſe of ſir Chriſtopher, ſupported him till his death, in 1659, when he was in the ninety-fifth year of his age.

That biſhop Morton poſſeſſed very reſpectable abilities, and a conſiderable ſhare of learning, is ſufficiently teſtified by the works which he publiſhed; but we conceive that the part which he took on the ſubject of the Book of Sports, will juſtify us in withholding our aſſent from the encomium paſſed by his biographers on the ſolidity of his judgment. With reſpect to his moral character, he was diſtinguiſhed by exemplary piety, ſtrict and rigid temperance, extenſive benevolence, and generous hoſpitality. So diſintereſted was he, that "he never purchaſed one foot of land, whatever he ſold, nor other temporal poſſeſſion, in all his long life, notwithſtanding his plentiful income; but, as his revenues increaſed, ſo were they ſpent in hoſpitable, charitable, and other Chriſtian, uſes." When he was in his ninety-fourth year, the popiſh writers, in order to invalidate the Engliſh ordinations, revived the ſtory of the Nag's-head club; and, among other proofs of its truth, pretended that biſhop Morton, in a ſolemn ſpeech made in full parliament, had declared in expreſs words, that the firſt Engliſh biſhops made after the Reformation had been conſecrated in a tavern. Being informed of this calumny, the biſhop ſent for a public notary from London, and in the preſence of proper witneſſes made a ſolemn proteſtation of the falſehood of this ſtory, and ſigned it in due form. He then ſent his chaplain, Dr. Barwick, to all the lords ſpiritual and temporal then alive, who had ſat in that parliament, requeſting that, if they believed him undeſervedly aſperſed, they would atteſt it by ſubſcribing their names; which was done by ſix biſhops and fourteen temporal lords, and by the ſeveral clerks and regiſters of the houſe. This proteſtation, with the proofs, was afterwards publiſhed by Dr. Bramhall, biſhop of Derry, in a treatiſe, intitled, "The Conſecration and Succeſſion of Proteſtant Biſhops juſtified, &c." Biſhop Morton was the author of ſeveral controverſial treatiſes, in Latin and Engliſh, againſt the proteſtant nonconformiſts and the papiſts; ſingle Sermons, &c. the titles of which may be ſeen in the Biog. Brit. and Dr. Barwick's Life of the Biſhop, annexed to the Sermon preached at his Funeral. *Gen. Biog.*

MORTON (Richard, M. D.) an eminent phyſician, was a native of Suffolk. His father was both a divine and a phyſician of great practice. Richard took the degree of B. A. at Oxford, and was afterwards a chaplain in the family of Foley, in Worceſterſhire; but, as he had adopted the principles of the nonconformiſts, he was obliged, in the intolerant times of Charles II. to abandon the theological profeſſion, and adopt that of phyſic. He took the degree of doctor of this faculty in 1670, at Oxford, whither he had accompanied the prince of Orange, whom he attended upon as his phyſician. Fixing in the metropolis, he became a fellow of the College of Phyſicians, and appears to have obtained a large ſhare of city-practice. He died at his houſe in Surrey, in 1698.

The firſt work by which Dr. Morton made himſelf known to the profeſſion, was his "Phthiſiologia, ſeu Exercitationes de Phthiſi," 1689, 8vo. This is valuable as a pathological work, deſcribing all the forms of conſumption, with their complications; but the diſtinctions are not marked with much preciſion, and the medical treatment is theoretical and complex. It was tranſlated into Engliſh in 1794, and appears to have been popular. His "Pyretologia, ſeu Exercitationes de Morbis univerſalibus acutis," conſiſts of 2 vols. 8vo. one publiſhed in 1691, the other in 1694. In the theory of fevers, his fundamental principle is, "that the febrile fomes is ſomething deleterious lurking in the animal ſpirits, or nervous fluid, which primarily acting upon them like a ferment, and producing an agitation in them, ſecondarily imparts various changes and morbid qualities to the humours." The regulation of the ſuppoſed fermentative expanſion of the animal ſpirits is therefore his great rule of practice; and this has in general led him to a more free employment of cordial and ſtimulant remedies than was uſual at that period. He contributed greatly to the liberal uſe of the Peruvian bark in febrile diſeaſes; and he employed opium freely in a variety of diſorders. He illuſtrates his doctrines by a number of caſes, in which much ſagacious diſcernment and vigorous practice is to be met with; and, upon the whole, though occaſionally warped by hypothetical theory, he may rank among the moſt eminent practitioners and improvers of the healing art. His works have been edited collectively at Amſterdam, Leyden, Geneva, Venice, and Lyons. *Gen. Biog.*

MORTON (Dr. Charles), was born in Weſtmoreland about the year 1716, and was a practiſing phyſician at Kendal in 1745. In 1744 he married miſs Mary Berkeley, niece of lady Betty Germaine. His ſecond wife was lady Saville, mother of ſir George Saville, to whom he was married in 1772, and who died in February 1791. The latter part of the ſame year, when he was ſeventy-five years of age, he married his third wife, Mrs. Eliz. Pratt, a near relation of lady Saville. In 1751 Dr. Morton was admitted a licentiate of the College of Phyſicians. On the eſtabliſhment of the Britiſh Muſeum, in 1756, he was appointed under-librarian of the manuſcript and medal department; and, in 1776, he ſucceeded Dr. Maty as principal librarian, which he enjoyed till his death. In 1760 he ſucceeded Peter Duval as ſecretary to the Royal Society, which ſituation he reſigned in 1774, when he was ſucceeded by Dr. Horſley, afterwards biſhop of St. Aſaph. In 1759 he publiſhed an improved edition of Dr. Barnard's engraved Table of Alphabets; and, in 1772, Whitlocke's Journal of the Swediſh Embaſſy in 1653, 1654. Dr. Morton was a man of a ſweet and amiable diſpoſition, of great uprightneſs and integrity, and much admired as a ſcholar. He died at his apartments in the Britiſh Muſeum, in February 1799, being about eighty-three years of age. *Phil. Tranſ. abr.* vol. x.

MOR'TON, in geography. See MORETON, vol. xv. p. 801.

MOR'TON, a village in Dorſetſhire, near the Frome, ſouth-eaſt of Puddleton, three miles north of Winfrith. The church was built in the year 1410; it is ſmall, but neat.

MOR'TON'S BA'Y, a bay on the weſt coaſt of the iſland of Nevis: two miles north of Charleſtown.

MOR'TON-ME'RIAL, a village in Warwickſhire, north of Kineton, on the river Thelsford, that runs into the Avon; it is ſo called, becauſe it is divided into two parts, the latter being a quarter of a mile from Morton, where the church ſtands.

MOR'TON-VAL'ENCE, a village in Glouceſterſhire, four miles from Painſwick, and ſix from Glouceſter. Over the church-door is a repreſentation of St. Michael fighting with the dragon, very rudely carved in ſtone.

MOR'TORP, a town of Sweden, in the province of Smaland: ten miles weſt-ſouth-weſt of Calmar.

MORT'PAY, *ſ.* Dead pay; payment not made.—This parliament was merely a parliament of war, with ſome ſtatutes conducing thereunto; as the ſevere puniſhing of *mortpayes*, and keeping back of ſoldiers' wages. *Bacon.*

MORTREE' (Grand), a town of France, in the department of the Orne: ſeven miles ſouth-ſouth-eaſt of Argentan, and thirteen north of Alençon.

MOR'TRELL, *ſ.* In old records, a meſs of bread and milk, ſuch as was allowed to poor people in an hoſpital.

MOR'TRESS, *ſ.* [from *mortier de ſageſſe*, Fr. *Skinner.*] A diſh of meat of various kinds beaten together.—A *mortreſs* made with the brawn of capons, ſtamped, ſtrained, and mingled with a like quantity of almond-butter, is excellent to nouriſh the weak. *Bacon's Nat. Hiſt.*

MOR'TU I'SLAND, or ST. CLARA, an iſland in the Atlantic, near the coaſt of Peru, about two miles in length, and about fifteen miles to the north-north-eaſt of the river Tumbez.

MOR'TUARY, *ſ.* [*mortuaire*, Fr. *mortuarium*, Lat.] A burial-place.—Look on thy full table as a *mortuary* of the diſpeopled elements; where their ſlain are huddled up. *Whitlocke's Manners of the Eng.* 1654.—A gift left by a man at his death to his pariſh church, for the recompence of his perſonal tithes and offerings not duly paid in his life-time. *Harris.*—The ſenſe of this word, as given by Johnſon from Harris, certainly does not quite agree with the following from Blackſtone: but it may have both meanings.—*Mortuaries* are a kind of eccleſiaſtical heriots, being a cuſtomary gift claimed by and due to the miniſter in very many pariſhes on the death of his pariſhioners. They ſeem to have been originally, like lay-heriots, only a voluntary bequeſt to the church. *Blackſt. Comm.* ii. 28.—Thus Harris ſeems to have given the original ſenſe of the word, inſtead of the modern. *Maſon's Suppl. to Johnſon.*

A mortuary is not properly and originally due to an eccleſiaſtical incumbent from any but thoſe only of his own pariſh, to whom he miniſters ſpiritual inſtruction, and hath right to their tithes. But by cuſtom in ſome places of this kingdom, they are paid to the parſons of other pariſhes, as the corpſe paſſes through them.

Mortuaries are, in fact, a ſort of *eccleſiaſtical heriots:* being a cuſtomary gift claimed by, and due to, the miniſter in very many pariſhes on the death of his pariſhioners. 2 *Comm.* c. 28. p. 425. They ſeem originally to have been like lay-heriots, only a voluntary bequeſt to the church; being intended as a kind of expiation and amends to the clergy, for the perſonal tithes and other eccleſiaſtical duties, which the laity in their life-time might have neglected or forgotten to pay. For this purpoſe, after the lord's heriot or beſt good was taken out, the ſecond-beſt chattel was reſerved to the church as a mortuary. (*Co. Litt.* 185.) And therefore, in the laws of king Canute, this mortuary is called *ſoul-ſcot.* And, in purſuance of the ſame principle, by the laws of Venice, where no perſonal tithes have been paid during the life of the party, they are paid at his death out of his merchandiſe, jewels, and other moveables. So alſo, by a ſimilar policy in France, every man that died without bequeathing a part of his eſtate to the church, which was called *dying without confeſſion*, was formerly deprived of Chriſtian burial; or, if he died inteſtate, the relations of the deceaſed, jointly with the biſhop, named proper arbitrators to determine what he ought to have given to the church, in caſe he had made a will. But the parliament, in 1409, redreſſed this grievance.

It was anciently uſual in England to bring the mortuary to church along with the corpſe when it came to be buried; and thence it is ſometimes called a *corpſe-preſent:* a term which beſpeaks it to have been once a voluntary donation. However, in Bracton's time, ſo early as Henry III. we find it rivetted into an eſtabliſhed cuſtom; inſomuch, that the bequeſts of heriots and mortuaries were held to be neceſſary ingredients in every teſtament of chattels. *Imprimis autem debet quilibet, qui teſtamentum fecerit, dominum ſuum de meliori re quam habuerit recognoſcere; et poſtea eccleſiam de alia meliore:* "The lord muſt have the beſt good left him as a heriot; and the church the ſecond beſt as a mortuary." But yet this cuſtom was different in different places: *In quibuſdam locis habet eccleſia melius animal dē conſuetudine; in quibuſdam ſecundam vel tertium melius; et in quibuſdam nihil: et ideo conſideranda eſt conſuetudo loci.* This cuſtom ſtill varies in different places, not only as to the mortuary to be paid, but the perſon to whom it is payable. In Wales a mortuary or corſe-preſent was due upon the death of every clergyman to the biſhop of the dioceſe; till aboliſhed, upon a recompenſe given to the biſhop, by the ſtat. 12 Ann. ſt. 2. c. 6. And in the archdeaconry of Cheſter a cuſtom alſo prevailed, that the biſhop, who is alſo archdeacon, ſhould have, at the death of every clergyman dying therein, his beſt horſe or mare, bridle, ſaddle, and ſpurs; his beſt gown or cloak, hat, upper garment under his gown, and tippet, and alſo his beſt ſignet or ring: but by ſtat. 28 Geo. II. c. 6. this mortuary is directed to ceaſe, and the act has ſettled upon the biſhop an equivalent in its room. The king's claim to many goods, on the death of all prelates in England, ſeems to be of the ſame nature; though ſir Edward Coke apprehends, that this is a duty upon death, and not a mortuary: a diſtinction which ſeems to be without a difference. For not only the king's eccleſiaſtical character, as ſupreme ordinary, but alſo the ſpecies of the good claimed, which bear ſo near a reſemblance to thoſe in the archdeaconry of Cheſter, which was an acknowledged mortuary, puts the matter out of diſpute. The king, according to the record vouched by ſir Edward Coke, is entitled to ſix things: the biſhop's beſt horſe or palfrey, with his furniture; his cloak or gown, and tippet; his cup and cover; his baſon and ewer; his gold ring; and laſtly, his *muta canum*, his mew or kennel of hounds.

This variety of cuſtoms with regard to mortuaries giving frequently a handle to exactions on the one ſide, and frauds or expenſive litigations on the other, it was thought proper by ſtat. 21 Henry VIII, c. 6. to reduce them to ſome kind of certainty. For this purpoſe it is enacted, that all mortuaries, or corſe-preſents to parſons of any pariſh, ſhall be taken in the following manner, unleſs where by cuſtom leſs or none at all is due; viz. for every perſon who does not leave goods to the value of ten marks, nothing; for every perſon who leaves goods to the value of ten marks and under thirty pounds, 3s. 4d. if above thirty pounds, and under forty pounds, 6s. 8d. if above forty pounds, of what value ſoever they may be, 10s. and no more. And no mortuary ſhall throughout the kingdom be paid for the death of any feme-covert; nor for any child; nor for any one of full age that is not a houſekeeper; nor for any wayfaring man; but ſuch wayfaring man's mortuary ſhall be paid in the pariſh to which he belongs. And upon this ſtatute ſtands the law of mortuaries to this day.

MOR'TUARY, *adj.* [*mortuaire*, Fr.] Belonging to the burial of the dead.—Near the pyramids and *mortuary* caves. *Greenhill's Art of Embalming.*

MORTUGA'RA, a town of Brazil, in the government of Para: twenty miles ſouth-weſt of Para.

MOR'TY, an iſland in the North Pacific Ocean, about ſixty miles long from north to ſouth, and from ten to twenty-five in breadth; ſeparated from the north-eaſt part of the iſland of Gilolo by a channel about twenty-five miles wide, called the Strait of Morty. It belongs to the ſultan of Ternate. Lat. 2. 15. N. lon. 128. 23. E.

MORVEAU' (Louis Bernard Guyton de), an eminent French chemiſt, was born at Dijon, Jan. 4, 1737. He was deſcended from an ancient and reſpectable family; and his father was profeſſor of the civil law in the univerſity of Dijon.

Morveau's early education was not neglected. But, while his father and his tutor were initiating him in the old routine of theories, nature taught him to reſort to the practical acquiſition of knowledge. Accuſtomed every day to ſee the various artificers, whom his father employed about his houſe, to ſatisfy a caprice for building, young Guyton inſenſibly caught the ſpirit of *mechanics.* At the age of ſeven he had already given many inſtances of a diſpoſition for that branch of philoſophy; and this, which was in him improperly conſidered as a natural inclination, was the inconteſtible effect of example. Being with his father at a ſmall village near Dijon, during the vacation, he there happened to meet a public officer returning from a ſale, whence he had brought back a clock that had remained unſold, owing to its very bad condition. Morveau intreats his father to purchaſe it; ſix francs were given—the clock was diſmounted and cleaned by the ardent boy—ſome pieces that were wanting were added—the whole put together as before, without any other aſſiſtance; and in 1799, that is, fifty-five years afterwards, the clock was reſold at a higher price, together with the eſtate and houſe in which it had been originally placed; having during the whole of that time preſerved its movement in the moſt ſatisfactory manner. The ſame operation he once undertook for his mother's watch, to her perfect ſatisfaction, though he was then only eight years of age. Theſe trivial details might be multiplied; but they might alſo appear tedious and unimportant; they have been mentioned to ſhow how impoſſible it is to predict, from the early whims of childhood, the vocation which is to engage any individual at a more advanced period of life. No one has ſhown leſs taſte for mechanics than Guyton, during his long and brilliant career.

After the firſt years of inſtruction under his paternal roof, he was ſent to college, where he finiſhed his ſtudies at the age of ſixteen. About this time a M. Michault, a friend of his father, and a naturaliſt of ſome merit, propoſed to inſtruct him in *botany.* And a viſit which he ſoon after paid to Voltaire at Ferney, ſeems to have given him, at one time, a turn for *poetry;* particularly of the deſcriptive and ſatiric kind.

Having at length greater maturity of underſtanding, young Guyton was admitted a law-ſtudent in the univerſity of Dijon; and, after three years of cloſe application, was ſent to Paris to acquire a knowledge of practice at the bar. At the age of twenty-four, Guyton had pleaded ſeveral important cauſes; and about that time, when the office of advocate-general at the parliament of Dijon was advertiſed for ſale. It is well known that all public ſituations, even of the greateſt reſponſibility, were then ſold in France to the beſt bidder. Guyton's father, having aſcertained that this place would be acceptable to his ſon, purchaſed it for forty thouſand francs. The reputation of the young advocate, and his engaging manners, concurred in facilitating the bargain; and it is perhaps worthy of remark, that, when his father preſented him to the parliament on that occaſion, the magiſtrates compoſing it, after many flattering compliments, expreſſed a fear that his health, which ſeemed delicate, would ſuffer from the fatigues of office. He lived, however, to be nearly eighty years of age.

But the more ſober ſtudy of the law did not prevent him from cultivating various branches of polite literature, on which ſubjects he correſponded with ſeveral friends who were eminent in the belles-lettres. In 1764 he was admitted an honorary member of the Academy of Sciences, Arts, and Belles Lettres, of Dijon, then one of the moſt learned ſocieties of Europe: and here begins that brilliant career which he followed with ſo much ardour and glory. Two months afterwards he preſented to the aſſembled chambers of the parliament of Burgundy a Memoir on Public Inſtruction, with a Plan for a College, on the principles detailed in his work. When we conſider the youth of the writer, the age he lived in, the prejudices he encountered, and the deeply-rooted abuſes he had to combat, we cannot help admiring the talent diſplayed in this work, and wiſhing that its principles had never been loſt ſight of in arranging the ſyſtems of public education. The encomiums which every public journal of the time has paſſed on this production, and the flattering letters which he received, were proofs of its value. The celebrated Chalottes, who was the king's attorney-general at the parliament of Bretagne, and who had treated the ſame ſubject in a maſterly manner, wrote to him as follows: *J'ai prouvé la néceſſité de la réforme de l'éducation publique; vous avez indiqué les moyens de l'exécuter.* "I have pointed out the neceſſity of a reform in the mode of public inſtruction; you have ſhown how this reform may be effected." A few months after this, Morveau delivered an Eloge on the preſident Jeannin, at a public meeting of the Dijon Academy: it was full of chaſte eloquence, and virtuous ſentiments.

Thus we have ſhown the wonderful verſatility of talents diſplayed by one man. He was qualified by nature to excel in mechanics, the belles lettres, law, ethics, or eloquence. But we muſt paſs over all the circumſtances of minor importance, and haſten to the brilliant *chemical* career which he firſt entered upon at the age of thirty, when deeply plunged in the intricacies of a very different purſuit.

The exact ſciences were ſo ill taught, and lamely cultivated, at the time of Morveau's univerſity-education, that, after his admiſſion into the academy of Dijon, his notions of mechanical and natural philoſophy were ſcanty and inſufficient. This partial ignorance expoſed him to ſome mortification during the meetings of that ſociety. A Dr. Chardenon was in the habit of reading memoirs on chemical ſubjects; and on one occaſion our author thought it neceſſary to hazard ſome remarks which were ill received by the doctor, who ſneeringly told him, that, having obtained ſuch ſucceſs in literature, he had better reſt ſatisfied with the reputation ſo juſtly acquired, and leave chemiſtry to thoſe who knew more of the matter. Angry at this remark, Guyton determined upon an honourable revenge. He therefore applied himſelf to ſtudy the Theoretical and Practical Chemiſtry of Macquer, and the Manual of Chemiſtry which Beaumé had juſt publiſhed. To the latter chemiſt he alſo ſent an order for chemical preparations and utenſils, with a view of forming a ſmall laboratory next his office. Having done this, he began by repeating many of Beaumé's experiments; and, by trying his inexperienced hand in performing original ones, he ſoon found himſelf ſtrong enough to attack the doctor. The latter had juſt been reading a memoir on the analyſis of different kinds of oils, when Guyton proceeded to combat and controvert ſome opinions in ſo forcible and maſterly a manner as aſtoniſhed every one preſent. The meeting having been adjourned, Dr. Chardenon addreſſed Morveau: "Sir," ſaid he, "you are born to be an honour to chemiſtry. So much knowledge could only have been ſo quickly gained by genius joined with perſeverance. Follow your new purſuit, and confer with me in your difficulties." Such is the language of a liberal man, who, ambitious without jealouſy, and loving ſcience for its own ſake, ſees in the laudable efforts of another nothing but an additional means of forwarding the progreſs of his favourite ſtudy.

Morveau, having now become decidedly a *chemiſt*, went to Paris, for the purpoſe of viſiting the ſcientific eſtabliſhments of that metropolis, and purchaſing books, preparations, and inſtruments, which he ſtill wanted, to enable him to purſue his favourite ſtudy. The perſon to whom he addreſſed himſelf for this purpoſe was Beaumé, who was then among the firſt of the French chemiſts. Pleaſed with Guyton's ardour, Beaumé proceeded to inquire what courſes of chemiſtry he had attended. "None," was the anſwer. "How then could you have learned to make experiments, and above all to acquire the dexterity which certain manipulations require, and which you ſeem perfectly to underſtand?" "Practice," replied the young chemiſt, "has been my maſter; melted crucibles and broken retorts my tutors." "In that caſe," ſaid Beaumé, "you have not learned, you have invented."

Guyton de Morveau's firſt eſſay on his return to Dijon, was preſented in a note which he read to the Academy that ſame year, but which, not having been printed, has probably been loſt. His next memoir was of more importance. The phenomenon of the increaſe of weight in metals after a long expoſure to the action of fire, had been, in fact, explained by Jean Rey in 1630; but loſt ſight of almoſt immediately afterwards. His explanation was forgotten, and the *calcination* of metals became once more the ſubject of controverſies and conjectures amongſt the ſucceſſive philoſophers who cultivated the ſcience of chemiſtry. Dr. Chardenon, who had often obſerved this augmentation of weight, attempted to explain it in a memoir, which he read at the Academy of Dijon. He began by ſhowing the improbability of the hypotheſis advanced by others; and particularly combated that of M. Berault, who, in a memoir which obtained the prize of the Academy of Bourdeaux twenty years before, had imagined that the air ſurrounding the ignited metals, depoſited amongſt their molecules a quantity of foreign matter, and thus encreaſed their abſolute gravity. The new explanation, however, which Dr. Chardenon offered, was not much happier; and it certainly muſt ſtrike us with aſtoniſhment, that men otherwiſe inſtructed, and verſed in the phyſical ſciences, ſhould have ſo far perverted their own knowledge, as to explain a phenomenon, conſiſting in the *augmentation* of abſolute weight in a given maſs, by imagining the *ſubtraction* of a certain principle (phlogiſton) from that maſs; and vice verſâ the *reduction* of its primitive weight, by the *addition* of the ſame principle. Anxious to prove his intereſt in the new ſtudy he had embraced, Guyton loſt no time in purſuing this inquiry, and, a few months afterwards, read a paper upon the ſubject. That ſpirit of practical reſearch, which has diſtinguiſhed the writer on every ſubſequent occaſion, ſeems to have dictated this production; but in thoſe days no appeal to facts could produce conviction.

In the April of the following year, while making ſome experiments on the ſolution of alkalies in certain acids, Guyton was very near collecting the carbonic acid, by ſaturating a given quantity of mineral alkali (carbonat of ſoda) with nitrous acid. But his aim in making theſe experiments, was to ſhow that, during the efferveſcence which took place at the moment of mixing the two ingredients, there was a conſiderable diminution of the temperature.

But it muſt not be ſuppoſed, becauſe Morveau had ardently embraced purſuits foreign to his profeſſional vocations, that he neglected the field of literature, in which he had culled ſo many flowers; or that he abandoned the bar, which reſounded ſtill with his praiſe. By an aſſiduity that has few examples, a zeal that knew no bounds, Guyton was alternately a chemiſt, a magiſtrate, and a diſtinguiſhed writer of polite literature. At the opening of the ſeſſions of the parliament of Burgundy, in November 1769, he pronounced a diſcourſe, *Sur les Mœurs*, which was as remarkable for the beauty of its ſtyle, as for the ſoundneſs of its doctrine. This oration ſerved to confirm his talents as a chaſte and elegant writer—a character which he maintained even in the courſe of the moſt unimportant, as well as the moſt abſtruſe, memoirs on ſubjects of ſcience.

Various other occupations diſtinguiſhed the next four or five years of Morveau's life, in his double capacity of a chemiſt and a lawyer; but, in a ſketch like the preſent, in which his moſt important labours only can be recorded, it would be needleſs to dwell upon all his productions. We muſt not, however, omit to mention the collection of Scientific Eſſays which he publiſhed about this time, (1772.) and in which he treated ſome of the moſt important ſubjects connected with ſcience: and this in deſpite of ſome of his prejudiced legal colleagues, who publicly upbraided him for giving up too much of his time to ſcientific reſearches.

This and the following year of Guyton's life, were particularly rich in uſeful and ingenious reſearches. His experiments on adheſion are too well known to need particular mention in this place. The reſults he had obtained from them were afterwards confirmed by other philoſophers, who, like him, found, that a diſk of glaſs, ten lines in diameter, adhered to the ſurface of mercury with a force equal to a weight of 66·5 grains. About this time, alſo, the theory of gaſes was beginning to threaten the phlogiſtic doctrine. The reſearches of ſeveral eminent philoſophers of Europe, and more particularly of England, had brought the two parties to a cloſe combat, from whence there was no retreating, unleſs either conquered or triumphant. Guyton took part in the conteſt; and, perceiving the weak ſide of the doctrine he had hitherto ſupported, without however being yet wholly convinced of the ſoundneſs of that of its opponents, in a publication, which does him infinite credit, and in which his theories and conjectures are ſupported by new facts and experiments, ſhowed a diſpoſition to adopt the pneumatic doctrine, provided ſeveral doubts were explained to him, which yet perplexed and forbade him to embrace its otherwiſe luminous principles.

Morveau was now deſtined to lay the foundation of a moſt important diſcovery. We allude to his mode of diſinfecting air impregnated with peſtilential or epidemic miaſmata. It was in 1773 that Guyton ſhowed the efficacy of muriatic acid gas in deſtroying infection. Till then, no ſcientific principle had led thoſe who in vain ſought to combat the influence of that infection in hoſpitals, lazarettoes, priſons, or otherwiſe, where it produced the moſt fatal conſequences, to the diſcovery of any effective method. Means, as various as they were numerous, had till then been employed with little ſucceſs. The aromatic fires, the combuſtion of ſulphur, the acetic vapours, and others, had never been productive of any beneficial effect; and the infection which had ſpread itſelf, at the epoch we are now recording, in one of the churches at Dijon, would have ultimately proved fatal to that city, as it had hitherto proved unconquerable, had not Morveau, led by analogies which his chemical reſearches had ſuggeſted, propoſed and employed the gas reſulting from the decompoſition of muriat of ſoda by ſulphuric acid. In this manner was that church inſtantly purified; and thus were the priſons of Dijon during the ſame year entirely freed from the infectious fever, ſpringing from the accumulation of diſeaſed perſons. From that moment it was proved, that the muriatic acid gas attacked and deſtroyed the baneful effects of putrefaction, no matter how produced, by which the moſt trivial malady is often changed into a diſeaſe of fatal termination. At a ſubſequent period, Fourcroy, from a ſuppoſition that the gas in queſtion acted in virtue of the oxygen it was believed to contain, ſuggeſted to employ it in that ſtate in which a much greater proportion of that ſame principle was ſuppoſed to be preſent. Morveau, who, without entering into the theories explanatory of the effect, contented himſelf with the important reſults to be derived from it, having aſcertained by comparative experiments the ſuperior efficacy of the oxygenated muriatic acid (chlorine), propoſed by Fourcroy, in certain caſes, loſt no time in adopting the improvement; and thus eſtabliſhed at once, in the moſt incontrovertible manner, one of the moſt powerful means with which the magiſtrate, as well as the phyſician, can arm themſelves to combat infection.

As increaſing merit never fails to meet with unworthy opponents, Morveau had, like many other illuſtrious perſons, the mortification of ſeeing himſelf attacked by prejudice on the one hand, and by malice and open hoſtility on the other. *Fixed air*, ſince called *carbonic acid*, was at that time engaging the attention of chemiſts, and Guyton had thought it neceſſary to exhibit ſome experiments illuſtrative of its properties, when ſeveral writers, amongſt whom were many medical men, attacked the principles on which the nature and properties of that acid were explained, inſiſting upon its identity with the vitriolic acid. Guyton, however, in two eſſays, completely refuted the doctrine. Another ſource of controverſy was the eſtabliſhing metallic conductors at Dijon, at a time when they had juſt been propoſed by the American philoſopher. Guyton's efforts in ſeconding the benevolent intentions of that illuſtrious man, were conſidered as irreverent and irreligious: he was attacked for his *preſumption*, in diſarming the hand of the Supreme Being; and would have ſuffered materially from the multitude of fanatics who had aſſembled to pull down the conductor placed on the houſe of the Dijon Academy, had not Dr. Maret, the ſecretary, ſucceeded in diſperſing the motley troop, by aſſuring them that the aſtoniſhing virtue of that inſtrument reſided in the gilded point which had purpoſely been ſent from Rome by the holy father.

In 1778, M. Guyton publiſhed the firſt volume of a Courſe of Chemiſtry, which ſhortly afterwards was ſucceeded by a ſecond, a third, and a fourth, volume. Our preſent knowledge of this ſcience is ſuch, that we could not refer to this work with a view of deriving any material information from it. The important and aſtoniſhing progreſs made ſince that time in chemiſtry, and to which Guyton himſelf has been greatly inſtrumental, have rendered all former productions mere works of reference; wherein we may trace the firſt ſteps of that gigantic march which chemiſts have ſince performed, in purſuing philoſophical truth. As a monument, therefore, of the early efforts of Guyton in behalf of his favourite ſcience, and of the extraordinary verſatility of his talents, his Elements of Chemiſtry will always be referred to with conſiderable ſatisfaction. The pleaſing and deſultory part of the ſcience, however, was not the only one that Guyton cultivated. Aware, from his every-day increaſing knowledge of new and intereſting facts, that they were applicable to various objects of public and domeſtic life, and that they might thus be rendered highly important to ſociety, he ſtudied the different modes of their application; and, amongſt other enterpriſes of which we cannot here undertake to ſpeak, the eſtabliſhment of a manufacture of nitrat of potaſh, on a large ſcale, ought more particularly to be mentioned. This enterpriſe called forth the thanks of the then miniſter of finances, the celebrated Necker, who in a letter on that ſubject conveyed to him "his majeſty's ſatisfaction at the new proof of his (Morveau's) love for the public welfare, and of his attachment to his majeſty's ſervice."

Such were indeed the claims of Guyton to the approbation of government, whoſe intereſts he ſtudied to maintain on every occaſion; but in an independent and dignified manner. For let us turn to another of his productions which appeared about the ſame time, (Diſcours ſur l'Amour de l'Humanité, prononcé à l'ouverture des audiences de Dijon, 1778.) and we ſhall again find the faithful ſervant of the crown, the firm patriot, the good citizen, and the zealous philanthropiſt, in him whom we ſo recently admired as the promoter of ſcience and the arts—of both of which he had ever been one of the firmeſt ſupporters. The republic of letters had in that year to mourn the loſs of two men equally celebrated, Rouſſeau and Voltaire. Burial-ſervice had been refuſed in Paris to the remains of the latter; and the unprejudiced as well as the moſt honeſt exclaimed againſt the proceedings. Guyton, in the diſcourſe we have juſt alluded to, thought it neceſſary to make an alluſion to that event, and to expreſs his indignation, that in a country like France, men ſuch as Voltaire, whoſe rights to national gratitude and poſthumous fame were countleſs, ſhould be perſecuted even beyond the grave.

In the year 1777, Monſ. de Morveau was employed to examine the quarries of regular ſchiſtus and the coal-mines of Burgundy, for which purpoſe he performed a mineralogical tour through that province. In the Memoirs of the Dijon Academy for 1779, we find another inſtance of the uſeful reſults of Guyton's new ſcientific purſuits, in a memoir, giving an account of a rich lead-mine diſcovered by him, and to work which, for want of other combuſtibles, he ſought for beds of coal in the neighbourhood, though unſucceſsfully. A few years later, when Bergman had ſo well deſcribed the properties of the heavy ſpar and the earth obtained from it, Guyton, greatly aſſiſted by his geological knowledge, ſearched for it in Burgundy, and found it in conſiderable quantity at Thôte, ſo as to be enabled to give to the Dijon Academy an accurate deſcription of that mineral, and of the earth which enters into its compoſition, and which he afterwards called *barytes*. It ought alſo to be remarked, that, although the method of ſeparating the baſis from its acid in this caſe had already been publiſhed by Bergman in the Tranſactions of Upſal, Morveau propoſed a different proceſs, conſiſting in the decompoſition of the ſulphat by heat and charcoal, the conſequent formation of a ſulphuret, which he had occaſion to obſerve very diſtinctly in the courſe of the operation, and the formation of a ſalt (decompoſable by alkalies), by means of muriatic acid. It was about this time too that he found the white emerald of Burgundy.

But the fame of Morveau could no longer remain confined within the limits of a few country towns. His zeal and talents; his erudition and extenſive knowledge; his proficiency in the natural ſciences; the eloquence of his harangues, and the elegant ſtyle of his writings; to which may now be added, the utility of his chemical lectures, gratuitouſly delivered; were too-powerful motives for rendering him truly popular and extenſively known in France, not to attract the attention of the moſt renowned of his countrymen, as well as that of the moſt eminent and learned men of Europe. In the year 1779, he was requeſted by Pankouke, who meditated the great project of the *Encyclopedie Methodique*, to undertake the new edition of all the chemical articles in that great dictionary, and ſupported his demand with a letter from Buffon, whoſe requeſt Guyton could not refuſe, though he had long heſitated in accepting the office. The engagement was ſigned between them in September 1780; and, although the firſt part of that work did not appear till ſix years afterwards, ſtill the ſtudy and the reſearches, which the execution of his engagement demanded, furniſhed him with immediate and very conſiderable occupation.

A new doctrine, ſhaking to its very foundation the theory of Stahl, had been by this time publicly avowed by Lavoiſier, then juſtly conſidered as the moſt eminent of the French chemiſts. He had long expreſſed his doubts reſpecting the exiſtence of phlogiſton, and its inſufficiency to explain the various chemical phenomena. Led by the reſearches of Bayen, and the experiments of Jean Rey, he had been induced to conſider the atmoſpheric air as materially contributing to the phenomenon of combuſtion; and the experiments he made to aſcertain the reality of his conjectures, proved that a certain portion of the atmoſpheric air diſappeared during the combuſtion of bodies, and particularly of the metals. When this fact was announced to the Royal Academy of Sciences, a diviſion enſued amongſt the ſeveral chemiſts of Europe, ſome of whom undertook to ridicule it, and to defend the Stahlian principles; while others, on the contrary, without any heſitation, embraced the new doctrine, of which the fact advanced by Lavoiſier was the principal foundation.

About this period, chemiſtry derived eſſential aid from Guyton himſelf. The nomenclature of that ſcience was obſcure and barbarous; and he ſoon perceived that he ſhould in vain endeavour at perſpicuity, while the language remained thus abſurd and inefficient. With Guyton this conſideration alone would have checked the ardour of his purſuit, had not his own genius ſuggeſted the idea of reforming a nomenclature, till then the opprobrium of chemiſtry. To this, therefore, he directed his attention; and in 1782 was publiſhed his firſt eſſay on a new chemical nomenclature, forming the baſis of all thoſe ſubſequent changes from which we have derived ſuch ſubſtantial benefit, and by the aſſiſtance of which, chemiſtry has grown from a pigmy to a coloſſus. No ſooner, however, did this project reach the capital, than ſeveral of the members of the Royal Academy of Sciences, of which he was a correſponding member, inconſiderately undertook to oppoſe it; and the zealous propoſer, as he himſelf uſed to ſay, was *accablé d'objections* in every point of his enterpriſe. Macquer himſelf, who, on firſt learning his friend's project, had written to him "that, finding it excellent, he had determined to adopt it," did not, in the preſent inſtance, dare to defend him againſt the multiplied attacks of ſuch numerous and powerful opponents. Undiſmayed, however, and full of zeal, Guyton, with a view to obviate every difficulty, and to anſwer in perſon the objections that might be made, went to Paris, and preſented himſelf before the Academy, where he not only ſucceeded in ſhowing the neceſſity of the reform, but ultimately induced the moſt eminent chemiſts of the capital, ſuch as Lavoiſier, Berthollet, and Fourcroy, to join him in rendering that reform more complete and ſucceſsful. No ſcience, indeed, requires more preciſion in its various denominations than chemiſtry; and, if any thing had yet been wanting, fully to perſuade us of the neceſſity of reforming thoſe that exiſted at the epoch in which Guyton began his chemical ſtudies, we need only conſider the falſe analogies to which thoſe denominations often gave riſe, the continued errors committed when ſpeaking or writing on that ſcience, and the confuſion which enſued, to be ſatisfied, that in merely conceiving the firſt idea of that reform, which, by the aſſiſtance of others, he was afterwards enabled to complete, Guyton rendered one of the moſt important ſervices to the ſcience. It would be folly to deny, that the immenſe progreſs ſince made in chemiſtry—the multiplied diſcoveries—the luminous mode in which that ſcience is now taught and ſtudied, and its rapid extenſion, are owing to the zealous exertions of Guyton, as diſplayed in his Plan of a Methodical Chemical Nomenclature, read at the Academy of Sciences of Paris in 1787. See our article CHEMISTRY, vol. iv. p. 148. Another circumſtance deſerving attention is, that from the repeated conferences held with Lavoiſier, Berthollet, and Fourcroy, for the purpoſe of receiving their obſervations, and corrections of his original propoſition, the ſcience derived great advantages: for, while the latter were adopting the ideas of the former, Guyton became convinced of the truth of Lavoiſier's new doctrine, and haſtened to abjure the phlogiſtic theory, and to embrace the more luminous tenets of his illuſtrious countryman.

In 1783, in conſequence of the favourable report made by Macquer to government, Guyton obtained permiſſion to eſtabliſh a manufactory of ſoda; and in the ſame year he publiſhed his Collections of Pleadings at the Bar, among which we find his *Diſcours ſur la Bonhomie*, delivered at the opening of the ſeſſions of Dijon, and with which he took leave of his fellow-magiſtrates, ſurrendering the inſignia of office, having determined to quit juridical avocations.

On the 25th of April, 1784, Guyton, accompanied by the preſident Virly, aſcended from Dijon in a balloon, which he had himſelf conſtructed, and repeated the experiment on the 12th of June following, with a view of aſcertaining the poſſibility of directing thoſe aeroſtatic machines, by an apparatus of his own contrivance. He had been led to this, by the intereſting and important experiments of MM. Charles and Robert, the former of whom made the firſt application of the hydrogen gas to the purpoſes of aeroſtation. While employed in preparing for his aerial excurſions, he was viſited by the unfortunate Rozier, who had then ſcarcely recovered from an accident he had met with in a recent experiment with a Montgolfier at Lyons, and to a repetition of which he afterwards fell a lamented victim. The effect produced by this bold undertaking by two of the moſt diſtinguiſhed characters of the town, was beyond deſcription. This experiment was then quite new, and looked upon with a kind of reverential awe, that tended to augment conſiderably the admiration which the Bourguignons already felt for their illuſtrious countryman. Though M. Morveau failed in eſtabliſhing the mode of directing thoſe aerial veſſels, his method was ingenious, and one of the beſt which had been till then imagined; and our countryman Kirwan, who, like the other correſpondents of M. Guyton, begged him to ſpare a life, already ſo precious to ſcience, and not again to riſk it in ſuch frail machines, ſtated to him that he thought his mode of directing the balloon extremely plauſible. See the article AEROSTATION, vol. i.

At length the firſt part of the volume of chemiſtry of the Encyclopædia made its appearance, and was ſeized upon with avidity by every one who took an intereſt in the progreſs of that ſcience. This work is too well and too generally known to need any eulogium. The article Acid, alone, is a complete hiſtory of the ſcience. The erudition diſplayed in it, and the numerous and well-digeſted facts to be found throughout; the clear expoſition of the various doctrines announced and ſupported by the different authors who have written on chemiſtry; and finally, the accurate and full details of the various experiments that had been made in almoſt every part of Europe, down to the time of Guyton's writings; are in themſelves ſufficient to enſure him an everlaſting fame.

It was Guyton's good fortune to have a man as eminent as himſelf for a ſucceſſor in this undertaking. Fourcroy, at the expreſs invitation of Guyton, was applied to, by the publiſher, to continue the chemical part of the Encyclopædia; and having accepted the propoſition, on condition that Guyton ſhould communicate to him his vocabulary—notes—articles ready begun—extracts—tranſlations, and drawings; the latter, with that liberality which ever diſtinguiſhed him, loſt not a moment in ſending him every thing he had aſked for, together with the entire article on Metallurgy by Duhamel, and the plates relating to it.

In September 1787, our profeſſor was pleaſingly ſurpriſed at Dijon by the honour of a viſit from Lavoiſier, Berthollet, and Fourcroy, accompanied by their reſpective ladies, and MM. Monge and Vandermonde. By a very lucky coincidence, Dr. Beddoes of Briſtol, who was travelling through France at the time, happened to paſs through Dijon, and joined this party, who had aſſembled to repeat and diſcuſs ſeveral curious experiments explanatory of the new chemiſtry. It was alſo about this time that Guyton received a viſit from ſir Charles Blagden, announcing, by a letter from ſir Joſeph Banks, his election as member of the Royal Society.

In 1789 began the grand revolution. The national aſſembly was eſtabliſhed, and the kingdom was now divided into departments. In 1790, Guyton received a letter from count St. Prieſt, naming him one of a commiſſion, appointed by the aſſembly, for the formation of the department of the Côte d'Or. Till then, and from the time of his reſigning the chief magiſtracy at the parliament of Burgundy, he had abſtained from all interference in political matters; and, although the unhappy turn which affairs had then taken formed often the ſubject of lamentation between himſelf and his numerous correſpondents in the capital, ſtill he was far from wiſhing to take any decided part in the conteſt. While thus however engaged for the public ſervice, he received a freſh mark of the high conſideration in which his talents and knowledge were held by the moſt eminent among the learned of his nation; for, on the 25th of Auguſt, 1791, he obtained, from the Academy of Sciences, the great prize, which was annually decreed to the moſt uſeful work, for the firſt volume of the Dictionary of Chemiſtry in the Encyclopædia. His triumph on this occaſion was the more gratifying to him and his friends, that amongſt his competitors was the celebrated profeſſor Scarpa, who had recently publiſhed a highly-eſteemed work on anatomy. Lavoiſier, who had been greatly inſtrumental in thus determining the favourable deciſion of the Academy, remitted, in his quality of treaſurer to the Society, the prize to his friend, accompanied by an appropriate congratulation; and the latter, aware of the preſſing wants of the ſtate, ſeized the opportunity of contributing his mite towards their relief, by making a patriotic offering of the whole amount of that prize he had ſo deſervedly acquired.

The conſtitution preſented by the firſt National or Conſtitutional Aſſembly demanding a new election of the legiſlative power, Guyton was, on the 7th of September, nominated to the legiſlature, by the electoral college of his department. The dignity of ſolicitor-general of the department, to which alſo he had recently been raiſed, not permitting him to continue the chemical lectures at Dijon, of which he had already given fifteen courſes gratuitouſly, he reſigned his chair in favour of Dr. Chauſſier, one of the preſent moſt diſtinguiſhed profeſſors at the faculty of medicine; and, bidding adieu to his friends and the place of his early exploits, proceeded to Paris, at which place, when not elſewhere particularly employed by the government, he continued for the remainder of his life.

The republic being now conſidered as firmly eſtabliſhed after the death of the king in 1793, Morveau immediately reſigned his penſion of 2000 franks, and the arrears of that penſion. During the following year he was employed in the Low Countries, having received from government different commiſſions, to act with the armies of the republic; and diſplayed, on many occaſions, a perſonal bravery that called for the praiſes of the general officers. Charged with the direction of a great aeroſtatic machine for warlike purpoſes, he ſuperintended the employment of that in which the chief of the ſtaff of general Jourdan and himſelf aſcended during the battle Fleurus, and which ſo materially influenced the ſucceſs of the French arms on that day. On his return from his various miſſions, he received from the three committees of the executive government a joint invitation to co-operate with ſeveral learned men in the inſtruction of the central ſchools, and was named profeſſor of chemiſtry at the *Ecole Centrale des Travaux Publics*, ſince better known under the name of the Polytechnic School, in which he greatly contributed to the formation of thoſe numerous and eminent men, whom that celebrated and highly-uſeful eſtabliſhment has produced. In 1795, he was re-elected member of the Council of Five Hundred, by the electoral aſſemblies of Sarthe and Ile et Vilaine. When the executive government had decreed the formation of the National Inſtitute, he received a letter from the miniſter of the interior, announcing that he had been named one of the forty-eight members choſen by government to form the nucleus of that ſcientific body.

At the end of 1799, Bonaparte, as firſt conſul, appointed Guyton one of the adminiſtrators general of the mint; and, the year following, director of the Ecole Polytechnique. The Legion of Honour had been but recently inſtituted for the reward of eminent ſervices rendered to the ſtate, when Guyton received the croſs of that order from the hands of the firſt conſul, in the church of the Invalids: his promotion to an officer of that ſame order, took place in 1805, two years only after obtaining his firſt decoration. The firſt conſul having ſoon after aſſumed the title of emperor, Morveau was, in 1811, created a baron of the empire.

Sixteen years of uninterrupted labour at the Ecole Polytechnique, ſince 1798, (for, notwithſtanding all his other occupations and reſponſible ſituations, he had not for a ſingle moment ceaſed from his duties as profeſſor of chemiſtry at that ſchool,) ſeemed to entitle him to an honourable retreat. This he obtained, on application to the proper authorities, in 1813, and withdrew from public into the retired ſtation of private life, crowned with years and reputation, and followed by the bleſſings of the numerous pupils whom he had brought up in the career of ſcience. His time of repoſe, however, in this world, was to be but ſhort: he was ſeized with a total exhauſtion of ſtrength on the 21ſt of December, 1815, and expired after three days' illneſs, having nearly completed the eightieth year of his age. His remains were followed to the grave by the members of the Inſtitute, and many other diſtinguiſhed characters of the capital, on the 3d of January, 1816; where Berthollet, one of his earlieſt colleagues, pronounced, according to cuſtom, a ſhort but impreſſive funeral-oration on his departed friend.

Monſ. Guyton de Morveau was of a middle ſtature, and well made—with a quick penetrating eye, and a countenance full of intelligence. His health, notwithſtanding the many and arduous occupations of his long and uſeful life, had been but ſeldom chequered by diſeaſe, his conſtitution having progreſſively improved with mental and corporeal exerciſe. He was fond of converſation; and, though rather inclined to take the lead in it, he knew how to liſten to that of others, whenever the laws of politeneſs, or the proſpect of gaining information, demanded it. In his intercourſe with ſociety, he was cheerful, and of the moſt amiable diſpoſition. The purity of his language; his uncommon ſtore of information on almoſt every ſubject connected with the ſciences, the arts, and polite literature; and the agreeable manner of relating the numerous anecdotes with which he had become acquainted during a long and buſy career; made his company much ſought after; while his polite addreſs and condeſcenſion conſiderably heightened the advantage of poſſeſſing him among the circles which he moſt uſually frequented. But his higheſt praiſe was the probity of his character, which had become proverbial amongſt all thoſe who knew him, and had withſtood the ſeductions of power, and the temptations of high and lucrative employments.

ployments. In his profeſſions he was ſincere; and, whether he be conſidered as a public or private individual, his notions will be found to have ever been of the utmoſt purity.

"No one, ſays Dr. Granville, ever exerted himſelf with greater aſſiduity, during a very long ſeries of years, in public and private life, than Guyton de Morveau.—Procureur-général for the ſpace of two-and-twenty years at Dijon—ſolicitor-general of one of the French departments—member of the legiſlative body—of the national convention—of the council of five hundred—occaſionally upon the committees on financial, diplomatic, and legiſlative, ſubjects—commiſſary to the armies and to the frontiers—and, finally, director-general of the mint, he might fairly be ſuppoſed to have had no time for any other occupation. But, when we reflect that he was ſtill better known for his ſervices to ſcience—that he was a public profeſſor of chemiſtry at Dijon and Paris for upwards of thirty years—that he fulfilled the duties of director-general of the Polytechnic School for a conſiderable ſpace of time—and, finally, that during twenty-ſix years, as member of the National Inſtitute, he furniſhed ſeveral important memoirs and reports to that ſcientific body, publiſhed in its tranſactions, beſides many other papers printed in the Annales de Chimie, of which he was one of the earlieſt and moſt indefatigable editors—we cannot withhold that tribute of praiſe and admiration which his memory demands." Dr. Granville's Memoir in the *Quarterly Journal* of the Royal Inſtitute.

MORVE'E, a town of Guzerat: forty miles north-eaſt of Noanagur.

MOR'VEN, a diſtrict of Scotland, in the county of Argyle; extending in length about twenty miles along the ſound of Mull, and ten at its greateſt breadth. The country of Fingal and his heroes.

MORUGLIEN'GO, a town of France, in the department of the Seſia: twenty miles north-north-weſt of Vercelli.

MORU'GO, a river of Surinam, which runs into the ſea, north of Eſſequibo.

MORVIE'DRO, or MURVIEDRO, a town of Spain, in the province of Valencia, ſuppoſed to be erected on the ruins of the ancient *Saguntum*, founded about two hundred years before the Trojan war by a colony of Grecians, and deſtroyed by Hannibal, is a long and narrow town, a league from the ſea, at the foot of a mountain of black marble veined with white. The name of Murviedro is ſaid to be derived from *Muri veteres*, or *Muros viejos*, "Old Walls," from its ſuppoſed ſcite. This town is ſurrounded by lofty walls, and flanked by ſmall round towers. Its incloſure has ſeveral gates, defended by ſquare towers. The ſtreets are narrow, crooked, and deep; and the houſes exhibit a bad appearance. The ſuburbs are extenſive, more agreeable and airy than the town, and perfectly level. The inhabitants amount to about 5000. It has one pariſh-church, three chapels of eaſe, two convents of monks, a convent of nuns, and a corregidor. Its commerce partly conſiſts in brandy, which is exported to the north of Europe and to America: but its more certain reſource is the production of the neighbouring lands in oil, wine, wheat, barley, hemp, and carobs. It abounds with veſtiges of antiquity, which remind the paſſing obſerver of its original inhabitants, of its victors the Carthaginians, and of its poſſeſſors the Romans. Several Celtiberian and Roman inſcriptions are ſeen; but of the numerous ſtatues that ornamented the temples and other public edifices of Saguntum, one only remains, of white marble without a head, and a fragment of another. The traces of the walls of its circus are ſtill diſcernible: but its moſaic pavement is deſtroyed. A greater portion of the theatre remains than of any other Roman monument. It is thirteen miles north-north-eaſt of Valencia. Lat. 39. 38. N. lon. 0. 22. W.

MORVIE'DRO, a river of Spain, which runs into the ſea below the town ſo called.

MOR'VILLE, a ſmall iſland in the Engliſh Channel, near the coaſt of France. Lat. 48. 50. N. lon. 3. 28. W.

MOR'VILLE SUR NIE'D, a town of France, in the department of the Meurte: ſeven miles north of Château Salins, and ſeven weſt of Morhange.

MOR'VILLE SUR SE'ILLE, a town of France, in the department of the Meurte: three miles eaſt-ſouth-eaſt of Pont à Mouſſon, and three north-weſt of Nomeny.

MORVILLIE'R, a town of France, in the department of the Voſges: four miles ſouth-weſt of Neufchâteau, and three north of Bourmont.

MO'RUM, *ſ.* in ſurgery, an excreſcence on the ſurface of the ſkin, ſo called from its ſuppoſed reſemblance to a mulberry.

MORUMGA'NI, a ſea-port on the weſt coaſt of Madagaſcar. Lat. 15. S.

MORUN'DA, in ancient geography, a town of Aſia, in Media, placed by Ptolemy between Larraſſa and Tigrana.—A town of Aſia, in Atropaténe, ſituated on the northern part of the lake Spauta.—A town of India, on this ſide of the Ganges, inhabited by the people called by Ptolemy *Aii*.

MORUN'G, a country of Aſia, dependent on Thibet, on the banks of the Coſa, a little to the north of the country of Bengal, and ſouth-weſt from Bootan.

MORUN'GEN, a town of Germany, in the county of Mansfeld: four miles ſouth-weſt of Wippra.

MORUN'GEN. See MOHRUNGEN, vol. xv. p. 620.

MORUNGU', *ſ.* in botany. See GUILANDINA.

MO'RUP, a town of Sweden, in the province of Halland: twenty-five miles north-north-weſt of Halmſted.

MO'RUS, *ſ.* [derivation uncertain.] The MULBERRY-TREE; in botany, a genus of the claſs monoecia, order tetrandria, natural order of ſcabridæ, (urticæ, *Juſſ.*) Generic characters—I. Male flowers in an ament. Calyx: perianthium four-parted; leaflets ovate, concave. Corolla; none. Stamina: filaments four, awl-ſhaped, erect, longer than the calyx, one within each calycine leaf; antheræ ſimple. II. Female flowers heaped either on the ſame or a different individual from the males. Calyx: perianthium four-leaved; leaflets roundiſh, blunt, permanent, the two oppoſite outer ones incumbent. Corolla; none. Piſtillum: germen cordate; ſtyles two, awl-ſhaped, long, reflex, rugged; ſtigmas ſimple. Pericarpium: none; calyx very large, fleſhy, becoming ſucculent like a berry. Seed: ſingle, ovate, acute.—*Eſſential Character.* Male. Calyx four-parted; corolla none. Female. Calyx four-leaved; corolla none; ſtyles two; calyx becoming a berry; ſeed one. There are ten ſpecies, beſides varieties.

1. Morus alba, or white mulberry-tree: leaves obliquely cordate, even. This is a middle-ſized tree, with a whitiſh bark, of which a coarſe ſort of paper may be made, and ſpreading branches. Leaves broad-lanceolate, obliquely cordate, ſubſerrate, undivided, or three-lobed, ſome cut, ſmooth, petioled, ſcattered. Berries lateral, juicy, inſipid, pale, oblong. Gærtner deſcribes the fruit as a capſule covered with the leaflets of the calyx conferruminated into a white turbinate berry, ovate-acuminate, membranaceous, full of ſoft pulp, one-celled, finally drying up into a thin pellicle drawn over the ſeed. Seed ſingle, (one of the two being conſtantly abortive,) ovate, drawn to a point upwards, ſublenticular, rufeſcent, fixed to the apex of the capſule by a filiform chord. Native of China, Cochinchina, and Japan, and according to Gmelin of Perſia. Cultivated by Gerard in 1596. It flowers in June.

There are two or three varieties of this tree, which differ in the ſhape of their leaves, and in the ſize and colour of the fruit; but, as it is of no other uſe but for the leaves, the longeſt-ſhooting and the largeſt-leaved ſhould be preferred. Thunberg ſays it varies with entire leaves ſimply lobed, and with the lobes cut or gaſhed.

The white mulberry is commonly cultivated for its leaves to feed ſilk-worms in France, Italy, &c. (See PHALÆNA mori, and the article SILK.) In Spain, as

Mr. Townſend informs us, they prefer the white mulberry in Valencia, and the black in Granada. The Perſians generally make uſe of the latter; and Mr. Miller was aſſured by a gentleman who had made trial of both ſorts of leaves, that the worms fed with the black mulberry produced much the beſt ſilk; but that the leaves of the black ſhould never be given to the worms after they have eaten for ſome time of the white, leſt they ſhould burſt.

Sir George Staunton ſays, that the trees he obſerved in China did not appear to differ from the common mulberry-trees of Europe; that ſome of them were ſaid to bear white, and ſome red or black, fruit, but that often they bore none; and that the tender leaves growing on the young ſhoots of the black mulberry are ſuppoſed to be the moſt ſucculent. Evelyn remarks, that the leaves of the white mulberry are far more tender than thoſe of the black, and ſooner produced by at leaſt a fortnight. Nor is this tree leſs beautiful to the eye than the faireſt elm, very proper for walks and avenues. The timber will laſt in water as well as the moſt ſolid oak, and the bark makes good and tough baſt-ropes.

2. Morus nigra, or common mulberry-tree: leaves cordate, rugged. The difference which Linnæus ſets down between the black mulberry and the white is, that in the former the leaves are ſubquinquelobate, bluntiſh, and rugged, in the latter undivided and ſhining; the fructification of the former diœcous, of the latter monœcous. Theſe diſtinctions however are not exact. The black mulberry is a larger ſtronger tree; and the fruit is dark blackiſh red, and more acid. Mr. Miller's account is, that the black mulberry has generally male flowers or catkins on the ſame tree with the fruit, but it often happens that ſome of the trees which are raiſed from ſeeds have moſtly male flowers and produce no fruit; and that he has obſerved ſome trees which produced only catkins for many years after they were planted, and afterwards have become fruitful. This latter obſervation agrees with a general remark on monœcous trees, that whilſt they are young they bear male flowers chiefly and very little fruit. Mulberry-trees of a certain age are not only more fruitful than young ones, but their fruit is much larger and better flavoured. This tree grows naturally in Perſia, whence it was firſt brought to the ſouthern parts of Europe. It is now become common in every part of our continent, where the winters are not very ſevere. In the northern parts of Sweden it will not live in the open air; and in ſeveral parts of Germany it is planted againſt walls, and treated in the ſame way as peaches and other tender fruits are here.

It was cultivated here in 1596, by Gerard. In ſome of the old kitchen-gardens near London there are trees of a very great age, which are very healthy and fruitful, and their fruit is larger and better-flavoured than thoſe of younger trees. Bradley ſays, that moſt of theſe were planted in the time of king James I. when there was a project of ſetting up a ſilk-manufacture in England; but, though even a recommendation from the crown could not bring about the planting theſe trees in ſufficient number for the purpoſe, yet the trees have been found to flouriſh every-where with us when properly planted, and the worms feed very kindly and work very well with us. When this manufacture was firſt attempted, the people of many parts of England, nay, and in ſome parts of the dampeſt places in Ireland, tried it, and always with ſucceſs. The only thing that ſtopped the progreſs of ſo valuable a thing at that time, was the want of a ſufficient quantity of mulberry-trees; and the ſcheme has been neglected ever ſince.

The tree was always eſteemed by the ancients for its delicious fruit, long before the uſe of its leaves was found out. The Romans, in the height of their luxury, preferred it before all the foreign fruits; and Columella and the other ancients are very expreſs in the methods of propagating it.

The ripe fruit of this tree abounds with a deep violet-coloured juice, which in its general qualities agrees with that of the other acido-dulces, allaying thirſt, partly by refrigerating, and partly by exciting an excretion of mucus from the mouth and fauces; a ſimilar effect is alſo produced in the ſtomach, where, by correcting putreſcency, a powerful cauſe of thirſt is removed. This is more eſpecially the caſe with all thoſe fruits in which the acid much prevails over the ſaccharine part, as the currant, &c. and to which the medicinal qualities of this fruit may be referred; but both theſe, and moſt of the other ſummer-fruits, are to be conſidered rather as articles of diet than of medicine. The London College directs a *ſyrupus mori*, which is an agreeable vehicle for various medicines.

The bark of the root of the mulberry-tree has an acrid bitter taſte, and poſſeſſes a cathartic power. It has been ſucceſsfully uſed as an anthelmintic, particularly in caſes of tænia. The doſe is half a drachm of the powder. *Woodville's Med. Bot.*

The more general cultivation of mulberry-trees in England might be of greater uſe than is at preſent ſuppoſed in many reſpects. In Devonſhire they have a way of mixing mulberry-juice with their cyder in the making, and this produces the very beſt of all Engliſh vinous liquors.

β. M. laciniata. Mr. Miller ſets down a variety of the black mulberry, with palmate or elegantly-cut leaves and a ſmaller fruit, as a diſtinct ſpecies. He ſays, that it grows naturally in Sicily, whence he received a parcel of the ſeeds, and raiſed a good number of plants; that all theſe were totally different in their leaves from the common mulberry; and that the tree is of humbler growth, and the fruit ſmall without any flavour.

3. Morus papyrifera, or paper mulberry-tree: leaves palmate, fruit hiſpid. This tree makes very ſtrong vigorous ſhoots, but ſeems not to be of tall growth, for it ſends out many lateral branches from the root upwards. The leaves are large, ſome of them entire, others deeply cut into three or five lobes, eſpecially whilſt the trees are young; they are dark green and rough to the touch on the upper ſurface, but pale green and ſomewhat hairy on the under ſide, falling off on the firſt approach of froſt in autumn. The fruit is little larger than peaſe, ſurrounded with long purple hairs, when ripe changing to a black-purple colour, and full of ſweet juice. It is a native of Japan and the South Sea iſlands; according to Mr. Miller, of China alſo, and South Carolina, whence he received the ſeeds. The inhabitants of Japan make paper of the bark. They cultivate the trees for this purpoſe on the mountains much after the ſame manner as oſiers are cultivated with us, cutting down the young ſhoots in December, after the leaves are fallen. (See the article Paper.) The fineſt and whiteſt cloth, worn by the principal people at Otaheite and in the Sandwich iſlands, is made of the bark of this tree: and this, when dyed red, takes a better colour. The bread-fruit tree makes a cloth inferior in whiteneſs and ſoftneſs, worn chiefly by the poorer people. Cloth is alſo made of a tree reſembling the wild fig-tree of the Weſt Indies. It is coarſe and harſh, the colour of the darkeſt brown paper: but it is the moſt valuable becauſe it reſiſts water. This is perfumed and worn by the chiefs as a morning-dreſs in Otaheite. The juice of the paper-mulberry is uſed in China as a glue in gilding either paper or leather, but not wood. It was cultivated before 1759, by Hugh earl (afterwards duke) of Northumberland, in whoſe gardens ſeveral of theſe trees were raiſed from ſeeds, and one of them was given to Mr. Miller.

4. Morus rubra, or red mulberry-tree: leaves cordate, villoſe underneath; aments cylindric. The Virginian red or large-leaved mulberry-tree with black ſhoots, will grow to the height of thirty or forty feet, ſending forth many large branches. The leaves are not only larger,

but rougher, than thoſe of the common mulberry, though in other reſpects they ſomewhat reſemble them. It produces plenty of catkins, in ſhape like thoſe of the birch, and it has a dark reddiſh fruit.' Mr. Miller remarks, that a large tree of this ſpecies which had been many years in the biſhop of London's garden at Fulham, never produced any fruit, but had ſome years a great number of catkins, much like thoſe of the hazel-nut, which occaſioned Mr. Ray to give it the name of Corylus: but it might be one of the male trees, which do not produce fruit, as ſometimes happens in the common ſort.

According to Kalm, this tree is polygamous. Loureiro deſcribes it as a middle-ſized tree, with a ſmooth aſh-coloured bark, and long weak ſpreading branches. Leaves cordate, acute, ſerrate, large, pale, villoſe underneath, ſoft, petioled, alternate. Berry cylindric, an inch long, axillary, one or two together, peduncled, red, eatable. Parkinſon, ſo long ago as 1629, ſays that it grows quickly with us to a great tree, and that the fruit is longer and redder than the common ſort, and of a very pleaſant taſte. Though it bears the ſeverity of our climate very well, yet it is ſtill a ſcarce tree among us. Native of Virginia and Carolina; according to Loureiro, it is alſo found wild to the weſt of Cochinchina, and is cultivated by the Cochinchineſe for feeding ſilkworms, but not ſo generally as the white mulberry.

5. Morus Indica, or Indian mulberry: leaves ovate-oblong, equal on both ſides, unequally ſerrate. This is a large tree, with a ſoft thick yellowiſh bark, and a milky juice like the fig, which is aſtringent. The branches come out on every ſide. The leaves are on ſhort footſtalks, rough, dark green above, pale underneath, alternate. Flowers in round heads, at the footſtalks of the leaves, on each ſide the branches, of an herbaceous white colour. Fruit roundiſh, firſt green, then white, and finally dark red. It ſeems by Miller's deſcription to be a monœcous tree; Linnæus ſuſpects it to be diœcous. Loureiro deſcribes it as a ſhrub, ſix feet high, ſuberect and ſlender; the bark duſky and hempen; the branches few, long, and weak. Leaves acute, commonly undivided, but ſome lobed, ſmooth, petioled, alternate. Berries roundiſh, duſky red, hiſpid, ſmall, ſweet, axillary, ſolitary. Native of the Eaſt Indies, Japan, and Cochinchina, where it is cultivated on a very extenſive ſcale, eſpecially on the banks of rivers, to feed ſilk-worms. Mr. Miller received the ſeeds from Bombay, which ſucceeded in the Chelſea-garden before the year 1759.

6. Morus Tartarica, or Tartarian mulberry-tree: leaves ovate-oblong, equal on both ſides, equally ſerrate. This is a ſhrub irregularly branched, with a trunk ſeldom ſo big as the human arm; bark whitiſh grey; wood very hard, yellow, ſomewhat veined; branches ſlender, wand-like, round, ſmooth; branchlets leafy, bearing fruit at the baſe. Diſtinguiſhable from the common mulberry by the ſmoothneſs of the leaves. Berries ſmall, on long peduncles, red or pale when ripe, inſipid: they are eaten freſh, in a conſerve, or dried; a wine and a ſpirit are made from them in Siberia and Ruſſia, and the leaves are uſed for feeding ſilkworms. Linnæus remarks, that it is very nearly allied to the preceding, but with longer peduncles and petioles, and the ſerratures of the leaves more diſtinct.

7. Morus latifolia, or broad-leaved Bourbon mulberry-tree: leaves broad-heart-ſhaped, pointed, undivided, coarſely ſerrated; rough above, veiny beneath. Poiret in Lamarck deſcribes the leaves as three inches broad, three and a half or four long; their under ſide remarkably reticulated, and marked with as many little pores, or depreſſions, as there are rough points on the upper ſurface. Native of the Iſle of Bourbon.

8. Morus auſtralis, or ſouthern mulberry-tree: leaves oval, long-pointed, naked, roughiſh, ſerrated, on long footſtalks; fruit ſhort, with long permanent ſtyles. Cultivated in the Iſle of Bourbon; and is probably a variety of M. Indica.

9. Morus Mauritiana, or laurel-leaved mulberry-tree: leaves elliptic-oblong, entire, rough on both ſides. This is a large and ſtrong tree. The branches are rough with ſmall irregular tubercles; leaves numerous, ſcattered, three or four inches in length, and one or one and a half in breadth, elliptic-oblong, more or leſs obtuſe, perfectly entire, rough with minute points on both ſides, reticulated with innumerable veins. Fruit green, ſweet with ſome acidity, two inches long. The French call this tree *la rappe*, or the raſp-tree, of Madagaſcar, and the leaves ſeem calculated to ſerve as a fine file, or raſp, like ſome of the fig kind. Native of Madagaſcar and the Mauritius.

10. Morus tinctoria, dyer's mulberry-tree, or fuſtic-wood: leaves oblong, pointed, finely ſerrated, rough; heart-ſhaped and unequal at the baſe. Native of Jamaica and other Weſt-India iſlands, but particularly abundant about Campeachy on the main land, from whence the wood is exported, in great quantities, as an article of trade, and is well known, by the name of fuſtic, as a yellow dye. Sloane deſcribes the tree as having a large and ſtraight trunk, ſixty feet or more in height, with long and large roots, whoſe bark is very yellow; bark of the trunk light brown, with yellow clefts; wood very firm and ſolid, of a very fine yellow. Branches ſpreading. Leaves alternate, on ſhortiſh ſtalks, rough, dark green, pointed, larger towards the footſtalk; Browne deſcribes them as unequal at the baſe; and Piſo, like Marcgrave, ſays they are finely ſerrated. Sloane deſcribes the ſpikes as whitiſh and ſhort, abundant at the ends of the branches; and the fruit as large as a nutmeg, round, formed like other mulberries; but greeniſh both within and without, with brown ſeeds. When ripe it is pleaſant, though luſciouſly ſweet. Miller has borrowed much from Sloane's account. He raiſed ſeveral plants from ſeed in the ſtove at Chelſea, but they appear not to have ſurvived long, being very tender, though of quick growth. It is to be regretted that there is no good figure, nor ſcientific deſcription, of this valuable tree.

β. M. Xanthoxylon, ſpinous mulberry-tree, or baſtard fuſtic: leaves ovate-oblong, pointed, ſerrated, nearly ſmooth; ſpines axillary. Native of the Weſt Indies: Miller had it from Jamaica and the Bahama Iſlands; Jacquin obſerved it in the vaſt woods near Carthagena. The former induced Linnæus to diſtinguiſh this from his M. tinctoria, though the ſpecimen in his herbarium is what he originally deſcribed for that ſpecies, and ſubſequently marked *xanthoxylon*. The leaves of this are ſmooth beneath, ſlightly rough to the touch on the upper ſide; their form ovate-oblong, pointed, unequal at the baſe; the margin rather ſtrongly ſerrated. Spines axillary, ſolitary, ſcarcely the length of the footſtalks, which is about half an inch. Miller ſays there are two ſpines to each leaf, which on the older branches extend to the length of two inches. He obſerves that this tree does not grow to ſo great a ſize as the laſt. The wood is ſold for the ſame uſe, but Linnæus mentions that its quality is inferior to that of the real M. tinctoria. Theſe two plants are well worthy the notice of ſome Weſt-Indian botaniſt.

Propagation and Culture. The white mulberry may be propagated either from ſeeds or layers, as will be directed preſently for the black mulberry, and is equally hardy; but the moſt expeditious method of raiſing this tree in quantity is from the ſeeds, which may be procured in plenty from the ſouth of France or Italy. The beſt way to ſow them in England is to prepare a fine warm border of rich mellow earth; or, if that is not eaſily to be had, to make a moderate hot-bed, arch it over with hoops, and cover it with mats. Sow the ſeeds towards the end of March in drills, covering them with light earth a quarter of an inch deep: in very dry weather water the bed gently and frequently; in the heat of the day ſhade it with mats, and cover it when the nights are cold. In five or ſix weeks the plants will come up; and, being tender when they firſt appear, muſt be guarded againſt froſty mornings, which often happen in May. During ſummer keep them clean from weeds, cover them from the extreme heat of the ſun, and continue to water them in dry weather. In autumn cover them again, when the firſt froſts come, and continue to protect them through the firſt winter. The following March tranſplant them into the nurſery, there to remain two or three years, and then to be removed where they are to continue; or, if not very ſtrong, they had better remain in the ſeed-bed two years before they are planted out in the nurſery, in rows at two feet and a half diſtance, and one foot and a half aſunder in the rows, there to continue till they are ſufficiently ſtrong to be planted out finally. The trees which are deſigned to feed ſilk-worms, ſhould never be ſuffered to grow tall, but rather kept in a ſort of hedge; and, inſtead of pulling off the leaves ſingly, they ſhould be ſheared off together with their young branches, which is much ſooner done, and is not ſo injurious to the tree.

The common, or black mulberry, has generally male flowers or catkins on the ſame tree with the fruit; but it often happens, that ſome of the trees which are raiſed from ſeeds, have male flowers only, and produce no fruit; ſo that thoſe who plant theſe trees for their fruit, ſhould never make choice of ſuch as have been propagated by ſeeds, unleſs they have ſeen them produce fruit in the nurſery. It is alſo the ſureſt way to mark ſuch trees as are fruitful in the nurſery, at the time when the fruit is upon them, becauſe thoſe trees which are propagated by layers are ſometimes of the male ſort; nor ſhould the ſhoots which come out near the roots of old trees be ever laid down, for theſe rarely produce fruit until they have been planted many years, although the trees from which theſe were produced might be very fruitful. Some trees which produced only catkins for many years after they were planted, afterwards have become fruitful; the ſame thing has been obſerved in walnut-trees, and alſo in the lentiſk and turpentine trees.

The old mulberry-trees are not only more fruitful than the young, but their fruit is much larger and better flavoured; ſo that, where there are any of theſe old trees, it is the beſt way to propagate from them, and to make choice of thoſe branches which are moſt fruitful. The uſual method of propagating theſe trees, is by laying down their branches, which will take root in one year, and are then ſeparated from the old trees; but, as the moſt fruitful branches are often ſo far from the ground as not to be layed, unleſs by raiſing boxes or baſkets of earth upon ſupports for this purpoſe, the better way is to propagate them by cuttings, which, if rightly choſen and ſkilfully managed, will take root very well; and in this method there will be no difficulty in having them from trees at a diſtance, and from the moſt fruitful branches. Theſe cuttings ſhould be the ſhoots of the former year, with one joint of the two-years wood to their bottom: the cuttings ſhould not be ſhortened, but planted their full length, leaving two or three buds above ground. The beſt ſeaſon for planting them is in March, after the danger of hard froſt is over; they ſhould be planted in light rich earth, preſſing the ground pretty cloſe about them; and, if they are covered with glaſſes, it will forward their putting out roots; but, where there is not ſuch conveniency, the ground about them ſhould be covered with moſs, to prevent its drying; and, where this is carefully done, the cuttings will require but little water, and will ſucceed much better than much wet. If the cuttings ſucceed well and make good ſhoots, they may be tranſplanted the following ſpring into a nurſery, where they ſhould be regularly trained to ſtems, by fixing down ſtakes by each, to which the principal ſhoots ſhould be faſtened; and moſt of the lateral branches ſhould be cloſely pruned off, leaving only two or three of the weakeſt to detain the ſap, for the augmentation of the ſtem; for, when they are quite diveſted of their ſide-ſhoots, the ſap is mounted to the top, ſo that the heads of the trees grow too faſt for the ſtems, and become too weighty for their ſupport. In about four years growth in the nurſery, they will be fit to tranſplant where they are to remain; for theſe trees are tranſplanted with greater ſafety while young, than when they are of a larger ſize.

This tree delights in rich light earth, and where there is a depth of ſoil, as in moſt of the old kitchen-gardens about London; in ſome of which are trees of a very great age, which are healthy and fruitful, and their fruit is larger and better-flavoured than thoſe of younger trees. In a very ſtiff ſoil, or on ſhallow ground, whether of clay, chalk, or gravel, the trunk and branches are commonly covered with moſs, and the little fruit produced is ſmall, ill-taſted, and ripens late. If this tree be planted in a ſituation where it is defended from the ſtrong ſouth and north-weſt winds, it will preſerve the fruit from being blown off; but this ſhelter, whether it be trees or buildings, ſhould be at ſuch a diſtance as not to keep off the ſun; for, where the fruit has not the benefit of his rays to diſſipate the morning-dews early, it will turn mouldy and rot upon the trees. There is never any occaſion for pruning theſe trees, further than to cut off any of the branches which may go acroſs others, ſo as to rub and wound their bark, by their motion occaſioned by the wind; for their ſhoots ſhould never be ſhortened, becauſe the fruit is produced on the young wood.

For propagating the mulberry by *layers*, a number of trees muſt be planted for ſtools two yards aſunder. A few ſtools will ſoon produce many layers, for they throw out plenty of young branches when the head is taken off. When the ſtools have ſhot forth young wood fit for laying, in the beginning of winter let the earth be excavated round each ſtool, and let the preceding-ſummer ſhoots be ſlit at a joint and laid therein, fixing them down with a peg, filling the interſtices with fine mould, levelling the ground, and cutting the young twigs to one eye above the ſurface. In the autumn following the layers will all probably have taken good root, and have made conſiderable ſhoot in the ſtem, ſo that they will be ready for the nurſery-ground, in which they are to be managed in the ſame way as the ſeedlings. The ſecond year after, the ſtools will have a freſh crop of young wood for laying.

Cuttings may be planted not only in March, but alſo in October. Theſe ſhould be ſtrong ſhoots of the laſt year's wood; and, if a tree does not make ſuch ſhoots, it muſt be headed the year before for this purpoſe. The ſhoots ſhould be a foot and a half long, and muſt be planted a foot deep, in a ſhady well-ſheltered place; and in a moiſt ſoil, well worked and fine. Theſe trees may likewiſe be increaſed by cuttings planted at the end of June, or the beginning of July, in pots plunged up to their rims in the ſtove, where, if water and ſhade be conſtantly afforded them, they will ſtrike root and become good plants.

If an old mulberry-tree becomes a bad bearer, or caſts the fruit before it is ripe; cut a trench two feet deep round the tree, and about four feet from the trunk; fill it with freſh mould, enriched with cow-dung; and, as the large roots may be raiſed without inconvenience, *let the compoſt be put under them*, ſo as to make the bed, over which the tree ſtands, as rich as poſſible. At the ſame time, let the old wood be cut from the head of the tree, that the young wood may have ſpace to grow in. Theſe operations being judiciouſly conducted, you will, in a few years, have an old tree converted into a young one. Obſerve alſo, that, if you expect plenty of fruit, the ground muſt not be cropped near the tree, for the feeding-fibres of the roots will be cut off by the ſpade when the fruit requires the greateſt nouriſhment. The mulberry is remarkable for putting out its leaves late; ſo that, when they appear, the gardener may take it for granted that all danger from froſt is over. This is a remark of Pliny's: *Cum germinare videris morum, injuriam poſtea frigoris timere nolito.*

The other ſpecies muſt be conſidered chiefly as ſtove-plants.

MO'RUS NORVEG'ICA. See RUBUS CHAMÆMORUS.

MORZEGOR'SKOI, a town of Ruſſia, in the government of Archangel, on the weſt ſide of the Dwina: one hundred miles ſouth-eaſt of Archangel.

MOR'ZOVETZ, an iſland of Ruſſia, in the ſtraits between the Frozen and White Sea. Lat. 66. 40. N. lon. 41. 38. E.

MO'SA, in ancient geography, a river of Belgic Gaul falling into the German Ocean; and now called the *Maeſe*, or *Meuſe*. The bridge over it, *Moſæ Pons*, is now ſuppoſed to be MAESTRICHT.

MOSABAD', a town of Hindooſtan, in Agimere: thirteen miles ſouth-ſouth-eaſt of Roopnagur.

MO'SACH, a river of Bavaria, which runs into the Iſer two miles eaſt of Freyſingen.

MOSA'IC, or MOSAICAL, *adj.* [from *Moſes.*] Denoting the writings or law of Moſes.—For his acquaintance with the *Moſaical* learning, as it is more credible in itſelf, ſo I have alſo better proof. *More's Conj. Cabb.*—The *Moſaick* ſacrifices were types (and by both the diſpenſations of the Law and Goſpel declared to be ſo) of the great vicarious ſacrifice of the croſs. *Warburton's Div. Leg.*

MOSA'IC, *ſ.* [*moſaique*, Fr. ſuppoſed to be corrupted from *muſæus*, Lat.] A kind of painting in ſmall pebbles, cockles, and ſhells of ſundry colours; and of late days likewiſe with pieces of glaſs figured at pleaſure; an ornament in truth, of much beauty, and long life, but of moſt uſe in pavements and floorings. *Wotton's Architecture.*

MOSA'IC, or MOSAICAL, *adj.* Belonging to the above kind of work.—The trees were to them [the flowers] a pavilion, and they to the trees a *moſaical* floor. *Sidney's Arcadia.*—The moſt remarkable remnant of it is a very beautiful *moſaick* pavement, the fineſt I have ever ſeen in marble; the parts are ſo well joined together, that the whole piece looks like a continued picture. *Addiſon on Italy.*

Each beauteous flower,
Iris all hues, roſes, and jeſſamin,
Rear'd high their flouriſh'd heads between, and wrought
Moſaick. *Milton.*

Critics are divided as to the origin and reaſon of the name: ſome derive it from *moſaicum*, a corruption of *muſaicum*, as that is of *muſivum*, as it was called among the Romans. Scaliger derives it from the Greek μȣσα, and imagines the name was given to this ſort of work, as being very fine and ingenious. Nebricenſis is of opinion it was ſo called, becauſe *ex illis picturis ornabantur muſea.*

Moſaic ſeems to have taken its origin from paving: the fine effect and uſe of pavements compoſed of pieces of marble of different colours, ſo well joined together, as that, when dried, they might be poliſhed, and the whole make a very beautiful and ſolid body, which, continually trodden upon, and waſhed with water, was not at all damaged, gave the painter the hint, who ſoon carried the art to a much greater perfection, ſo as to repreſent foliages, maſques, and other groteſque pieces of various colours, on a ground of black or white marble. In fine, obſerving the good effect which this kind of work had in pavements, and finding that it reſiſted water, they proceeded to line walls with it, and to take various figures by it, for the ornament of their temples and public buildings. But, nature not producing variety of colours enough for them in marbles to paint all kinds of objects, they bethought of counterfeiting them with glaſs and metal colours; which ſucceeded ſo well, that, having given all manner of tints to an infinite number of little pieces of theſe two matters, to counterfeit ſtones of various colours, in order to get more colours, the workmen arranged them with ſo much art, that their moſaic ſeemed almoſt to vie with painting; this way of repreſenting objects having this advantage, that it reſiſts the injuries of the air as well as marble itſelf; and even grows more beautiful with time, which effaces all other kinds of painting.

The ſucceſsful employment of moſaic for interior decoration might have led to the invention of painting on glaſs. Moſaic, it is well-known, is compoſed of little pieces of coloured or enamelled glaſs: in like manner, the oldeſt painted windows are nothing more than ſmall portions of coloured glaſs ſoldered one to the other in leaden moulded grooves, by which they are held together ſo as to be placed in a ſaſh of iron, or of any other material; making a kind of picture, like inlaid ſtones or glaſs-ware united by maſtic or any other cement, and producing the repreſentation which is called moſaic. We are inclined alſo to believe that, in the infancy of the art of painting on glaſs, the artiſt began with tracing figures in diſtemper, or with colours diluted in yolk of egg or varniſh, on clear glaſs, before the idea was formed of colouring glaſs in the fire in order to render the picture more perfect and more durable.

Previouſly to having reached the perfection of moſaic, artiſts commenced by inſerting in walls and pavements flint, pieces of coloured glaſs, enamel, or marble: by degrees, they reduced theſe into ſmall diviſions; and this art, proſecuted with care, obtained ſo much favour among the Greeks, that the moſt celebrated artiſts were employed on it, and produced in it moſt magnificent pictures, of which hiſtory makes mention. Pliny ſpeaks of one Soſus who worked at Pergamus, and who excelled in the art of fabricating moſaic. In 1763 were diſcovered at Pompeii ſeveral moſaics from the hand of Dioſcorides, if we may judge by the inſcriptions which they exhibit. The French alſo worked in moſaic; but, as they had no knowledge of the rules of art, they produced only rude figures. The practice of moſaic continued in ſpite of the ignorance which prevailed in the arts of deſign; and it was cultivated at Rome about the fourteenth century, and at Florence a century later. A preſident of the parliament of Paris, named David, being in that city, cauſed to be executed under his own eye, and at his expenſe, a moſaic, bearing the date of 1500, which repreſents the Virgin ſitting with the infant Jeſus on her knees, accompanied by two angels in the act of adoration. Towards the end of the laſt century, the taſte for moſaic came again into faſhion at Rome, and the latter popes incurred conſiderable expenſe to ſupport and encourage able workers in moſaic, whoſe talents they were jealous of excluſively poſſeſſing. They cauſed to be thus copied, of the ſame ſize as the originals, the moſt beautiful pictures which Raphael had painted for the decoration of the Vatican; and theſe fine monuments, capable of reſiſting the ravages of time, embelliſh the church of St. Peter. At laſt the French government, wiſhing to rival Italy in this ſpecies of the pictorial art, eſtabliſhed at Paris (ſome years ago) a ſchool of moſaic for the deaf and dumb. The direction of this little philanthropic academy is confided to M. Belloni; and already theſe unfortunate children, who are inſtructed with equal zeal and care, execute moſaics which may be put in competition with the beſt of thoſe of Italy. *Lenoir's Hiſt. of the Arts in France*, 1811.

We ſhall now detail the proceſſes for the different kinds of moſaic work.

1. *Glaſs.*—This kind they begin with little pieces of glaſs, which they provide of as many different colours as poſſible. To this end, the glaſſman's furnaces being diſpoſed, and their pots or crucibles full of the matter of which glaſs is made, or rather of glaſs already made, they put what metalline colour or dye they think fit in each crucible, always beginning with the weakeſt, and augmenting the ſtrength of the colours from crucible to crucible, till they come to the deepeſt dye, as in mixing of colours on a pallet to paint in oil. When the glaſs has had ſufficient coction, and all the colours are in their perfection, they take out the glaſs hot as it is, laying it on a ſmooth marble, flatting it down with another marble, and then cut it into ſlices of equal bigneſs, and about the thickneſs of an inch and a half. They then, with an inſtrument which the Italians call ***bocca dicane***, make ſome pieces ſquare, and others of different figures and ſizes, as occaſion requires. If it be deſired to have gold, either in the ground of the painting or in the ornaments, they

take ſome of the pieces of glaſs, which they moiſten on one ſide with gum-water, and afterwards lay them over with gold-leaf: they put theſe pieces on a fire-ſhovel, which they place in the mouth of the furnace, having firſt covered them with another hollow piece of glaſs: here they continue till they become red-hot; after which the ſhovel is drawn out all at once, and the gold becomes ſo firmly bound to the glaſs, that it will never afterwards leave it.

To apply theſe ſeveral pieces, and out of them to form a picture, they firſt make a cartoon, or deſign; this they transfer on the ground or plaſter, by chalking as in painting in freſco. As this plaſter is to be laid thick on the wall, it will continue freſh and ſoft a conſiderable time, ſo that there may be enough prepared at once to ſerve three or four days. This plaſter is compoſed of lime made of hard ſtone, with brickduſt ground very fine, gum tragacanth, and whites of eggs: when it is thus prepared, and laid on the wall, and the deſign finiſhed of what is to be repreſented; with plyers they take out the little pieces of glaſs, ranging them one after another, and ſtill keeping ſtrictly to the light, ſhadow, and different tints and colours repreſented in the deſign; preſſing or flattening them down with a ruler, which ſerves both to ſink them within the ground, and to render the ſurface even. Thus, in a long time, and with an infinite deal of trouble, they finiſh the work; which is ſtill the more beautiful, as the pieces of glaſs are more uniform, and ranged at more equal heights. Some of theſe are executed with ſo much juſtneſs, that they appear as ſmooth as a table of marble, and as finiſhed and maſterly as a painting in freſco; with this advantage, that they have a fine luſtre, and will hold almoſt for ever. The fineſt works of this kind, that have deſcended to us, and thoſe from which the moderns have retrieved the art, almoſt loſt, are thoſe of the church of St. Agnes, formerly the Temple of Bacchus, at Rome; beſides ſome at Piſa, Florence, and other cities of Italy. The moſt eſteemed among the works of the moderns are thoſe of Joſeph Pine, and the chevalier Lanfranc, in the church of St. Peter at Rome. There are ſome very good ones likewiſe at Venice.

During the preſent year (1817), without the gate of St. Sebaſtian, near the Via Ardeatina, at Rome, in a farm belonging to the ducheſs of Chablais, called Tor Marancio, have been found a conſiderable number of ancient moſaic pavements, antique paintings, and fragments of ſculpture. Inſcriptions on the leaden pipes which conveyed the water thither, ſeem to indicate that this was the villa of the Munatia family. The pavements repreſent nothing but trelliſes or compartments, only one of which diſplays different colours; the others generally are white or black. One of theſe pavements is very remarkable: upon it are ſeen the ſhip of Ulyſſes and the Syrens, one of whom, with birds' feet, is playing on a lyre. In another part of it is repreſented Scylla, half-woman and half-fiſh, enfolding two men with her two tails, and ſtriking the water with a ſhip's rudder.

While this article was in the preſs, (Aug. 1817.) a beautiful piece of ancient moſaic, about twelve feet ſquare, has been dug up in a field contiguous to Farnham in Surrey.

2. *Marble.*—This kind is uſed in large works, as in pavements of churches, baſilics, and palaces; and in the incruſtation and veneering the walls of the ſame edifices.

The ground is ordinarily a maſs of marble, either white or black. On this ground the deſign is cut with a chiſſel, having been firſt chalked. When it is dug of a ſufficient depth, i. e. an inch or more, it is filled up with marble of a proper colour, firſt contoured, or faſhioned to the deſign and reduced to the thickneſs of the cavities, with various inſtruments. To make the pieces thus inſerted into the cavities hold, whoſe ſeveral colours are to imitate thoſe of the deſign, they uſe a ſtucco, compoſed of lime and marble duſt; or a maſtic, which each workman prepares differently; after which, the work is half poliſhed with a ſoft kind of ſtone. The figures thus marked out, the painter or ſculptor himſelf draws with a pencil the colours of the figures not determined by the ground, and in the ſame manner makes ſtrokes or hatchings, in the places where ſhadows are to be; and when he has engraved, with a chiſſel, all the ſtrokes thus drawn, he fills them up with a black maſtic, compoſed chiefly of Burgundy pitch, poured on hot; taking off, afterwards, what is ſuperfluous, with a piece of ſoft ſtone or brick, which, with water and beaten cement, takes away the maſtic, poliſhes the marble, and renders the whole ſo even, that one would imagine it only conſiſted of a ſingle piece; it is this kind of moſaic we ſee in the pompous church of the invalids at Paris, and the fine chapel of Verſailles; and with which ſome entire apartments of that palace are incruſted.

3. *Precious Stones.*—For this kind there are required other and more delicate inſtruments than thoſe uſed in marble; as wheels, drills, tin plates, &c. uſed by lapidaries and ſeal-engravers. As none but the richeſt marbles and ſtones enter this work, to make them go the farther, they are ſawn into the thinneſt leaves imaginable, ſcarcely exceeding half a line in thickneſs. The block to be ſawed is faſtened firmly with cords on the bench, only raiſed a little on a piece of wood one or two inches high. Two iron pins, which are on one ſide the block, and which ſerve to faſten it, ſerve alſo to direct the ſaw. The pieces to be ſawed are put into a vice contrived for the purpoſe: in which ſtate, with a kind of ſaw or bow made of a fine braſs wire bent on a piece of ſpringy wood, together with emery moiſtened with water, the leaf is gradually faſhioned by following the ſtrokes of the deſign made on the paper, and then glued to the piece. When there are pieces enough faſhioned to form an entire flower, or ſome other part of the deſign, they are applied. The ground, that ſuſtains this moſaic, is uſually of ſtone. The matter, with which the ſtones are joined together, is a ſtucco, or maſtic, laid very thin on the leaves as they are faſhioned; and the leaves in this ſtate are applied with plyers. If any contour, or ſide of a leaf, be not either rounded enough, or ſquared enough, to fit the place where it is to be uſed; when it is too large, it is brought down with a braſs file or raſp; and, when too ſmall, is managed with a drill, and other lapidary inſtruments.

4. *Gypſum.*—Of this ſtone, calcined in a kiln, beaten in a mortar, and paſſed through a ſieve, they make a kind of artificial marbles, imitating precious ſtones; and of theſe they compoſe a kind of moſaic work which comes little ſhort either of the durableneſs or vivacity of the natural ſtones; and which has this advantage, that it admits of continued pieces, or paintings, of entire compartments, without any viſible joining.

Some make the ground of plaſter of Paris, others of free-ſtone. If the former, it is ſpread in a wooden frame, of the length and breadth of the intended work, and about an inch and a half thick. This frame is ſo contrived, as that, the tenons being only joined to the mortiſes by ſingle pins, they may be taken aſunder, and the frame be diſmounted when the plaſter is dry; this frame they cover on one ſide with a ſtrong linen cloth, nailed all round; and being placed horizontally, with the linen at bottom, it is filled with plaſter, paſſed through a wide ſieve: the plaſter being half dry, the frame is ſet perpendicular, and left till it is quite dry, and then taken out, by diſmounting the frame. In this moſaic, the ground is the moſt important part. To prepare the ſifted gypſum to be applied on this ground, they diſſolve and boil it in the beſt Engliſh glue; and, after mixing with it the colour it is to bear, the whole is worked up together into the ordinary conſiſtence of plaſter; and then taken and ſpread on the ground, five or ſix inches thick. It muſt be obſerved, that, if the work be ſuch as that mouldings are required, they are formed with gouges, and other inſtruments. It is on this plaſter, thus coloured like marble or precious ſtones, and which is to ſerve as a ground to a work either of lapis lazuli, agate, alabaſter, or the like, that the deſign to be repreſented is drawn; having been firſt pounced, or chalked. To hollow or impreſs the deſign, they uſe the ſame inſtruments with the ſculptors; the ground, whereon they are to work, not being much leſs hard than marble itſelf. The cavities, thus made in the ground, are filled up with the ſame gypſum boiled in glue, only differently coloured; and thus are the ſeveral colours of the original repreſented. To have the neceſſary colours and tints at hand, they temper quantities of the gypſum with the ſeveral colours, in little pots. When the deſign is thus filled, and rendered viſible, by half-poliſhing it with brick or ſoft ſtone, they go over it again, cutting ſuch places as are either to be weaker, or more ſtrongly ſhadowed, and filling them with gypſum; which is repeated till all the colours, added one after another, repreſent the original to the life. The work, being finiſhed, is ſcoured with ſoft ſtone, ſand, and water; then with pumice-ſtone; and, laſtly, poliſhed with a wooden rubber, and fine emery; then a luſtre is given it, by ſmearing it over with oil, and rubbing it a long time with the palm of the hand; which gives it a gloſs nothing inferior to that of natural marble.

5. *Feathers.*—In Clavigero's Hiſtory of Mexico is deſcribed a curious kind of moſaic work, made by the ancient Mexicans of the moſt delicate and beautiful feathers of birds. See the article Mexico, vol. xv. p. 299.

6. *Wood.*—As to moſaic work of wood, more properly called *marquetry*, or *inlaid work*, the ancients were well acquainted with it, and uſed it for the adorning of their beds, tables, and other movables; employing, for this purpoſe, ivory, beſides the richeſt woods. See Marquetry, vol. xiv. p. 403.

There are, beſides theſe, two other branches of moſaic work; the one called *damaſkeening*, or *damaſk-work*, conſiſting in an aſſemblage of gold or ſilver threads, of which are ſometimes formed flat works, and ſometimes baſſo-relievos. The other is called *ſhell-work*; conſiſting of ſhells, artificial congelations, petrifactions, &c. uſed in grottos.

MOSA'LA, a town of Sweden, in the Lapmark of Tornea: eighteen miles north-eaſt of Kimi.

MOSAL'SK, a town of Ruſſia, in the government of Kaluga: forty-eight miles weſt of Kaluga. Lat. 54. 20. N. lon. 34. 34. E.

MOSAMBI'QUE. See Mozambique.

MOS'BACH, a town of Bavaria, in the Upper Palatinate: twelve miles north-north-eaſt of Nabburg, and twenty eaſt of Amberg.

MOS'BACH, a town of the grand duchy of Baden. It contains three churches, and ſome manufactures of cloth, ſalt, &c. eighteen miles eaſt of Heidelberg, and twenty-eight eaſt of Spire.

MOS'BACH, a town of the duchy of Wurzburg: five miles north of Schweinfurt.

MOSBRUN'N, a town of Auſtria: eight miles ſouth of Vienna.

MOS'BURG, a town of the duchy of Carinthia: ſix miles north-weſt of Clagenfurt.

MOS'BURG, or Mospurg, a town of Bavaria: twenty-four miles north-eaſt of Munich, and nine ſouth-weſt of Landſhut. Lat. 48. 23. N. lon. 11. 55. E.

MOS'CHA, now *Maſcat*, a port of Arabia, on the Red Sea. See vol. xiv. p. 863.

MOSCHA'RIA, *ſ.* in botany. See Teucrium iva.

MOS'CHATEL, Moschatel'la, or Moschatellina, *ſ.* in botany. See Adoxa.

MOS'CHEL, or O'ber Mos'chel, late a town of France, in the department of Mont Tonnerre: twelve miles north-eaſt of Lautereck, thirty-two north-north-eaſt of Deux Ponts. Lat. 49. 46. N. lon. 7. 43. E.

MOSCHEL'APHUS, *ſ.* in natural hiſtory, a name given by ſome writers to a creature of a mixed nature, produced by the copulation of a ſtag with a cow. Wagner tells us, that theſe creatures are ſometimes ſeen in the mountainous parts of Swiſſerland; as are alſo the hippotauri, generated between a bull and a mare; but neither of theſe ever propagate their ſpecies.

MOSCHEU'TOS, *ſ.* in botany. See Hibiscus.

MOS'CHI, in ancient geography, a people who inhabited a territory north of the Euphrates, between that river and the Colchide, and the coaſts ſouth-eaſt of the Euxine Sea, according to Strabo. Pliny ſays that Phryxus built among the Moſchi the rich temple of Leucothæa, and eſtabliſhed there an oracle. This temple was pillaged by the ſon of Mithridates. This people alſo occupied a part of Mount Caucaſus, where the river Phaſis took its riſe.

MOS'CHION. Several ancient phyſicians of this name are mentioned by Galen, Pliny, Soranus, and Plutarch; ſome of whom were authors. But the only one, whoſe writings have been preſerved, was a phyſician of the methodic ſect, of an uncertain age, but who probably lived about the eighth century. His work is extant both in Greek and Latin; but it is ſuppoſed that the Greek is a tranſlation from the Latin. It was firſt printed at Baſle in 1538, in the Libri Gyneciorum of Spachius, with the title of "De Mulieribus affectibus Liber unus;" and has been ſubſequently republiſhed by Gaſp. Wolff, with Geſner's Scholia, 1538; and by J. O. Dewes, Vienna, 1793, with notes. The work is of little value, ſhowing a very imperfect acquaintance with the ſubject of which it treats. *Haller.*

MOS'CHLITZ, a town of Saxony, in the county of Reuſſen: two miles ſouth-weſt of Schleitz.

MOS'CHENITZ, a town of Iſtria: three miles ſouth of Laurana.

MOS'CHO, or Mosho, a town of Africa, in the kingdom of Dongola, on the left bank of the Nile: 210 miles ſouth-ſouth-weſt of Syene, and one hundred north-weſt of Dongola. Lat. 20. 26. N. lon. 30. 52. E.

MOS'CHONT, a fortreſs of Aſiatic Turkey, in Aladulia: twenty-two miles ſouth of Arzingan.

MOSCHOP'ULUS (Emanuel), a Greek grammarian who flouriſhed in the fourteenth century, was a native of the iſland of Crete, and wrote a treatiſe on grammar, firſt printed in 1545.—His nephew, Emanuel, was a conſiderable mathematician and antiquary. He compoſed a Greek Lexicon in 1545.

MOS'CHUS, a Greek paſtoral poet, was a native of Syracuſe. The time when he flouriſhed is very differently ſtated; ſome making him a pupil of Bion, who is ſuppoſed to have lived under Ptolemy-Philadelphus, while Suidas ſpeaks of him as the friend of the grammarian Ariſtarchus, who flouriſhed under Ptolemy-Philometor about 160 years before Chriſt. The tenderneſs with which he ſpeaks of Bion in his beautiful elegy on that poet ſeems, however, to render probable his perſonal acquaintance with him. Moſchus is a poet of great elegance of ſtyle, and more delicacy and ingenuity in his conceptions than uſual among the bucolic poets. His "Runaway Love," in particular, deſerves a high rank among the ſentimental pieces. A few Idyls are the whole of his remains, and of ſome of theſe the real author is uncertain. They are generally printed in conjunction with thoſe of Bion. *Gen. Biog.*

MOS'CHUS, *ſ.* in zoology, the Musk; a genus of the claſs mammalia, order pecora. Generic characters—They have no horns; there are eight ſmall cutting teeth in the lower jaw; in the upper, no cutting or fore teeth; but two long tuſks, one on each ſide, projecting out of the mouth. An odoriferous ſubſtance produced by ſome of theſe animals, and which has long been uſed in perfumery and medicine, is what has chiefly recommended them to notice. That ſubſtance was long known and valued in Europe before any authentic information could be obtained concerning the circumſtances, form, and manners, of the animals that afforded it. It ſeems to have been unknown to the ancients, but is mentioned in the eighth century by the Arabians, who uſed the drug in their medical practice. At that period, and long after, the animal was by ſome conſidered as a kind of goat, by others as a ſpecies of deer, or antelope, and of courſe was ſuppoſed to be a horned animal. About the cloſe of the ſeventeenth century,

tury, a pretty accurate deſcription of its figure and habits was given. There are ſeven ſpecies.

1. Moſchus moſchiferus, the Thibet muſk: a follicle near the navel; tail ſhort. The ſize and general appearance of this animal reſemble, in ſome degree, thoſe of the ſmall roebuck. It meaſures about forty inches in length, and twenty-ſeven in height from the top of the ſhoulders to the bottom of the fore-feet, thirty-three inches from the top of the haunches to the bottom of the hind-feet. The upper jaw is conſiderably longer than the lower, and is furniſhed on each ſide with a curved tuſk about two inches long, and conſequently expoſed to view when the mouth is cloſed. Theſe tuſks are thought to reſemble a pair of crooked knives: their ſubſtance is a kind of ivory. The ears are long and narrow, of a pale yellowiſh caſt in the inſide, and deep brown on the outſide. The general colour of the whole body is a kind of deep iron-grey; the tips of the hairs being of a ferruginous caſt, the remainder is blackiſh, growing much paler, or whitiſh, towards the roots; each hair is ſomewhat waved or undulated throughout its whole length, and is of a ſtrong and elaſtic nature, growing rather upright on the animal, and very thick. See the annexed Plate, fig. 1. The female is ſmaller than the male, and wants the tuſks.

Theſe animals inhabit the Alpine Mountains of Aſia, Tonquin, and Siberia: they are alſo found about the Lake Baikal, and near the rivers Jeniſea and Argun. Their favourite haunts are the tops of mountains covered with pines, where they delight to wander in places the moſt difficult of acceſs. In their habits and manners they reſemble the chamois, and other mountain goats, ſpringing with great celerity, and, when purſued, taking refuge among the higheſt and moſt inacceſſible ſummits. They are hunted for the ſake of their perfume, which is contained in a receptacle about the ſize of a ſmall egg, hanging from the middle of the abdomen, and is peculiar to the male animal. This receptacle is found filled with a ſoft unctuous browniſh ſubſtance, of the moſt powerful and penetrating ſmell, which is the perfume, in its natural ſtate, ſo well known. As ſoon as the animal is ſlain, the hunters cut off the receptacle, or muſk-bag, and tie it up ready for ſale. The perfume is found in animals at all ſeaſons of the year, but not in thoſe that are young: the quantity is about a quarter of an ounce. The celebrated traveller, Tavernier, ſays he purchaſed, in one of his eaſtern journeys, no leſs than 7673 muſk-bags. The penetrating nature of the muſk-perfume is generally known: its colour is brown, with an unctuous and granulated appearance. At a diſtance, the ſcent is agreeable; but when brought too cloſe, and in large quantities, it produces alarming effects: it has been known to force the blood from the noſe, eyes, and ears, of thoſe who have imprudently or accidentally inhaled its vapours.

2. Moſchus Indicus, the Indian muſk: body tawny above, and whitiſh beneath, with ſpurious hoofs, and a ſomewhat-lengthened tail. This is called the Indian muſk, as being found in the Eaſt Indies. It has been deſcribed by Briſſon, and is larger than the Thibet muſk. Its head is very like that of the horſe; the ears are erect and oblong, and the legs ſlender.

3. Moſchus pygmæus, the pigmy-muſk: body above brown, tawny, beneath white, and without ſpurious hoofs. It inhabits India and Java; is very ſmall, as its ſpecific name imports, not being more than nine or ten inches long from the noſe to the tail. It is a moſt elegant little animal, of a bright bay colour, but beneath and on the inſides of the thighs it is white. Its ſhape, as well as its colour, is beautiful, and the legs are ſo ſlender as not to exceed the diameter of a ſwan's quill; the head, eyes, and ears, are rather large; and the aſpect is mild. The natives of Java catch great numbers in ſnares, and carry them to market in cages for ſale; and ſome years ſince they were purchaſed at as low a rate as twopence or threepence each. It obtained the name of Guinea muſk from the opinion of Briſſon and others, that it was a native of that country, which it has been ſince aſcertained is not the caſe. The legs of the pigmy-muſk have been frequently capped at the upper joint with gold or ſilver, and in that ſtate uſed as tobacco-ſtoppers. See the Plate, fig. 2.

β. There is a variety of this ſpecies thus deſcribed: Body ruſty, mixed with black; neck and throat with perpendicular ſtripes.

4. Moſchus meminna, the meminna: body above cinereous-yellow, beneath white; ſides ſpotted with white, and with ſpurious or falſe hoofs. It is a native of the Indian Iſlands, but is chiefly found in Ceylon and Java. It has been ſometimes confounded with the M. pygmæus. It is readily diſtinguiſhed by its remarkable colour and ſpots; and was raiſed into a diſtinct ſpecies by Mr. Pennant, who calls it the Indian muſk. See fig. 3.

5. Moſchus Javanicus, the Java muſk: body above ferruginous, beneath longitudinally white; tail longiſh, hairy, white beneath and at the tip. As its name imports, it is a native of Java; and about the ſize of a rabbit. The noſe and ears are naked; the neck is grey, mixed with brown hairs; beneath white, with two grey ſpots almoſt connected; under the throat there are two long divergent hairs; the crown is longitudinally blackiſh. See fig. 4.

6. Moſchus Americanus, the Braſilian muſk: body tawny-brown; mouth black; throat white. This ſpecies is found in Braſil and Guinea; is nearly as large as a roebuck, with ears four inches long; it is timid, active, and ſwift; the hair is ſoft and ſhort; the head and neck on the upper part brown, and under it is white; the hind-legs are longer than thoſe in front. It can, like a goat, ſtand with all the four legs together on the point of a rock. The animals of this ſpecies are often ſeen ſwimming in rivers, and may then be eaſily taken. The Indians hunt them, and their fleſh is eſteemed very delicate. See fig. 5.

β. A variety of this ſpecies is tawny-brown, ſpotted above with white.

7. Moſchus delicatulus, the Leverian muſk; ferruginous-brown, and ſpotted above with white. In the Leverian Muſeum it was called the "ſmall ſpotted muſk." Dr. Shaw ſays, that the animal ſo named appears to be nearly allied to one figured by Seba, who aſſures us it is a native of Surinam, and deſcribes it as of a ferruginous colour, thickly ſpotted with white, except on the head, breaſt, and belly, and that it is in all probability the ſame. In ſize it ſcarcely exceeds the pigmy-muſk, if the ſpecimen referred to be of its full growth, of which there are doubts entertained, from the fineneſs and cloſeneſs of its hair. See fig. 6.

MOSCK'KA, or Moska. See Muscka.

MOS'COS, the name of a tribe in the kingdom of New Granada, ſaid to have been ſo called by the Spaniards, who, finding them more numerous than the other tribes, transferred the appellation from the *flies*, which abound in the country. Their conquerors found them governed by two elective princes, one of whom, denominated the "Zipa," reſided at Bogota, while the "Zaqui" was eſtabliſhed at Tunja. Others more juſtly infer, that the appellation of Moſcos was a mere play of words upon the native name of *Muiſcas*. Next to the Peruvians, they were the moſt civilized people. They wore a cloſe tunic of cotton, with a ſquare cloak of the ſame fabric. On the head was a cap of the ſkins of animals, decorated with plumes of various colours; and over the forehead hung a creſcent of the gold or ſilver which abounded in their country, the points being turned upwards. Their arms were adorned with bracelets, formed of ſtone or bone; the noſe-ring was of gold; and on gala-days, the face and body were painted with *achiote*, or rocou, which yields a vermilion tint, and with the juice of the *jagua*, which produces a deep black. The women uſed a ſquare cloak, *chircate*, faſtened with a girdle; and over the ſhoulders a ſmall mantle, called *liquira*, fixed on the breaſt with a large pin of gold. The men wore their hair long, and divided in what is called the Nazarene form; while that of the women was looſe, and darkened by art; the greateſt affront being to cut off their hair. Both ſexes were handſome, and of good diſpoſitions. Their weapons were ſlings, ſwords of hard wood, and light darts. They believed in a Great Author of Nature; and adored the ſun, Zuhi, and the moon, Chia, as his repreſentatives. Their immortality was material, according to the cuſtomary opinion among ſavages; and they buried the dead with ornaments of gold, and the precious emeralds of their country. They were in conſtant warfare with the Muzos and Colinas, but were feared and reſpected by all. The Muſco language, called Chibaha, was general throughout the kingdom; but it is now adulterated, and nearly loſt, though moſt of the converted tribes of the kingdom of New Granada belong to this nation. They are generally of generous diſpoſitions, bold, faithful, and robuſt, though inclined to ebriety. *Pinkerton*, vol. iii.

The account given of theſe people by Dr. Robertſon is as follows: They ſubſiſted chiefly by agriculture. The idea of property was introduced among them, and its rights ſecured by laws, handed down by tradition, and obſerved with great care. They lived in large towns; they were decently clothed, and their houſes, compared with thoſe of ſurrounding tribes, might be termed commodious. Government had aſſumed, in this ſtate of civilization, a regular form; and a juriſdiction was eſtabliſhed, which took notice of different crimes, and puniſhed them with rigour. They were acquainted with the diſtinction of ranks, and their chief reigned with abſolute authority. He was attended by various officers and guards, carried with much pomp in a ſort of palanquin, and the road was ſwept before him and ſtrewed with flowers. For the ſupport of this expenſe, taxes were levied on the people, who regarded their prince with veneration, and ſeldom approached him but with an averted countenance. One of the chief cauſes of that obſequious ſpirit, which prevailed among the people, was the influence of ſuperſtition. The reſpect they paid to their monarchs was inſpired by religion; and the heir apparent of the kingdom was educated in the innermoſt receſs of their principal temple, under ſuch auſtere diſcipline, and with ſuch peculiar rites, as tended to fill his ſubjects with high ſentiments concerning the ſanctity of his character, and the dignity of his ſtation. This ſuperſtition, which, in the rudeſt period of ſociety, is either altogether unknown, or waſtes its force in childiſh unmeaning practices, had acquired ſuch an aſcendant over thoſe people of America who had made ſome little progreſs towards refinement, that it became the chief inſtrument of bending their minds to an untimely ſervitude, and ſubjected them, in the beginning of their political career, to a deſpotiſm hardly leſs rigorous than that which awaits nations in the laſt ſtage of their corruption and decline. The Moſcos (as well as the tribe of the Natchez) had advanced beyond the other uncultivated nations of America in their ideas of religion, as well as in their political inſtitutions. They had temples, altars, prieſts, ſacrifices, and that long train of ceremonies, which ſuperſtition introduces wherever ſhe has fully eſtabliſhed her dominion over the minds of men. But the rites of their worſhip were cruel and bloody; they offered human victims to their deities, and many of their practices reſembled the barbarous inſtitutions of the Mexicans. *Hiſt. America*, vol. ii.

MOS'COVY. See Muscovy.

MOS'COW, the capital of the province or government of Moſkovſkaia, and till the beginning of the preſent century the metropolis of all Ruſſia, is ſituated in a ſpacious plain on the banks of the river Moſkva.

The Ruſſian antiquaries differ conſiderably in their opinions concerning the firſt foundation of Moſcow; the following relation, Mr. Coxe ſays, is generally eſteemed by the beſt authors the moſt probable account. Kiof was the metropolis, when George, ſon of Vladimir Monomaka, aſcended in 1154 the Ruſſian throne. That monarch, being inſulted in a progreſs through his dominions by a rich and powerful nobleman named Stephen Kutchko, put him to death, and confiſcated his domains, which conſiſted of the lands now occupied by the city of Moſcow and the adjacent territory. Pleaſed with the ſituation of the ground lying on the conflux of the Moſkva and Neglina, he laid the foundation of a new town, which he called *Moſkva*, from the river of that name. Upon the demiſe of George, the new town was not neglected by his ſon Andrew; but it fell into ſuch decay under his immediate ſucceſſors, that when Daniel, ſon of Alexander Nevſki, received, in the diviſion of the empire, the duchy of Muſcovy as his portion, and fixed his reſidence upon the conflux of the Moſkva and Neglina, he may be ſaid to have founded the town anew. The ſpot now occupied by the Kremlin was at that time overſpread with a thick wood and a moraſs, in the midſt whereof was a ſmall iſland, containing a ſingle wooden hut. Upon this part Daniel conſtructed churches and monaſteries, and various buildings, and encloſed it with wooden fortifications: he firſt aſſumed the title of Duke of Moſcow; and was ſo attached to this ſituation, that, when in 1304 he ſucceeded his brother Andrew Alexandrovich in the great duchy of Vladimir, he did not remove his court to Vladimir, but continued his reſidence at Moſcow, which then became the capital of the Ruſſian dominions. His ſucceſſors followed his example; among whom his ſon Ivan conſiderably enlarged the new metropolis, and in 1367 his grandſon Demetrius Ivanovitch Donſki ſurrounded the Kremlin with a brick wall. Theſe new fortifications, however, were not ſtrong enough to prevent Tamerlane, in 1382, from taking the town after a ſhort ſiege. Being ſoon evacuated by that deſultory conqueror, it again came into the poſſeſſion of the Ruſſians; but was frequently invaded and occupied by the Tartars, who in the fourteenth and fifteenth centuries overran the greateſt part of Ruſſia, and who even maintained a garriſon in Moſcow until they were finally expelled by Ivan Vaſſilievitch I. To him Moſcow is indebted for its principal ſplendour, and under him it became the principal and moſt conſiderable city of the Ruſſian empire.

Moſcow continued the metropolis of Ruſſia until the beginning of the eighteenth century, when, to the great diſſatisfaction of the nobility, but with great advantage probably to the ſtate, the ſeat of empire was transferred to Peterſburgh. But, notwithſtanding the predilection which Peter conceived for Peterſburgh, in which all the ſucceeding ſovereigns excepting Peter II. have fixed their reſidence, Moſcow, according to Mr. Coxe, is ſtill the moſt populous city of the Ruſſian empire. Here the chief nobles who do not belong to the court reſide: they here ſupport a larger number of retainers; they love to gratify their taſte for a ruder and more expenſive magnificence in the ancient ſtyle of feudal grandeur; and are not, as at Peterſburgh, eclipſed by the ſuperior ſplendour of the court.

Moſcow is repreſented as the largeſt town in Europe; its circumference within the rampart, which encloſes the ſuburbs, being exactly 39 verſts, or 26 miles; but it is built in ſo ſtraggling and disjointed a manner, that its population in no degree correſponds to its extent. Some Ruſſian authors ſtate its inhabitants at 500,000 ſouls, a number evidently exaggerated. According to a computation, which Mr. Coxe ſays may be depended upon, Moſcow contains within the ramparts 250,000 ſouls, and in the adjacent villages 50,000. The ſtreets of Moſcow are in general exceedingly long and broad; ſome of them are paved; others, particularly thoſe in the ſuburbs, are formed with trunks of trees, or are boarded with planks like the floor of a room; wretched hovels are blended with large palaces; cottages of one ſtory ſtand next to the moſt ſuperb and ſtately manſions. Many brick ſtructures are covered with wooden tops; ſome of the wooden houſes are painted; others have iron doors and roofs.

Numerous churches preſent themſelves in every quarter, built in a peculiar ſtyle of architecture; ſome with domes of copper, others of tin, gilt or painted green, and many roofed with wood. In a word, ſome parts of this vaſt city have the look of a ſequeſtered deſert, other quarters of a populous town; ſome of a contemptible village, others of a great capital.

Moſcow may be conſidered as a town built upon the Aſiatic model, but gradually becoming more and more European, and exhibiting in its preſent ſtate a motley mixture of diſcordant architecture. It is diſtributed into the following diviſions. 1. *Kremlin*, or the Fortreſs. This ſtands in the central and higheſt part of the city; is of a triangular form, and about two miles in circumference; and is ſurrounded by high walls of ſtone and brick; which were conſtructed in the year 1491, under the reign of Ivan Vaſſilievitch I. It contains the ancient palace of the czars, ſeveral churches, two convents, the patriarchal palace, the arſenal, now in ruins, and one private houſe, which belonged to Boris Godunof before he was raiſed to the throne. 2. *Khitaigorod*, or the Chineſe Town, is encloſed on one ſide by that wall of the Kremlin which runs from the Moſkva to the Neglina; and on the other ſide by a brick wall of inferior height. It is much larger than the Kremlin, and contains the univerſity, the printing-houſe, and many other public buildings, and all the tradeſmen's ſhops. The edifices are moſtly ſtuccoed or white-waſhed; and it contains the only ſtreet in Moſcow in which the houſes ſtand cloſe to one another without any intervals between them. 3. The *Bielgorod*, or White Town, which runs quite round the two preceding diviſions, is ſuppoſed to derive its name from a white wall with which it was formerly encloſed, and of which ſome remains are ſtill to be ſeen. 4. *Semlainogorod*, which environs all the three other quarters, takes its denomination from a circular rampart of earth with which it is encompaſſed. Theſe two laſt-mentioned diviſions exhibit a groteſque groupe of churches, convents, palaces, brick and wooden houſes, and mean hovels, in no degree ſuperior to peaſants' cottages. 5. The *Sloboda*, or Suburbs, form a vaſt exterior circle round all the parts already deſcribed, and are inveſted with a low rampart and ditch. Theſe ſuburbs contain, beſides buildings of all kinds and denominations, corn-fields, much open paſture, and ſome ſmall lakes, which give riſe to the Neglina. The river *Moſkva*, from which the city takes its name, flows through it in a winding channel; but excepting in ſpring is only navigable for rafts. It receives the Yauſa in the Semlainogorod, and the Neglina at the weſtern extremity of the Kremlin; the beds of both theſe laſt-mentioned rivulets are in ſummer little better than dry channels.

The places of divine worſhip at Moſcow are exceedingly numerous; including chapels, they amount to above a thouſand: there are 484 public churches, of which 199 are of brick, and the others of wood; the former are commonly ſtuccoed or white-waſhed, the latter painted of a red colour. The moſt ancient churches of Moſcow are generally ſquare buildings, with a cupola and four ſmall domes, ſome whereof are of copper or iron gilt; others of tin, either plain or painted green. Theſe cupolas and domes are for the moſt part ornamented with croſſes entwined with thin chains or wires. The church of the Holy Trinity, ſometimes called the church of Jeruſalem, which ſtands in the Khitaigorod, cloſe to the gate leading into the Kremlin, has a kind of high ſteeple and nine or ten domes: it was built in the reign of Ivan Vaſſilievitch II. The inſide of the churches is moſtly compoſed of three parts; that called by the Greeks *ωδοναος*, by the Ruſſians *trapeza;* the body; and the ſanctuary or ſhrine. Over the door of each church is the portrait of the ſaint to whom it is dedicated, to which the common people pay their homage as they paſs along, by taking off their hats, croſſing themſelves, and occaſionally touching the ground with their heads.

The bells, which form no inconſiderable part of public worſhip in this country, as the length or ſhortneſs of their peals aſcertains the greater or leſs ſanctity of the day, are hung in belfries detached from the church: they do not ſwing like our bells, but are fixed immoveably to the beams, and are rung by a rope tied to the clapper and pulled ſidewiſe. Some of theſe bells are of a ſtupendous ſize; one in the tower of St. Ivan's church weighs 3551 Ruſſian poods, or 127,836 Engliſh pounds. It has always been eſteemed a meritorious act of religion to preſent a church with bells; and the piety of the donor has been meaſured by their magnitude. According to this mode of eſtimation, Boris Godunof, who gave a bell of 288,000 pounds to the cathedral of Moſcow, was the moſt pious ſovereign of Ruſſia, until he was ſurpaſſed by the empreſs Anne, at whoſe expenſe a bell was caſt which exceeded in bigneſs every bell in the known world. This bell was never ſuſpended. The hiſtory of its fall, by the accidental burning of a beam to which it was hung, Dr. Clarke informs us is mere fable; but, as writers are accuſtomed to copy each other, the ſtory continues to be propagated. "The fact is, the bell remains in the place where it was originally caſt. It never was ſuſpended; the Ruſſians might as well attempt to ſuſpend a firſt-rate line-of-battle ſhip, with all its guns and ſtores. A fire took place in the Kremlin, the flames of which caught the building erected over the pit in which the bell yet remained; in conſequence of which the metal became hot; and water thrown to extinguiſh the fire fell upon the bell, cauſing the fracture which has taken place. The deſcent into the cave is by a double flight of ſteps; and the bell reaches from the bottom of the cave to the roof. The entrance is by a trap-door, placed even with the ſurface of the earth. We found the ſteps very dangerous; ſome of them were wanting, and others broken, which occaſioned me a ſevere fall down the whole extent of the firſt flight, and a narrow eſcape for my life, in not being daſhed upon the bell. In conſequence of this accident, a centinel was ſtationed afterwards at the trap-door, to prevent people becoming victims to their curioſity. He might have been as well employed in mending the ſteps, as in waiting all day to ſay they were broken. The bell is truly a mountain of metal. They relate, that it contains a very large proportion of gold and ſilver; for that, while it was in fuſion, the nobles and the people caſt in, as votive offerings, their plate and money. It is permitted to doubt the truth of traditionary tales, particularly in Ruſſia, where people are much diſpoſed to relate what they have heard, without once reflecting on its probability. I endeavoured, in vain, to aſſay a ſmall part. The natives regard it with ſuperſtitious veneration, and they would not allow even a grain to be filed off. At the ſame time it may be ſaid, the compound has a white ſhining appearance, unlike bell-metal in general; and perhaps its ſilvery aſpect has ſtrengthened, if not given riſe to, a conjecture reſpecting the richneſs of its materials. On feſtival days, the peaſants viſit the bell as they would a church, conſider it an act of devotion; and they croſs themſelves as they deſcend and aſcend the ſteps. The bottom of the pit is covered with water, mud, and large pieces of timber, which, added to the darkneſs, render it always an unpleaſant and unwholeſome place, in addition to the danger ariſing from the ſteps which lead to the bottom. I went frequently there, in order to aſcertain the dimenſions of the bell with exactneſs. To my great ſurpriſe, during one of thoſe viſits, half a dozen Ruſſian officers, whom I found in the pit, agreed to aſſiſt me in the admeaſurement. It ſo nearly agreed with the account publiſhed by Jonas Hanway, that the difference is not worth notice. This is ſomewhat remarkable, conſidering the difficulty of exactly meaſuring what is partly buried in the earth, and the circumference of which is not entire. No one, I believe, has yet aſcertained the ſize of the lower rim of the bell, which would afford ſtill greater dimenſions than thoſe we obtained; but it is entirely buried in the earth. About ten perſons were preſent when I meaſured the part which remains expoſed to obſervation. We applied a ſtrong cord cloſe to the metal in all parts of its periphery, and round the lower part where it touched the ground, taking care at the ſame time not to ſtretch the cord. From the piece of bell broken off, it was aſcertained that we had thus meaſured within two feet of its lower extremity. The circumference obtained was 67 feet 4 inches; which allows a diameter of 22 feet $5\frac{1}{3}$ inches. We then took the perpendicular height from the top of the bell, and found it correſpond exactly with the ſtatement made by Hanway, namely, 21 feet $4\frac{1}{2}$ inches. In the ſtouteſt part, that in which it ſhould have received the blow of the hammer, its thickneſs equalled 23 inches. We were able to aſcertain this by placing our hands under water where the fracture had taken place, which is above 7 feet high from the lip of the bell. The weight of this enormous maſs of metal has been computed to be 443,772lbs. which, if valued at three ſhillings a-pound, amounts to 66,565l. 16s. lying unemployed, and of no uſe to any one."

The palace, inhabited by the ancient czars, ſtands at the extremity of the Kremlin. Part of this palace is old, and remains in the ſame ſtate in which it was built under Ivan Vaſſilievitch I. The remainder has been ſucceſſively added at different intervals, without any plan, and in various ſtyles of architecture, which has produced a motley pile of building, remarkable for nothing but the incongruity of the ſeveral ſtructures. The top is thickly ſet with numerous little gilded ſpires and globes; and a large portion of the front is decorated with the arms of all the provinces which compoſe the Ruſſian empire. The apartments are in general exceedingly ſmall, excepting one ſingle room called the council-chamber, in which the ancient czars uſed to give audience to foreign ambaſſadors, and which has been repeatedly deſcribed by ſeveral Engliſh travellers who viſited Moſcow before the imperial reſidence was transferred to Peterſburgh. The room is large and vaulted, and has in the centre an enormous pillar of ſtone which ſupports the ceiling. In this palace Peter the Great came into the world, in the year 1672. In that part called the treaſury, are depoſited the crown, jewels, and royal robes, uſed at the coronation of the ſovereign, beſides ſeveral curioſities relative to the hiſtory of the country.

Of the great number of churches contained in this city, two in particular, namely, that of St. Michael and that of the Aſſumption of the Virgin Mary, are remarkable; the one for being the place where the ſovereigns of Ruſſia were formerly interred, and the other where they are crowned. Theſe edifices, which are ſituated in the Kremlin, are both in the ſame ſtyle of architecture; and their exterior form, though modelled according to the ancient ſtyle of the country, is not abſolutely inelegant. In the cathedral of St. Michael, which contains the tombs of the Ruſſian ſovereigns, the bodies are not, as with us, depoſited in vaults, or beneath the pavement, but are entombed in raiſed ſepulchres, moſtly of brick, in the ſhape of a coffin, and about two feet in height. When Mr. Coxe viſited the cathedral, the moſt ancient were covered with palls of red cloth, others of red velvet, and that of Peter II. with gold tiſſue, bordered with ſilver fringe and ermine. Each tomb has at its lower extremity a ſmall ſilver plate, upon which is engraved the name of the deceaſed ſovereign, and the era of his death. The cathedral of the Aſſumption of the Virgin Mary, which has long been appropriated to the coronation of the Ruſſian ſovereigns, is the moſt ſplendid and magnificent in Moſcow. The ſcreen is in many parts covered with plates of ſolid ſilver and gold richly worked. From the centre of the roof hangs (or did hang) an enormous chandelier of maſſy ſilver, weighing 2940lbs. it was made in England, and was a preſent from Moroſof, prime miniſter and favourite of Alexey Michaelovitch. The ſacred utenſils and epiſcopal veſtments are extraordinarily rich, but the taſte of the workmanſhip is in general rude. Many of the paintings which cover the inſide walls are of a coloſſal ſize: ſome are very ancient, and were executed ſo early as in the latter end of the fifteenth century. It contains among the reſt the head of the Virgin, ſuppoſed to have been delineated by St. Luke, and greatly celebrated in this country for its power of working miracles. According to the tradition of the church, it was brought from Greece to Kiof, transferred from thence to Volodimir, and afterwards to Moſcow. It ſeems to have been a Grecian painting, and was probably anterior to the revival of the art in Italy. In this cathedral are depoſited the remains of the Ruſſian patriarchs, the firſt of whom was Job, before whoſe time the primate of the Ruſſian church was ſuffragan to the patriarch of Conſtantinople. Job, being metropolitan archbiſhop of Moſcow, was in 1588 inſtalled in this cathedral patriarch of Ruſſia, by Jeremias patriarch of Conſtantinople. Philaretes and Nicon were diſtinguiſhed patriarchs, and died much regretted at an advanced age in 1633. The laſt of theſe patriarchs, who are reckoned to have been eleven, was Adrian, at whoſe demiſe, in 1699, Peter the Great refuſed to nominate a ſucceſſor; and in 1721 the patriarchal dignity was formally aboliſhed.

In connexion with this account of the churches at Moſcow, we ſhall here introduce a brief deſcription of ſome of the moſt prominent ceremonies performed in this city at the time of Eaſter. Dr. Clarke, who preſented to the public a picture of the Ruſſian manners approaching to caricature, and who has incurred the charge of exaggeration in ſome of his details, furniſhes us with ſeveral inſtances of the groſſeſt ſuperſtition, ſtill prevalent in Ruſſia. "All that has been ſaid or written of the Roman-catholic bigotry," ſays this writer, "affords but a feeble idea of the ſuperſtition of the Greek church. It is the greateſt libel upon human reaſon, the ſevereſt ſcandal upon univerſal piety, that has yet diſgraced the annals of mankind. There are no people who obſerve Lent with more ſcrupulous and religious rigour than the Ruſſians. Travelling the road from Peterſburgh to Moſcow, if at any time, in poor cottages, where the peaſants appeared ſtarving, I offered them a part of our dinner, they would ſhudder at the ſight of it, and caſt it to the dogs; daſhing out of the children's hands, as an abomination, any food given to them; and removing every particle that might be left entirely from their ſight. The ſame privation takes place among the higher ranks; but, in proportion as this rigour has been obſerved, ſo much the more exceſſive is the degree of gluttony and relaxation, when the important intelligence that *Chriſt is riſen* has iſſued from the mouth of the archbiſhop. During Eaſter they run into every kind of exceſs, rolling about drunk the whole week. When Eaſter was proclaimed, the inn where we lodged became a Pandæmonium. Drinking, dancing, and ſinging, continued through the night and the day. But, in the midſt of all theſe exceſſes, quarrels hardly ever took place. The wild rude riot of a Ruſſian populace is full of humanity. Few diſputes are heard; no blows are given; no lives endangered, but by drinking. No meetings take place of any kind, without repeating the expreſſions of peace and joy, *Chriſtos voſcreſs!* "Chriſt is riſen!" to which the anſwer is always the ſame, *Vo iſtiney voſcreſs!* "He is riſen indeed!" On Eaſter Monday begins the preſentation of the paſchal eggs; lovers to their miſtreſſes, relatives to each other, ſervants to their maſters, all bring ornamented eggs. Every offering at this ſeaſon is called a paſchal egg. The meaneſt pauper in the ſtreet, preparing an egg, and repeating the words *Chriſtos voſcreſs*, may demand a ſalute even of the empreſs. All buſineſs is laid aſide: the upper ranks are engaged in viſiting, balls, dinners, ſuppers, maſquerades; while the boors fill the air with their ſongs, or roll drunk about the ſtreets. Servants appear in new and tawdry liveries; and carriages in the moſt ſumptuous parade."

In the Khitaigorod is a place where the public archives are depoſited, a ſtrong brick building, containing ſeveral vaulted apartments with iron floors. Theſe archives, conſiſting of a numerous collection of ſtate-papers, were crowded into boxes and thrown aſide like common lumber, until the empreſs Catharine ordered them to be reviſed and arranged. In conformity to this mandate, Mr. Muller diſpoſed them in chronological order with ſuch perfect regularity, that any ſingle document may be inſpected with little trouble. They are encloſed in ſeparate cabinets with glaſs doors: thoſe relative to Ruſſia are all claſſed according to the ſeveral provinces which they concern; and over each cabinet is inſcribed the name of the province to which it is appropriated. In the ſame manner the manuſcripts relative to foreign kingdoms are placed in ſeparate diviſions under the reſpective titles of Poland, Sweden, England, France, Germany, &c.

The univerſity of Moſcow, all ſituated in the Khitaigorod, was founded, at the inſtance of count Shuvalof, by the empreſs Elizabeth, for 600 ſtudents; who are clothed, boarded, and inſtructed, at the expenſe of the crown. Beſides this inſtitution, there are two gymnaſia, or ſeminaries for the education of youth, endowed alſo by Elizabeth; in which are taught, by twenty-three profeſſors, divinity, claſſics, philoſophy, the Greek, Latin, Ruſſian, German, French, Italian, and Tartar, languages; hiſtory, geography, mathematics, architecture, fortification, artillery, algebra, drawing and painting, muſic, fencing, dancing, reading, and writing.

Moſcow is the centre of the inland commerce of Ruſſia, and particularly connects the trade between Europe and Siberia. The only navigation to this city is formed by the Moſkva, which, falling into the Occa near Columna, communicates by means of that river with the Volga. But, as the Moſkva is only navigable in ſpring upon the melting of the ſnows, the principal merchandiſe is conveyed to and from Moſcow upon ſledges in winter. The whole of the retail trade is carried on in the Khitaigorod; where, according to a cuſtom common in Ruſſia, as well as in moſt kingdoms of the eaſt, all the ſhops are collected together in one ſpot. The place is like a kind of fair, conſiſting of many rows of low brick buildings; the intervals between them reſembling alleys. Theſe ſhops or booths occupy a conſiderable ſpace; they do not, as with us, make part of the houſes inhabited by the tradeſmen, but are quite detached from their dwellings, which for the moſt part are at ſome diſtance in another quarter of the town. The tradeſman comes to his ſhop in the morning, remains there all day, and returns home to his family in the afternoon. Every trade has its ſeparate department; and they who ſell the ſame goods have booths adjoining to each other. Furs and ſkins form the moſt conſiderable article of commerce in Moſcow; and the ſhops which vend thoſe commodities occupy ſeveral ſtreets.

Amongſt the curioſities of Moſcow, the market for the ſale of houſes is not the leaſt remarkable. It is held in a large open ſpace in one of the ſuburbs; and exhibits a great variety of ready-made houſes, thickly ſtrewed upon the ground. The purchaſer who wants a dwelling, repairs to this ſpot, mentions the number of rooms he requires, examines the different timbers, which are regularly numbered, and bargains for that which ſuits him. The houſe is ſometimes paid for on the ſpot, and taken away by the purchaſer; or ſometimes the vender contracts to tranſport and erect it upon the place where it is deſigned to ſtand. It may appear incredible to aſſert, that a dwelling may be thus bought, removed, raiſed, and inhabited, within the ſpace of a week; but we ſhall conceive it practicable by conſidering that theſe ready-made houſes are in general merely collections of trunks of trees tenoned and mortiſed at each extremity into one another, ſo that nothing more is required than the labour of tranſporting and adjuſting them. But this ſummary mode of building is not always peculiar to the meaner hovels; as wooden ſtructures of very large dimenſions and handſome appearance are occaſionally formed in Ruſſia with an expedition almoſt inconceivable to the inhabitants of other countries. A remarkable inſtance of this diſpatch was diſplayed the laſt time the empreſs came to Moſcow. Her majeſty propoſed to reſide in the manſion of prince Gallitzin, which was eſteemed the completeſt edifice in the city; but, as it was not ſufficiently ſpacious for her reception, a temporary addition of wood, larger than the original houſe, and containing a magnificent ſuite of apartments, was begun and finiſhed within the ſpace of ſix weeks. This meteor-like fabric was ſo handſome and commodious, that the materials, which were taken down at her majeſty's departure, were to be re-conſtructed as a kind of imperial villa upon an eminence near the city. Mr. Coxe mentions an admirable police in this city for preventing riots, or for ſtopping the concourſe of people in caſe of fires, which are very frequent and violent in thoſe parts, where the houſes are moſtly of wood, and the ſtreets are laid with timber. At the entrance of each ſtreet there is a chevaux-de-frize gate, one end whereof turns upon a pivot, and the other rolls upon a wheel; near it is a centry-box, in which a man is occaſionally ſtationed. In times of riot or fire the centinel ſhuts the gate, and all paſſage is immediately ſtopped.

Among the public inſtitutions of Moſcow, the moſt remarkable is the Foundling Hoſpital, endowed in 1764 by the empreſs Catharine, and ſupported by voluntary contributions and legacies, and other charitable gifts. In order to encourage donations, her majeſty granted to all benefactors ſome valuable privileges, and a certain degree of rank in proportion to the extent of their liberality. Among the principal contributors muſt be mentioned a private merchant named Dimidof, a perſon of great wealth, who expended in favour of this charity above 100,000l. The hoſpital, which is ſituated in a very airy part of the town upon a gentle aſcent near the river Moſkva, is an immenſe pile of building of a quadrangular ſhape; and calculated to receive 8,000 foundlings. The children are brought to the porter's lodge, and admitted without any recommendation. The rooms are lofty and large; the dormitories, which are ſeparate from the work-rooms, are very airy, and the beds are not crowded: each foundling, even each infant, has a ſeparate bed. The children remain two years in the nurſery, when they are admitted into the loweſt claſs; the boys and girls continue together until they are ſeven years of age, at which time they are ſeparated. They all learn to read, write, and caſt accounts. The boys are taught to knit; they occaſionally card hemp, flax, and wool, and work in the different manufactories. The girls learn to knit, net, and all kinds of needle-work; they ſpin and weave lace; they are employed in cookery, baking, and houſehold-work of all ſorts. At the age of fourteen the foundlings enter into the firſt claſs; when they have the liberty of chooſing any particular branch of trade; and for this purpoſe there are different ſpecies of manufactures eſtabliſhed in the hoſpital, of which the principal are embroidery, ſilk ſtockings, ribbands, lace, gloves, buttons, and cabinet-work. A ſeparate room is appropriated to each trade. Some boys and girls are inſtructed in the French and German languages, and a few boys in the Latin tongue; others learn muſic, drawing, and dancing.

It remains to ſay a few words upon the domeſtic habits of the inhabitants of this immenſe city.

Carriages are ſo common at Moſcow, that almoſt every perſon makes uſe of them. The equipages of the nobility with complete ſets of ſix horſes, are conſtantly driving about the ſtreets of Moſcow. The city is of ſo large a compaſs, that hackney-carriages are ſtationed in the ſtreets for conveying paſſengers to the different quarters. Theſe vehicles are without tops, have moſtly four wheels, and are furniſhed either with a long bench, or one, two, or three, ſeparate ſeats, like arm-chairs, placed ſideways; their fares are ſo reaſonable, that ſervants occaſionally uſe them upon errands to diſtant parts of the city: the coachman generally drives at the rate of eight or nine miles an hour. Notwithſtanding the number of coaches with ſix horſes that traverſe the ſtreets of Moſcow, their accompaniments are ridiculouſly mean. When a coach is procured with ſix horſes of different colours, the coachman and poſtilion are dreſſed like peaſants, with high cylindrical hats; the coachman, with a long beard and ſheep-ſkin robe, ſits on the box; the poſtilion, in a coarſe drugget garb, is mounted on the off-horſe, according to the cuſtom of the country. Behind the carriage is an enormous ſack of hay, which, while the maſter is paying his viſits, or regaling himſelf at dinner, is occaſionally given to the horſes.

"Nothing," ſays Mr. Coxe, "can exceed the hoſpitality of the Ruſſians. We never paid a morning-viſit to any nobleman without being detained to dinner; we alſo conſtantly received general invitations." The principal perſons of diſtinction keep open tables, and are highly obliged by the viſitors who reſort to them without ceremony. Muſic during dinner generally makes a part of the entertainment at the tables of the nobility. Moſt of the Ruſſian nobles have gardeners of our nation; and they are thus provided for their entertainments with pines, peaches, apricots, grapes, pears, cherries, and ſuch fruits as can rarely in this country be obtained without the aſſiſtance of hot-houſes. According to Richter, in his Sketch of Moſcow, pines are reared in great abundance in the hot-houſes about this city, and may be purchaſed for a ruble a-piece. At the country-ſeat of prince Gallitzin, grapes have been ſeen nearly ripe in the open air. The Ruſſian nobles are ſaid to diſplay a great degree of grandeur and magnificence in their houſes, domeſtics, and mode of living. The wealth of the nobles is enormous. Some of them have 70 and even 100,000 peaſants; and their fortunes are eſtimated by the number of their peaſants, who pay them, upon an average, 10 rubles annually, in ſpecie. They exact labour, not merely from the males, but from women, and children from the age of ten and upwards. Tithes are moreover demanded of linen, poultry, eggs, butter, pigs, ſheep, lambs, and of every product of the land, or of domeſtic manual labour. Should a peaſant by any misfortune be unable to furniſh the tribute expected by his lord, he muſt beg, borrow, or ſteal, to make up the deficiency. The only property a Ruſſian noblemen allows his peaſant to poſſeſs, is the food he cannot, or will not, eat himſelf; the bark of trees, chaff, or other refuſe: quaſs, water, and fiſh-oil. Traverſing the provinces ſouth of Moſcow, where the ſoil is ſingularly fertile and productive, the labourers are nevertheleſs, ſays Dr. Clarke, deſtitute of the common neceſſaries of life; the lord claims all the produce. Mr. Heber differs in his ſtatement of the condition of peaſants from Dr. Clarke; obſerving, that, with regard to their comforts or means of ſubſiſtence, they are not deficient. Their houſes are well adapted to the habits of the people; their clothing is warm and ſubſtantial, and they appear to be ſufficiently fed; but their political ſituation is ſervile and diſtreſſing. They are liable to be levied as ſoldiers at the pleaſure of their lords; for, if a maſter is diſpleaſed with his ſlave, he may ſend him to the army whenever he thinks proper, and take a receipt from the government.

The wealth of the nobles is no-where more conſpicuouſly diſplayed than at their weekly balls. Every perſon who is a plebeian is excluded by the laws of the ſociety, and, though nobles only are admitted, the company occaſionally conſiſts of 2000 perſons. The dreſſes are the moſt ſumptuous that can be imagined; the favourite ornaments of the ladies are cameos, which they wear upon their arms, in girdles round their waiſts, or upon their boſoms. The drapery is diſpoſed after the Grecian coſtume, and their hair is bound up round the head. The modes of dreſs in London and Paris are generally blended together by the ladies of Moſcow; and, in juſtice to their charms, it muſt be confeſſed, that no country in the world can boaſt ſuperior beauty. The men on theſe occaſions appear either in uniform or in coats of very rich embroidery; but neither men nor women evince the ſlighteſt degree of animation in the exerciſe of dancing. Dr. Clarke will not allow to the Ruſſians the unqualified praiſe of hoſpitality. The diſhes and the wines, he ſays, correſpond in gradation with the rank and condition of the gueſts. Thoſe who ſit near the maſter of the houſe are ſuffered to have no connexion with the fare or the tenants at the lower end of the table. The choſen diſhes at a Ruſſian table are carefully placed at the upper end, and are handed down to thoſe gueſts who are ſtationed near the owner of the manſion, according to the order in which they ſit; afterwards, if any thing remain, it is taken gradually to the reſt; ſo that perſons at the bottom of the table are often compelled to remain ſatisfied with an empty diſh. The wine alſo degenerates in quality, until at laſt it is deteriorated into ſimple quaſs. The number of attendants in waiting is prodigious. In the houſe of the young count Orlof, 500 ſervants waited at table; many of them ſumptuouſly clothed, and many others in rags.

Thus far Dr. Clarke. Mr. Porter adds, that dwarfs and fools are here the pages and the playthings of the great; and, at almoſt all entertainments, ſtand for hours by their lord's chair, holding his ſnuff-box, or waiting his commands. "There is ſcarcely a nobleman in this country who is not poſſeſſed of one or more of theſe friſks of nature; but, in their ſelection, I cannot ſay that the nobleſſe diſplay their gallantry, as they chooſe none but males. Theſe little beings are generally the gayeſt-dreſſed perſons in the ſervice of their lord, and are attired in a uniform or livery of very coſtly materials. In the preſence of their owner, their uſual ſtation is at his elbow, in the character of a page; and, during his abſence they are reſponſible for the cleanlineſs and combed locks of their companions of the canine ſpecies. Beſides theſe Lilliputians, many of the nobility keep a fool or two, like the motleys of our court in the days of Elizabeth; but like in name alone; for their wit, if they ever had any, is ſwallowed up by indolence. Savoury ſauces and rich repaſts ſwell their bodies to the moſt diſguſting ſize; and, lying about in the corners of ſome ſplendid ſaloon, they ſleep profoundly, till awakened by the command of their lord, to amuſe the company. Shaking their enormous bulk, they riſe from their trance; and, ſupporting their unweildly trunks againſt the wall, drawl out their heavy nonſenſe with as much grace as the motions of a ſloth in the hands of a reptile-fancier. One glance was ſufficient for me of theſe imbruted creatures; and, with ſomething like pleaſure, I turned from them to the leſs humiliating view of human nature in the dwarf. The race of theſe unfortunates is very diminutive in Ruſſia, and very numerous. They are generally well-ſhaped, and their hands and feet particularly graceful. Indeed, in the proportion of their figures, we ſhould no-where diſcover them to be flaws in the economy of nature, were it not for a peculiarity of feature, and the ſize of the head, which is commonly very much enlarged. Take them on the whole, they are ſuch compact, and even pretty, little beings, that no idea can be formed of them from the clumſy deformed dwarfs which are exhibited at our fairs in England. I cannot ſay we need envy Ruſſia in this part of her offspring. It is very curious to obſerve how nearly they reſemble each other: their features are all ſo alike, that you might eaſily imagine that one pair had ſpread their progeny over the whole country."

Moſcow has often ſuffered by fires; and, in the years 1737, 1748, and 1752, a conſiderable part of it was reduced to aſhes, eſpecially by the laſt fire, which conſumed above half the city, together with the czarina's ſtables. But the houſes have always been ſoon rebuilt after ſuch a calamity; as they are, for the moſt part, of very mean materials. The laſt conflagration (Sept. 1812), by which three-fourths of the city was deſtroyed, is freſh in the memory of all our readers. See the article LONDON, vol. xiii. p. 297. The Kremlin and the Khitaigorod ſuffered leaſt at that time, and we have therefore been ſtill able, in deſcribing thoſe parts, to avail ourſelves of the deſcriptions given by Coxe and Tooke. And the moſt recent accounts (Mar. 1817.) ſtate, that Moſcow has riſen from its aſhes more beautiful than ever, which may very well be, as moſt of the houſes were of wood thatched with mud. The univerſity is, however, rebuilt of better materials, and is in a flouriſhing condition: the library already contains 7000 volumes; and every thing connected with education, and the uſeful and elegant ſciences, is encouraged and promoted by the government.

The loſs that was ſuſtained, upon that dreadful occaſion, in lives and property, has been thought to be greatly exaggerated; for it was ſtated, that, beſides 30,000 ſick, 100,000 lives were loſt. But, if we look back into hiſtory, we ſhall find that Moſcow has endured ſtill greater calamities. In the Harleian Miſcellany, there is a curious pamphlet, which gives an account (by an eye-witneſs) of a moſt dreadful plague and fire, which happened there in the ſixteenth century. We ſhall make ſome extracts from this very curious and ſcarce tract.

"Being departed from Nerva about the 10th of July, 1570, we came, on the beginning of Auguſt, to Moſcow. A few days after, a horrid plague invaded the town, and the places about it, with ſuch violence, that in four months there died above 250,000 people; and it was particularly obſerved, that in eight days, that is from the 10th to the 18th of Auguſt, there died 2703 prieſts; and this plague did continue ſo fiercely, that, in the end of it, every one wondered when he met any body of his acquaintance.

"This extraordinary miſery was followed the year after, on the 15th of May, by a ſtrange ruin and conflagration: the occaſion was, that the emperor of the Tartarians, being diſcontented that the Ruſſians did not pay him ſome annual tribute, and hearing beſides, that the great duke (Ivan III.) by his tyranny and maſſacres, had ſo depopulated the country, that he ſhould find no great reſiſtance that way, did ſummon him to pay the ſaid tribute; but the great duke returned nothing in anſwer but ſpightful and reproachful words; wherefore the Tartarian came out of his country, about the end of February, followed with an army of one hundred thouſand horſe, who, within the ſpace of two months and a half, did ride about five hundred German leagues; which make two thouſand Engliſh miles. When they were come about two days' journey from the frontiers of the duke, he reſolved to meet them, and to give them battle; but he loſt it with a prodigious ſlaughter of his men. The duke, knowing that the Tartarian would ſeek him out, ran away as faſt as he could: he was only within five leagues of Moſcow, when the Tartarians came and encompaſſed the town, thinking he was within. They ſet on fire all the villages round about it; and, ſeeing that the war would prove too tedious for them, reſolved to burn that great city, or at leaſt the ſuburbs of it; for this purpoſe, having placed their troops round about it, they ſet fire on all ſides, ſo that it ſeemed a burning globe; then did riſe ſo fierce and violent a wind, that it drove the rafters and long trees from the ſuburbs into the city; the conflagration was ſo ſudden, that nobody had time to ſave himſelf, but in that place where he was then. The perſons that were burnt in this fire, were about 200,000; which did happen, becauſe the houſes are all of wood, and the ſtreets paved with great fir-trees, ſet cloſe together, which, being oily and roſinous, made the incendy unexpreſſible; ſo that, in four hours time, the city and ſuburbs where wholly conſumed. I and a young man of Rochelle, that was my interpreter, were in the middle of the fire, in a magazine vaulted with ſtone, and extraordinarily ſtrong, whoſe wall was three feet and a half thick, and had no air but on two ſides; one wherein was the coming in and going out, which was a long alley, in which there were three iron gates, diſtant about ſix feet from each other; on the other ſide there was a window, or grate, fenced with three iron ſhutters, diſtant half a foot one from another; we ſhut them inwardly as well as poſſibly we could; nevertheleſs, there came in ſo much ſmoke, that it was more than ſufficient to choak us, had it not been for ſome beer that was there, with the which we refreſhed ourſelves now and then. Many lords and gentlemen were ſtifled in the caves where they had retired, becauſe, their houſes being made of great trees, when they fell they cruſhed down all that was underneath; others, being conſumed to aſhes, ſtopped all the paſſages of going and coming out, ſo that for want of air they all periſhed: the poor country people that had ſaved themſelves in the city, with their cattle, from threeſcore miles round about, ſeeing the conflagration, ran all into the market-place, which is not paved with wood as the reſt; nevertheleſs, they were all roaſted there, in ſuch ſort, that the talleſt man ſeemed but a child, ſo much had the fire contracted their limbs; and this by reaſon of the great houſes that were round about it. A thing more hideous and frightful than any can imagine, in many places of the ſaid market, the bodies were piled one upon another to the height of half a pike, which put me in a wonderful admiration, being not able to apprehend, nor underſtand, how it was poſſible they ſhould be ſo heaped together.

"This wonderful conflagration cauſed all the fortifications of the town-wall to fall, and all the ordnance that were upon it to burſt. The walls were made of brick, according to the ancient way of building, without either fortifications or ditches. Many that had ſaved themſelves among them were nevertheleſs roaſted, ſo fierce and vehement was the fire; among them many Italians and Walloons of my acquaintance. While the fire laſted, we thought that a million of cannons had been thundering together; and our thoughts were upon nothing but death, thinking the fire would laſt ſome days, becauſe of the great circumference of the caſtle and ſuburbs; but all this was done in leſs than four hours time; at the end of which, the noiſe growing leſs, we were curious to know whether the Tartarians, of whom we ſtood no leſs in fear than of the fire, were entered. But, after we had hearkened awhile, we heard ſome Ruſſians running to and fro through the ſmoke, who were talking of walling the gates, to prevent the coming of the Tartarians, who were expected when the fire went out. I and my interpreter, being come out of the magazine, found the aſhes ſo hot, that we durſt ſcarce tread upon them; but, neceſſity compelling us, we ran towards the chief gate, where we found twenty-five or thirty men eſcaped from the fire, with whom, in a few hours, we did wall that gate and the reſt, and kept a ſtrict watch all that night with ſome guns that had been preſerved from the fire. In the morning, ſeeing that the place was not defenſible with ſo few people as we were, we ſought the means to get into the caſtle, whoſe entry was then inacceſſible: the governor was very glad to hear of our intention, and cried to us that we ſhould be very welcome; but it was a moſt difficult thing to come in, becauſe the bridges were all burnt, ſo that we were fain to get over the wall, having, inſtead of ladders, ſome high fir-trees thrown from the caſtle to us, wherein, inſtead of rounds to get up, they had made ſome notches with a hatchet, to keep us from ſliding. We got up them with much ado; for, beſides the evident inconvenience of thoſe rough ladders, we did carry about us the ſum of four thouſand thalers, beſides ſome jewels, which was a great hindrance to us to climb along thoſe high trees; and that, which did double our fear, was, that we ſaw before our eyes ſome of our company, that had nothing but their bodies to ſave, yet tumble down from the middle of thoſe high trees into the ditch, full of burnt bodies, ſo that we could not tread but upon dead corpſes, whoſe heaps were ſo thick every where, that we could not avoid to tread upon them, as if it had been a hill to climb up; and that which did augment our trouble was, that in treading upon them their arms and legs broke like glaſs: the poor limbs of theſe creatures being calcined by the vehement heat of the fire; and, our feet ſinking into thoſe miſerable bodies, the blood and the filth did ſquirt in our faces, which begot ſuch a ſtench all the town over, that it was impoſſible to ſubſiſt in it.

"The 25th of May, in the evening, as we expected, in great perplexity, what the Tartarians would attempt againſt us, who were about four hundred in the caſtle; the Tartarians, whom we had ſaluted with our guns, and killed ſome of them that were coming too near one of the caſtle-gates, began to go back the ſame way that they came in, with ſo much ſpeed, that the next morning all that torrent was drained up; for which having given God thanks, and ſet our buſineſs in order as well as the preſent calamity would permit, we went away from that deſolate place."

An eminence, called Sparrow-hill, ſituated about four or five miles from Moſcow, commands the beſt view of the city; and from thence the land about it may be perceived to be low and ſwampy, abounding with pools of ſtagnant water, and of courſe unhealthy. The climate is alſo dangerous from ſudden tranſitions. The rapidity of vegetation is here very ſtriking. In and about Moſcow the rivers freeze about the middle or latter end of November, and break up in March or the beginning of April. The birch-trees come out in May, and ſhed their leaves in September. Fahrenheit's thermometer ſtood at 68° on May 20th, and at 44° April 16th, and between theſe periods at intermediate degrees. At London on the ſame days it ſtood at 61° and 55°.

The monaſtery called *Troitſkoi Kloſter*, or the Monaſtery of the Holy Trinity, is diſtinguiſhed in the annals of Ruſſia as the aſylum for the Ruſſian ſovereigns in caſes of inſurrection; and is more particularly known to foreigners on account of the refuge which it afforded to Peter the Great, when he put an end to the adminiſtration of his ſiſter Sophia. This monaſtery is about forty miles from Moſcow. At a little diſtance, this monaſtery bears the appearance of a ſmall town, and like many other convents in this country is ſurrounded with high brick walls, ſtrengthened with battlements and towers. The parapet is roofed with wood, and the walls and towers are provided with embraſures for muſkets and cannon; the whole is ſurrounded by a deep ditch. This place has withſtood ſeveral ſieges, and particularly baffled all the efforts of Ladiſlaus prince of Poland, who attacked it at the head of a large army. Beſides the habitation for monks, the walls encloſe an imperial palace, and nine large churches conſtructed by different ſovereigns, which are ſplendid, and very rich in gold and ſilver ornaments, and coſtly veſtments. The library of the convent contains a curious collection of books.

Moſcow is 348 miles ſouth-eaſt of Peterſburg, ſix hundred eaſt-north-eaſt of Warſaw, and ſeven hundred north-eaſt of Cracow. Lat. 55. 45. 45. N. lon. 37. 21. E. *Coxe's Travels in Ruſſia. Tooke's Hiſt. of the Ruſſian Empire. Richter's Sketch of Moſcow. Porter's Travels in Ruſſia and Sweden. Dr. Clarke's Travels. Harleian Miſcellany*, vol. iii.

MOS'DORF, a town of the duchy of Luxemburg: four miles eaſt of Dicrich, and ſixteen north-north-eaſt of Luxemburg.

MOSE, a town of France, in the department of the Mayne and Loire: nine miles ſouth of Angers.

MOSE, an iſland in the Eaſtern Indian Sea, about thirty miles in circumference. Lat. 6. 20. S. lon. 132. 2. E.

MOSE, or VILLA DEL MOSE, a town on the bank of the river Tabaſco, in the bottom of Campeachy Gulf, from which great quantities of cocoa are ſhipped for Spain.

MOSE'CHE, a province of Angola, on the north bank of the Coanza.

MO'SEK. See MAUSCHEID, vol. xiv.

MOSEL'LE, a river of France, which riſes in the mountains of the Voſges, paſſes by or near to Remiremont, Epinal, Châtel ſur Moſelle, Charmes, Toul, Pont à Mouſſon, Metz, Thionville, Gravenmacheren, Treves, Traarbach, &c. and joins the Rhine at Coblentz.

MOSEL'LE, a department of France, bounded on the north by the duchy of Luxemburg, on the north-eaſt by the late department of the Sarre, on the eaſt by the late departments of Mont Tonnerre and the Sarre, on the ſouth-eaſt by the department of the Lower Rhine, on the weſt by the department of the Meuſe, and on the ſouth by the department of the Meurthe. Its population amounts to 562,700. Metz is the capital. This department is fertile in grain, wine, fruits, and paſtures. It has alſo mines of iron and coal.

MOSE'NIA, a town of Perſia, in Chuſiſtan: thirty-ſix miles ſouth-weſt of Suſter.

MOSERA'DA, a town of Italy, in the Treviſan: ſix miles north-north-eaſt of Trevigio.

MOS'EROTH, [Heb. diſcipline.] The name of a place. *Numb.*

MO'SES, the great prophet and legiſlator of the Hebrew nation, was the ſon of Amram, the grandſon of Levi, by Jochebed, the daughter of Levi, his own aunt; and was born in Egypt, in the year 1571 B.C. He was their third child, they having had before him a daughter called Miriam, and a ſon named Aaron. Some time before the birth of Moſes, a cruel edict had been promulgated by Pharaoh king of Egypt, intended to effectuate the gradual extirpation of the Iſraelites, which enacted, under the ſevereſt penalties, that every Hebrew male child which was born ſhould be caſt into the Nile, and that none but the females ſhould be ſuffered to live. This edict even enjoined the parents to become the executioners of their own ſons, or to diſcover them when born, that they might be drowned by the Egyptians. The reaſon of this decree, according to Joſephus, was the prediction of an Egyptian prophet, that a Hebrew child was about to be born who would hereafter diminiſh the power of Egypt, and increaſe that of the Iſraelites. Though there is no authority for this in the ſacred ſcriptures, which will be our chief reſource in this article, yet it does not appear at all improbable that the king's mind was impreſſed with ſome ſuch notion when he iſſued his commands.

At the birth of Moſes, it is ſaid that the natural reluctance of his parents to obey ſuch a decree, was increaſed by the ſuperior lovelineſs of the child; though mothers, probably, always ſee beauty in their new-born infants, which, for obvious reaſons, is a very wiſe proviſion of Providence; and they ventured to keep him in concealment during the ſpace of three months. (Exodus, ch. ii.) At length, the extreme danger of a diſcovery, which would have proved fatal to themſelves as well as the infant, reduced them to the cruel neceſſity of expoſing him. His mother, therefore, took a ſmall ark made of the ligneous part of the papyrus, and, having beſmeared it with bitumen, to render it water-tight, placed the infant in it, and ſet it down among the ſedges on the marſhy brink of the river. Anxious, however, about his fate, ſhe placed her daughter Miriam at a proper diſtance, to obſerve what ſhould become of him. Soon after this, the daughter of Pharaoh, coming to the river with her female attendants in order to bathe, diſcovered the ark, and ſent one of them for it. Upon opening it, ſhe was ſurpriſed at finding its contents to be a beautiful boy, whoſe crying irreſiſtibly excited her pity and compaſſion. Concluding him to be the child of one of the oppreſſed Hebrew race, who was left to periſh under her father's tyrannical proſcription, ſhe thought him deſerving of a better fate, and determined to reſcue him from deſtruction. At this moment Miriam approached the princeſs, and made an offer of bringing a Hebrew nurſe to ſuckle the child; which ſhe was ordered to do. Accordingly, ſhe called her mother Jochebed, who with unſpeakable joy received the infant from the princeſs, with orders to take the ſame care of him as if he were her own ſon, and a promiſe of being well rewarded for her ſervice. Afterwards the princeſs gave him the name of Moses, ſignifying *extracted*, "becauſe," ſaid ſhe, "I have drawn him out of the water." In due time the child was brought to his patroneſs, who declared him her adopted ſon, and gave directions for his being educated in all the branches of learning for which Egypt was then celebrated. It is reaſonable to ſuppoſe, that, while he was under the care of his parents, they had inſtructed him in their religion, and informed him of the ſecret of his birth.

How Moſes was afterwards occupied till he was about forty years of age, the Scriptures do not inform us; but many things are related by Joſephus and other hiſtorians concerning the early periods of his life; and, though ſome perſons conſider them as entirely fabulous, yet we think it right to mention one or two, and the more ſo, as we are diſpoſed to pay a conſiderable deference to the hiſtory of Joſephus, and are not willing to ſuppoſe him capable of introducing facts that were not authenticated by the beſt proofs that he was capable of obtaining. Unleſs we go thus far, we muſt loſe much that Chriſtians value as important, which he has tranſmitted in his Hiſtory and Antiquities. In the Acts of the Apoſtles, chap. vii. 20, we are told that Moſes was "exceedingly fair." And Joſephus relates, that when Moſes was only three years old, that is, when he was ſpecially introduced to Pharoah's daughter as her adopted ſon, no one who ſaw him could avoid being ſtruck with the ſingular beauty of his countenance; and he adds, people about their common buſineſs would leave it to gaze at him. Philo ſays, that at his birth he had a more elegant and beautiful appearance than denoted an ordinary perſon. According to Joſephus and Euſebius, Moſes acted as a leader in the wars, diſtinguiſhed himſelf, and obtained many ſignal victories.

When he was about forty years of age, he left the court of Pharoah, and went to viſit his countrymen the Hebrews, who groaned under the ill-uſage and oppreſſion of their unfeeling maſters. He is ſaid "to have looked on their burthens;" that is, under the direction of that Providence which deſigned him to be the deliverer of his nation, he made himſelf perſonally acquainted with their condition and treatment, endeavouring to relieve them from their intolerable oppreſſion, and, probably, preparing the minds of the leading people among them for the great enterpriſe in which he afterwards embarked. While he was thus employed, obſerving one day an Egyptian uſing an Hebrew with great cruelty, he was ſo exaſperated at his conduct, that, ſeeing no perſon near, he ran to the defence of the latter, and, having killed the Egyptian during the ſtruggle, buried him in the ſand. Soon afterwards, while endeavouring to put an end to a quarrel between two Hebrews, one of them, provoked at his interference, upbraided him with the death of the Egyptian, and tauntingly aſked him, whether he alſo meant to take away *his* life? Finding, therefore, that the fact was becoming publicly known, and being ſenſible that he had reaſon to fear the effects of Pharaoh's reſentment, he conſulted his ſafety by withdrawing immediately into the land of Midian, in Arabia Petræa.

Moſes met with a hoſpitable reception from Reuel, or Jethro, the prieſt or prince of the country, into whoſe ſervice he entered. In this ſituation he ſpent forty years, during which his behaviour had been ſo ſatisfactory to Jethro, that he beſtowed upon him his daughter Zipporah in marriage, by whom he had two ſons. His employment was that of keeping the flock of his father-in-law; and, as he was following it upon Mount Horeb, he had an extraordinary viſion, which occaſioned his return into the land of Egypt. In this viſion he ſaw a buſh in flames, not one leaf of which was conſumed; and from the midſt of the buſh a voice iſſued, announcing the ſpecial preſence of the Deity. (Exodus, ch. iii.) While Moſes liſtened with profound reverence and humility, the voice informed him that the time was now come when God would deliver the Hebrews from their bondage to the Egyptians, and that he was the inſtrument ſelected to conduct them out of the land of their oppreſſion towards the rich inheritance promiſed to their forefathers. He was, therefore, commanded to proceed to Egypt; and, after ſatisfying the Iſraelites concerning his commiſſion, to requeſt of the king that they might be permitted to go three days' journey into the deſert, for the purpoſe of celebrating a feſtival in honour of the God whom they worſhipped. From a modeſt ſenſe of diffidence in himſelf, as well as his fears reſpecting the difficulties in executing ſuch a commiſſion, Moſes was very deſirous of being excuſed from that ſervice, and offered repeated prayers that God would be pleaſed to make choice of a fitter inſtrument.

Encouraged at length by aſſurances of miraculous aſſiſtance, (ch. iv.) he obtained his diſmiſſion from Jethro, and with his wife and two ſons ſet out on his journey to Egypt. He had not proceeded far, before he was attacked with a dangerous diſeaſe, which Zipporah conceived to be a puniſhment for having neglected the circumciſion of his youngeſt ſon; ſhe, therefore, immediately performed that operation herſelf; and her huſband was ſoon afterwards able to purſue his journey, while ſhe returned with the two children to her father's. When Moſes arrived at Mount Horeb, he met his brother Aaron, who had been divinely directed to come thither, and was there acquainted by Moſes with the important commiſſion which was entruſted to him. This intelligence gave Aaron the higheſt ſatisfaction; and he accompanied his brother to the ſettlements of the Iſraelites in Egypt, where the elders or heads of the people were aſſembled, to receive the news of their ſpeedy deliverance. Here Aaron, whom God had appointed to be ſpokeſman for his brother, who had an impediment in his ſpeech, informed the aſſembly of the glorious errand on which Moſes was ſent to them; and the latter, in evidence of the truth of his miſſion, wrought the miracles in their preſence by which God had commanded him to eſtabliſh his credit and authority among them. One was, by turning his rod into a ſerpent, and then into a rod again; and another, by covering one of his hands with leproſy upon pulling it out of his boſom, and by healing it afterwards in the ſame way. Theſe proofs of ſupernatural power were ſo convincing to the aſſembly, that they profeſſed the utmoſt joy and gratitude towards the divine goodneſs, which had at length taken compaſſion on their wretched condition; but they ſoon afforded their deliverer a ſpecimen of the difficulties which he would have to ſtruggle with from their intractable and deſponding temper.

Moſes and Aaron now proceeded to open their commiſſion before the king of Egypt, (ch. v.) and, having obtained an audience, in the name of the Lord God of the Hebrews requeſted permiſſion for that people to go three days' journey into the deſert, for the purpoſe of celebrating a feſtival in his honour, without giving offence to the Egyptians by their peculiar rites and ceremonies; to which they added, that this God had commanded them ſo to do, and that, were they to refuſe obedience to him, they would be in danger of ſevere puniſhment, either by the peſtilence or the ſword. To this requeſt the haughty monarch replied, that he acknowledged no ſuch deity as the God in whoſe name they pretended to addreſs him, and that he would not grant the Iſraelites ſuch relaxation from their ſervitude as their bold requeſt implied. He then ſeverely reprimanded Moſes and Aaron for ſeducing the people from their work by ſuch idle projects, ordering them to return to their own labours. At the ſame time, under the pretence that the Hebrews had not work enough to employ their thoughts, and that their idleneſs would make them grow ſeditious, he directed their taſk-maſters to deprive them of the ſtraw uſed in making bricks, and by ſo doing oblige them to ſpend their time in gathering ſtubble inſtead of it, but without being allowed the leaſt diminution in the quantity of their daily labour. In the anguiſh of their hearts under this addition of miſery, the Hebrews attributed it to the interference of Moſes, and bitterly reproached him and his brother as the authors of their entire ruin.

The ill ſucceſs which had attended his firſt application to the king of Egypt would have deterred Moſes from appearing again before that prince, had not God encouraged him by freſh aſſurances of his determination to bring the Iſraelites out of their bondage with a triumphant arm, and inveſted him with a miraculous power over Pharaoh, (ch. vi.) to be exerciſed in ſuch diſplays of divine judgment on that proud monarch and his people, as ſhould force him to diſmiſs them. Thus encouraged, Moſes, accompanied by his brother, preſented himſelf again before Pharaoh, and confirmed his former meſſage by a miracle; which was followed, at different periods, by nine others, inflicting the moſt dreadful calamities upon the Egyptians as puniſhments for their continued oppreſſion of the Iſraelites. For a particular account of theſe extraordinary events, and of the effects produced by them upon Pharaoh, we muſt refer our readers to the ſame book of Exodus, ch. vii.–x. When, after the tenth miracle had been wrought, the king ſtill obſtinately refuſed to obey the divine meſſage, it is ſuppoſed that Moſes announced to him the approaching finiſhing ſtroke of the divine juſtice upon all the firſt-born of men and cattle throughout Egypt, and retired to his people in the land of Goſhen. From having been witneſſes to the dreadful judgments which the Egyptians had felt, they were now diſpoſed to receive his commands with the utmoſt reſpect; and, as Moſes knew that the effect of the predicted miracle would be an entreaty for their immediate departure, he directed them to borrow of the Egyptians jewels of gold and of ſilver, rich apparel, and other precious things, (ch. xi.) and to make ready for celebrating the paſſover. This feſtival was to be now obſerved for the firſt time, (ch. xii.) and was afterwards to be kept annually in commemoration of their great deliverance from the tyrannical yoke of the Egyptian monarch.

On the appointed night, this rite was duly celebrated with the ceremonies which Moſes had directed; and, while the Iſraelites were afterwards waiting in ſilence, knowing what ſlaughter would take place among the Egyptians, at midnight the executioners of the divine juſtice ſmote all the firſt-born throughout Egypt with inſtantaneous death, from the firſt-born of Pharaoh, who ſat on his throne, to the firſt-born of the impriſoned captive, and of all cattle; (ver. 29.) So great was the terror which this dreadful mortality created in the hitherto obſtinate Pharaoh, that, ſending for Moſes and Aaron, he not only gave his conſent to the requeſt which they had repeatedly preferred, but urged and preſſed the immediate departure of the Iſraelites, with their children, cattle, and all that they had; (ver. 31, 32.) The Egyptians, likewiſe, were impatient to hurry them out of their land, fearful that the further detention of that people would bring on them entire deſtruction; and, to haſten them, they freely parted with the moſt valuable things which the Iſraelites wiſhed to borrow of them; (ver. 33–36.)

No ſooner had Moſes returned to Goſhen from the preſence of Pharaoh, than, unwilling to give his changeable temper time to relax, he made the preconcerted ſignals for collecting the whole body of the Iſraelites at a place of rendezvous called Rameſes, (ver. 37.) whence he began his march at their head before break of day. They conſiſted of about ſix hundred thouſand men, beſides women and children; together with a mixed multitude of ſtrangers, who were probably *proſelytes of the gate*, or perſons who had renounced idolatry, though they were not yet circumciſed; and all their numerous flocks and herds. Their firſt encampment was at Succoth, where they were properly arranged according to their tribes and families, and the future order of their march ſo regulated, that there might be no confuſion in the movements of ſuch a vaſt aſſemblage. To direct them in their courſe, God was pleaſed to appoint a miraculous cloud, or volume of ſmoke, to precede them by day, and a pillar of fire by night, (xiii. 17–22.) under the guidance of which, in two marches more, Moſes brought them to Pi-hahiroth on the coaſt of the Red Sea.

In the mean time Pharaoh and the infatuated Egyptians repented that they had loſt the ſervitude of the Iſraelites, and ſuddenly raiſed a formidable army for the purpoſe of purſuing them, and compelling them to return to their former bondage; (ch. xiv.) This force Pharaoh led with ſo much expedition, that he overtook them on the approach of night at Pi-hahiroth, and pitched his camp in ſuch a poſition, that they were hemmed in by the ſea, impaſſable mountains, and his own forces. The appearance of this army raiſed the utmoſt conſternation and deſpondency in the puſillanimous Iſraelites, who ſeemed already to have forgotten the wonderful interpoſitions of Providence in their favour, and ungratefully reproached Moſes for leading them out of Egypt to periſh under the ſwords of the Egyptians in the wilderneſs. After meekly liſtening to their upbraiding language, Moſes comforted them with the aſſurance that this would be the laſt time of their ſeeing the Egyptians; and he had no ſooner diſmiſſed them, than God commanded him to direct their march towards the ſea, promiſing that, upon his ſtretching out his rod over it, the waters would divide and make way for the Iſraelites to go through it as on dry land, while Pharaoh and his army, venturing to purſue them, ſhould periſh in the returning waves. The events having correſponded with this promiſe, Moſes inſtituted a feſtival of ſeven days' continuance, in commemoration of the ſignal deliverance which the Iſraelites had experienced, and the total overthrow of Pharaoh and his hoſt. For this occaſion he compoſed a hymn (ch. xv.) to be ſung alternately by the men and women, celebrating the greatneſs of God's power diſplayed in theſe events, and his amazing mercy towards his people, which, for ſublimity and beauty of compoſition, not only rivals but ſurpaſſes the beſt pieces of the kind that Greece or Rome ever produced. The deliverance of the Iſraelites from their bondage in Egypt took place in the year 1491 B.C.

Moſes now entered upon the arduous taſk of conducting his nation towards the land promiſed to their fathers. Had it been conſiſtent with the wiſdom of Providence that they ſhould arrive at it by the moſt ſpeedy courſe, a few days' march might have led them to the borders of that country. But they were to be trained by a ſeries of hardſhips and difficulties to encounter the warlike people whom they were to ſupplant; their ſtubborn and ungrateful temper, and their fondneſs for idolatry and ſuperſtition, were to be corrected by trials and puniſhments; and a peculiar ſyſtem of legiſlation was to be formed and eſtabliſhed among them, intended to preſerve them from the corruptions of the reſt of the world, and to maintain the belief in the one living and true God, before they were to enter on the promiſed inheritance. Moſes, therefore, was to follow the guidance of the miraculous cloud and pillar in his progreſs with them. For the particulars of their movements we muſt refer to the Scriptures, and content ourſelves with mentioning the principal incidents which occurred under the adminiſtration of their great legiſlator.

From the coaſt of the Red Sea, Moſes led the Iſraelites into the wilderneſs of Shur, where their want of water after three days' travelling, and finding that which they diſcovered on their arrival at Marah too bitter to drink, excited the loudeſt complaints againſt their conductor; (ch. xv. 23.) In this emergency Moſes was directed to a tree, which, either by its intrinſic virtue or by a new miracle, ſweetened the water upon being caſt into it; and he was thus enabled to quell for the preſent the riotous diſpoſition of his followers. It diſplayed itſelf, however, more violently than before upon their arrival at the wilderneſs of Sin, where proviſions became exceedingly ſcarce; and their murmurs ſeemed to be directed againſt God himſelf, for permitting them to be decoyed from the fleſh-pots of Egypt into a deſert where they could expect nothing but to die with hunger; (ch. xvi.) In theſe circumſtances Moſes was directed to appeaſe them by aſſurances, that they ſhould have plenty of fleſh that very evening, and that on the morning of the following day bread ſhould be rained down for them from heaven. Accordingly, at the time mentioned in the firſt promiſe, whole clouds of quails from Egypt came pouring into the camp, where they were caught in incredible quantities; and on the next morning, before ſun-riſe, Moſes went at their head out of the camp into the wilderneſs, where he ſhowed them the ground covered with a ſmall ſhining ſubſtance, bearing a reſemblance to coriander-ſeed in reſpect to ſize, of which he told them they ſhould find a ſupply at that time every morning, excepting that of the Sabbath, and inſtructed them how to prepare it as a ſubſtitute for bread. Of this ſubſtance, to which they gave the name of *manna*, he directed them to gather only a limited quantity for each perſon, and expreſsly prohibited them from leaving any of it till the next day; but even theſe orders ſome of the people ventured to diſobey, out of a ſpirit of obſtinacy, or blameable curioſity.

The next extraordinary inſtance of the wayward behaviour of the Iſraelites towards Moſes, was exhibited on their journey from the deſert of Sin towards Mount Horeb, at a place called Rephidim, (ch. xvii.) where they murmured againſt him for want of water; and, when he remonſtrated with them at the criminal impatience which they diſcovered under their temporary ſuffering, they appeared ready to ſtone him. On this occaſion he had recourſe to God, who ordered him to go accompanied with the elders of Iſrael to Mount Horeb, which was at no great diſtance, and there ſtrike a rock with his miraculous rod in their preſence; and, upon his doing ſo, water guſhed out from it in ſufficient ſtreams to ſupply the demands of the Iſraelites and their flocks and herds. While the Iſraelites continued encamped at Rephidim, hoſtilities were commenced againſt them by the Amalekites; upon which Moſes appointed Joſhua commander of a ſufficient force to meet them in the field, informing him, that during the time of action he would take his ſtation on a neighbouring hill, with the miraculous rod in his hand. Accordingly, when Joſhua marched out againſt the enemy on the following day, Moſes aſcended the hill accompanied by Aaron and Hur; and, as the engagement commenced, held up his hands in prayer, extending the rod as a ſignal for the encouragement of the Iſraelites. While he continued them in this poſition, it was obſerved that Joſhua was ſucceſsful againſt the enemy; but when, through fatigue, he let them down, the advantage was on the ſide of Amalek. At length he was ſeated upon a ſtone, with Aaron and Hur on each ſide of him, who aſſiſted in holding up his hands till towards ſun-ſet, when the Amalekites were entirely defeated with very great ſlaughter. This victory over a powerful and warlike enemy, by a people unexperienced in martial deeds, was juſtly regarded as a moſt ſeaſonable and important event, and determined Moſes to erect an altar upon the ſpot in commemoration of it, which he called *Jehovah Niſſi*, or "the Lord is my ſignal;" becauſe, ſaid he, it will ſerve as a ſignal of the war, that is between the Lord and the Amalekites, from generation to generation.

Before the camp was removed from Rephidim, Jethro, the father-in-law of Moſes, came to pay him a viſit, (ch. xviii.) and brought to him his wife Zipporah and his two ſons, whom he received with the greateſt joy and affection, and informed them of the wonderful events which had preceded and followed the deliverance of the Iſraelites from the yoke of Pharaoh. This account Jethro heard with ſentiments of the deepeſt reverence for the God of Iſrael, to whom he offered ſacrifice, Aaron and all the elders of the people joining in the ſolemnity, out of the reſpect due to ſo venerable a perſon. On the following day, Jethro, obſerving that Moſes was occupied from morning till night in hearing complaints and deciding differences between the people, and well knowing that he muſt ſink under the frequent repetition of ſuch fatigue, added to the weight of his other duties, adviſed him to ſelect a competent number of men of integrity and ability to whom to commit the judging and well-ordering of the community, while he abſtained from every buſineſs himſelf that was not of the higheſt moment. This advice Moſes adopted, by appointing judges to ſit over thouſands, over hundreds, and over tens, reſerving only the moſt important cauſes for his own adjudication; by which means he eaſed himſelf of a load of care, and found more leiſure to apply to the higher departments of government.

Soon after this, Jethro returned to his own country; and Moſes gave directions for marching from Rephidim to the wilderneſs of Sinai; (ch. xix.) Here the Iſraelites remained longer than at any other ſtation; and the ſcene was rendered famous by the wonderful promulgation of their law, and the appointment of the principal ceremonies which they were afterwards to obſerve. While they were pitching their tents at a preſcribed diſtance from Mount Sinai, Moſes went up to the mountain alone, and was there commanded to remind the people of the wonders which had been wrought in their favour, and to aſſure them, that, if they obeyed the divine precepts which ſhould thence be iſſued, God would regard them as his peculiar people, and favourite nation. Upon this, Moſes returned to the camp, and aſſembled the elders, whom he directed to communicate the divine meſſage to the tribes; and, having received their promiſes of obedience, he charged them to prepare themſelves by purification in the oriental manner againſt the third day after that time, when they ſhould be witneſſes to extraordinary ſcenes, which ſhould give them the fulleſt ſatisfaction with reſpect to the ſpecial preſence of the Deity, and the divine authority of the laws that he was to be the inſtrument of conveying to them. In the mean time he ſtrictly prohibited them from approaching the mountain, under the ſevereſt penalties, till they ſhould be ſummoned to attend him towards it on the appointed day, by the ſound of a miraculous trumpet. On the morning of the third day, when the minds of all the Iſraelites were wrought up to the higheſt pitch of expectation, Mount Sinai was diſcovered to be ſurrounded with a thick cloud, out of which proceeded the moſt terrifying thunders and lightnings. The expected ſound of the trumpet being heard, Moſes advanced at the head of the people towards the mountain, till they arrived at a barrier which he had ordered to be erected; and there they beheld the top of Sinai covered with fire and ſmoke, while its foundations ſeemed to ſhake under their feet. In the midſt of this dreadful ſcene, Moſes was ſummoned to aſcend the mountain, accompanied by his brother Aaron, and they were both ſoon buried in the cloud. After being admitted to the place of the divine preſence, Moſes was commanded to take his ſtation lower down on the mount, "ſtanding," as he deſcribes it, "between God and the people." Theſe ſolemn preparations being finiſhed, and the thunders as well as the loud noiſe of the trumpet having ceaſed, an articulate voice was heard from the midſt of the fire and ſmoke, pronouncing the ten commandments, which were to be the foundation of the moral code of the Iſraelitiſh government. In the mean time the people, aſtoniſhed at what they ſaw and heard, removed farther off; and, after the divine voice had ceaſed ſpeaking, they were joined by Moſes, whom they entreated that this awful ſcene might proceed no further, leſt, if they ſhould hear the voice of God again, they might die with horror and amazement; promiſing all poſſible obedience to the divine commands, and requeſting that all future communications of the divine will might come through him alone. This awe and readineſs of obedience which they profeſſed Moſes highly commended, and went up again to the mountain, where he received additional precepts and ordinances, both moral and ceremonial, which were, with the decalogue, to form the heads of a covenant between God and the Iſraelites; ch. xx–xxiii.

After his return to the camp, Moſes erected an altar, and offered burnt-offerings and peace-offerings upon it; (ch. xxiv.) and, having cauſed the contents of the new covenant to be read to all the people, he received a ſolemn promiſe from them that they would faithfully adhere to it, and ratified it by the ceremony of ſprinkling the altar, the book, and the people, or the elders their repreſentatives, with the blood of the victims. Immediately afterwards, Moſes took with him Aaron, Nadab, Abihu, and ſo many as ſeventy of the elders of Iſrael, and brought them near to the mountain, where they beheld ſome ſymbol of the divine preſence ſufficient to convince them that they were tranſacting with the Divine Being himſelf; and, having then committed the care of the people to them, took Joſhua with him up to the mountain, and entered himſelf into the cloud. Here he remained forty days, during which he was inſtructed in the whole plan of the religion which was beſt adapted to the diſpoſition and circumſtances of the Iſraelites, and received two tables of ſtone, on which the ten commandments were written, or engraved, without human means, by the immediate direction of God; ch. xxv–xxxi.

In the mean time, the people, when more than a month had elapſed after Moſes was ſeen to enter the cloud, finding that he did not return, probably concluded that he was dead, and might think that God as well as his prophet had forſaken them; (ch. xxxii.) In this ſtate of uncertainty they aſſembled in a tumultuous manner about Aaron's tent, and, having contracted a propenſity to image-worſhip during their abode in Egypt, demanded that he ſhould make an idol to be carried before them, probably preſcribing that it ſhould be a likeneſs of the Egyptian Apis. This demand Aaron does not appear to have reſiſted with becoming fortitude, but, overcome by his fears, he conſented to receive their ear-rings and other jewels of gold, and to caſt them into the form of a calf, which he ſet upon a pedeſtal, and erected an altar before it. At this ſight the infatuated populace exclaimed, "This, O Iſraelites! is your god, who brought you out of the land of Egypt;" and Aaron appointed the following day as a ſolemn feſtival in honour of the new deity, which was begun with burnt-offerings and peace-offerings, and concluded with feaſting, dancing, and ſinging. Moſes, being informed, by the Almighty himſelf, of the behaviour of the Iſraelites, with ſuch threatening expreſſions againſt them, as made him apprehend that ſome heavy puniſhment, if not entire deſtruction, was ready to fall upon them, (ver. 10.) endeavoured, by humble but earneſt interceſſion, to deprecate the effects of the divine diſpleaſure: he then took the two tables, and haſtened down the mountain with Joſhua, that he might ſpeedily correct the alarming evil. As ſoon as he came near the camp, and ſaw the people dancing round the object of their idolatry, he was ſo agitated at the ſcene, that he broke the two tables in pieces by throwing them on the ground; and, coming up to his brother, he upbraided him in the ſtrongeſt terms for countenancing the criminal behaviour of the people, which threatened their ruin, by cauſing them to forfeit the divine protection. He then proceeded to deſtroy the idol, and afterwards reduced it to powder, which he threw into water, of which all the people drank by his order. In the mean time, having called upon thoſe to come forward who were willing to vindicate the inſulted honour of the true God, and being joined by the Levites, he commanded them to put on their ſwords, and to kill, without regard to age, quality, kindred, or acquaintance, all whom they ſhould find obſtinately perſevering in their profane feſtal rites. This command they immediately obeyed, and put to death about three thouſand men whom they diſcovered to be delinquents. By ſuch a dreadful example of puniſhment the Iſraelites ſeemed to be awakened to a ſenſe of their crime, and were filled with apprehenſion concerning the judgments which might ſtill be inflicted upon them. In theſe circumſtances Moſes interceded ſo powerfully on their behalf, that the Divine Being was pleaſed ſo far to pardon their offence, as to renew his promiſe of conducting them to the land of Canaan; but ſaid, that their conduct ſhould not be wholly forgotten, but would be conſidered in his future diſpenſations with reſpect to them. This promiſe, however, was to be ſo far conditional, that before they could claim it they were to obſerve a ſolemn and public act of humiliation, and produce the fruits of ſincere contrition and repentance.

After the day of humiliation was paſſed, Moſes was directed to aſcend Mount Sinai again, with two tables of ſtone which he had been ordered to prepare for the purpoſe of having the decalogue re-written or engraved on them; (ch. xxxiv.) Here he continued another forty days, during which he received further inſtructions relative to the ſyſtem of policy and religion which he was to eſtabliſh, and was favoured with a new and extraordinary manifeſtation of the divine preſence, to ſupport and conſole him under the labours of his arduous office. What the appearance was which he now ſaw, and which is called "the glory of God," we are not informed; but the effect of it was ſuch a glorious luſtre on the countenance of Moſes himſelf, that, when he deſcended from the mount with the two tables of commandments, Aaron and the elders of the people were deterred by the dazzling brightneſs from approaching him, till he covered his face with a veil. To the ſame expedient he was obliged to have recourſe for ſome time afterwards, whenever they met to converſe with him.

The next act of Moſes was to call an aſſembly of the people, (ch. xxxv.) in which he announced God's renewal of his covenant with them; enjoined the ſtrict obſervance of the ſabbath; declared the command which he had received to erect a tabernacle of the moſt coſtly materials, for the reſidence of the ſymbols of the divine preſence; and invited them to liberality in their voluntary offerings for the conſtruction of this undertaking. On this occaſion there appears to have been a generous emulation in all the people to contribute their moſt valuable effects and ornaments towards this work; the moſt ſkilful artiſts in all branches of curious workmanſhip were employed; and they proceeded with ſuch zeal and diligence, that the tabernacle, and all its rich furniture and coſtly apparatus, were completed and ſet up in leſs than ſix months. Moſes now proceeded to conſecrate the building with ſolemn ceremonies, and afterwards anointed Aaron high-prieſt, and his ſons his aſſiſtants, who offered all kinds of ſacrifices upon the new altar; and thus commenced, in the year 1490 B. C. that pompous worſhip of the Deity which was adapted to the preſent ſtate of the minds of the Iſraelites, who were incapable of being affected with a purer and more ſpiritual one. As an indication that God approved of what had been done, the cloud, which was the ſymbol of the divine preſence, deſcended upon the tabernacle, where it appeared as a pillar of fire in the night, and by its movements directed the journeyings of the people through the wilderneſs. (Exod. xl. Lev. viii. ix.)

Not long after this, an awful inſtance of the puniſhment of diſobedience was diſplayed in the caſe of perſons who were nearly allied to Moſes himſelf: for his two nephews, Nadab and Abihu, the ſons of Aaron, were ſtruck dead by fire from heaven, for preſuming to burn incenſe in the tabernacle with other fire than that on the altar, contrary to the divine command. (Lev. x.) To ſhow his impartiality in the treatment of offenders of whatever rank, Moſes commanded that their bodies ſhould be immediately carried out of the camp, and buried without any funeral pomp; and he prohibited the family of Aaron from practiſing any of the rites of mourning on that melancholy occaſion.

At length, after the camp had remained nearly twelve months in the neighbourhood of Mount Sinai, the Iſraelites re-commenced their marches through the wilderneſs under the guidance of the miraculous cloud; (Num. x. 11.) However, they had not proceeded more than three days, before ſtrong ſymptoms of diſcontent were diſcovered among them, the pretended cauſe of which is not mentioned in the ſacred writings. But, whatever it might be, it was highly offenſive to the Divine Being, who cauſed many of them to be deſtroyed by an extraordinary fire, which broke out in different parts of the camp, and which ceaſed as miraculouſly as it had begun, at the interceſſion of Moſes; (Num. xi.) From this early proof of their rebellious temper after the wonders which had been wrought among them, Moſes became ſenſible that the weight of government was likely to prove ſo heavy, that he ſhould require more aſſiſtance in ſuſtaining it than he could derive from the aid of the magiſtrates whom he had appointed by the advice of Jethro. He, therefore, earneſtly requeſted the divine direction in this matter; when God was pleaſed to command him to chooſe ſeventy of the elders of Iſrael, who were moſt conſiderable for wiſdom and integrity, and to erect them into a ſupreme court, promiſing to beſtow on them a portion of the ſame ſpirit which he had communicated to him, that they might bear the ſhare of the burden with him. This court Moſes eſtabliſhed without delay; and he found the advantage at the very next encampment of the Iſraelites at a ſmall diſtance from the Red Sea. A mixed multitude which had followed them from Egypt began now to murmur at being confined to live upon manna, and to regret the abundance and deliciouſneſs of the fiſh, fruits, and vegetables, which they enjoyed in that country. The diſſatisfaction which they expreſſed ſoon ſpread through the whole camp; and the people aſſembled in crowds round the tent of Moſes, demanding, in a tumultuous manner, that he ſhould provide them fleſh to eat, inſtead of the manna, which was now become loathſome to them. Upon this, Moſes ſummoned the ſeventy elders to the door of the tabernacle, where ſome ſtriking manifeſtation of the ſpecial preſence of God drew the attention of the whole camp, and he communicated to the elders ſuch a ſhare of his ſpirit, that they all began to propheſy, or to enter on the duties of their new office with a degree of authority, vigour, and influence, adapted to the criſis. At the ſame time Moſes was directed to inform the people, that, ſince they demanded fleſh, they ſhould be provided with ſuch food, till they ſhould nauſeate it as much as they now did the manna. Accordingly, a ſtrong wind brought ſuch aſtoniſhing flocks of quails, that they covered the whole camp and ſurrounding country for ſeveral miles, and, being tired by their long flight, were caught by the people in quantities ſufficient not only for an immediate ſupply, but to be preſerved for future uſe. The firſt care of the murmurers was to glut themſelves with this tempting food; but in the midſt of their feaſting they were ſmitten with the peſtilence or plague, which carried off great numbers of them as a puniſhment for their ſeditious and diſcontented conduct.

The next occaſion on which the divine power was exerted in ſupport of the authority of Moſes, was owing to an unexpected diſpute in his own family, (ch. xii.) Miriam as well as Aaron appearing to have caſt unworthy reflections upon his wife, and to have aimed at poſſeſſing an equal if not ſuperior ſhare of power than himſelf in affairs of government. As a token of the divine diſpleaſure at their conduct, Miriam, who ſeems to have been the moſt faulty of the two, was ſtricken with a ſudden leproſy; which had a proper effect upon them both, and led them ſubmiſſively to apply to their brother for his interceſſion with God on her behalf, in conſequence of which ſhe was cured of that diſorder.

In the fourth month of the ſecond year after their leaving Egypt, the Iſraelites encamped in the wilderneſs of Paran, when Moſes was commanded to ſend twelve proper men, one out of each tribe, to view the whole land of Canaan, to examine the ſtrength of its cities and inhabitants, the fertility of the ſoil and its productions; (ch. xiii.) After an abſence of forty days theſe meſſengers returned to the camp, and delivered their report to Moſes and Aaron, in the preſence of the elders and of all the people. They began by extolling the richneſs of the country, and ſhowed ſpecimens of the fine fruits which it produced, particularly a bunch of grapes of extraordinary ſize, which had been ſuſpended on one of their ſtaves, and carried on the ſhoulders of two perſons, to prevent the fruit from being bruiſed. As ſoon, however, as they obſerved that their account had inſpired the people with an eager deſire of becoming the poſſeſſors of ſuch a rich inheritance, by a ſpeedy conqueſt, ten of the envoys altered their tone, and maintained that ſuch an undertaking was impracticable, on account of the ſtrength of the fortified cities, and the bravery and gigantic ſtature of the inhabitants. Joſhua and Caleb, on the contrary, who were the remaining two of the deputation, adhered ſteadily to a favourable report; (ch. xiv.) and the latter endeavoured to diſſipate the apprehenſions which he perceived that the repreſentations of the cowardly ten had created in the minds of the people, by proving their ability for ſuch a glorious enterpriſe. But his efforts were in vain, and the people wholly deſpaired of overcoming the obſtacles which oppoſed the conqueſt of Canaan. Before the following morning their murmurings grew to ſuch a height, that they talked of returning again into Egypt, as preferable to embarking in ſuch a dangerous warfare, and even began to conſult about chooſing a leader to conduct them to the land of their former ſervitude. But, when they were upon the point of breaking out into open inſurrection, they were deterred by ſome threatening appearances in the cloud which then covered the tabernacle; and their fears of the Canaanites were converted into apprehenſions of ſome terrible judgment which might be immediately inflicted on them, as a puniſhment of their puſillanimity and rebellious ſpirit. On this occaſion Moſes was commiſſioned to announce a divine decree, that, as a mark of God's diſpleaſure on account of their infidelity and ingratitude, not one of their number, who were above the age of twenty years, excepting Joſhua and Caleb, ſhould ever enter into the promiſed land; but that they ſhould wander from place to place during forty years, till they all periſhed in the wilderneſs. As an earneſt of the fulfilment of this decree, ten meſſengers, by whoſe falſe report they were inſtigated to this rebellion, were all deſtroyed by a ſudden death. This ſevere ſentence excited ſo much alarm and ſhame in the cowardly multitude, that they preſented themſelves ready armed on the following morning before Moſes, (ver. 40.) and declared their determination to proceed immediately to the conqueſt of the country. It was in vain that he endeavoured to divert them from ſo raſh an enterprize, by repreſenting that they could not now expect ſucceſs, ſince by their late behaviour they had forfeited the divine aſſiſtance and protection. Determined to try their fortune, they marched againſt the Amalekites and Canaanites, who ſurpriſed them in the paſſes of their mountains, and drove them back with great ſlaughter to the camp.

During the remaining years which the Iſraelites ſpent in the wilderneſs, they were prepared for encountering theſe warlike nations by their expeditions againſt the Amorites and Midianites: and they were trained to order and obedience, by the ſevere puniſhment which ſpeedily followed their acts of rebellion and wickedneſs. Of the numerous inſtances of their correction which occurred under the adminiſtration of Moſes, we ſhall notice a few of the principal before we relate the concluding actions of his life. About the year 1471 B.C. the rebellion of Korah broke out; (ch. xvi.) He was one of the chiefs of the tribe of Levi, and had drawn a conſiderable party into his intereſt, among whom were Dathan and Abiram, heads of the tribe of Reuben. They took offence at the great diſtinction of the family of Aaron above the reſt of the Levites, and united in a plot for ſupplanting it. When it was ripe for being carried into execution, Korah appeared at the head of the conſpirators, and openly upbraided Moſes and Aaron with unjuſt ambition, in engroſſing all authority in civil and religious concerns, to the excluſion of the reſt of the congregation, whom he affirmed to have equal claims to it with themſelves. For this ſeditious addreſs Moſes ſeverely rebuked Korah and his party, reproaching them for their ingratitude and arrogance in not being contented with the privileges which God had conferred on their tribe, and aſpiring to the high-prieſthood, which he had been pleaſed to reſerve for Aaron and his poſterity. He then challenged them to appear on the following morning at the door of the tabernacle, having each of them a cenſer in his hand; when he promiſed that God would declare himſelf openly in favour of thoſe whom he deſigned for that high office. Afterwards he ſent privately for Dathan and Abiram, with the deſign of endeavouring to reclaim them from a party into which he ſuppoſed them to have been incautiouſly ſeduced; but, inſtead of coming to him, they returned an inſolent anſwer, charging him with having decoyed the whole nation out of the fertile land of Egypt into the wilderneſs, for the ſole purpoſe of reducing them under his own tyranny. Againſt the injuſtice of this accuſation Moſes made a ſolemn appeal to the Divine Being, and early next morning went with Aaron towards the tabernacle. Hither Korah ſoon afterwards repaired, at the head of two hundred and fifty Levites, each of them carrying a copper cenſer with incenſe, and followed by a prodigious multitude, who came either to be ſpectators of the ſcene which was to take place, or to ſupport the cauſe of the conſpirators. Upon this, Moſes and Aaron were commanded to ſeparate themſelves from the rebellious crew, leſt they ſhould periſh in the deſtruction that was ready to fall upon them; but, upon the interceſſion of the former, he was permitted to warn the people to quit Korah and his company, and they followed him to the quarters of the Reubenites, where Dathan and Abiram with their families were ſtanding at their tent-doors. Moſes now addreſſed himſelf to the aſſembly around him, and ſaid that, "if thoſe rebels ſhould die a common death, he would give them leave to look upon him as an impoſtor; but that, if the earth ſhould immediately open in a miraculous manner, and ſwallow them up alive, he truſted that the divine authority by which he acted would be no longer queſtioned." Scarcely had he ſpoken to this purport, when the earth clave aſunder under the feet of the conſpirators, and buried them alive, with all their families and ſubſtance. Terrifying as theſe events were, they had not the effect of cruſhing the ſpirit of inſurrection which the rebellious chiefs had excited; for, ſo ſoon as on the following morning, (ver. 40.) their numerous partiſans had the audacity to advance in a tumultuous manner againſt Moſes and Aaron, accuſing them of having murdered the people of the Lord, as they called their ſeditious leaders. Upon this, the two brothers haſtened to the tabernacle, where threatening appearances in the cloud ſuſpended for ſome time the fury of the inſurgents. Here Moſes, who foreſaw that ſome terrible judgment was ready to be inflicted on the guilty people, commanded his brother to take his cenſer, and to endeavour by the preſcribed rites to appeaſe the divine diſpleaſure; but, though Aaron made all poſſible haſte to obey him, a dreadful plague had already begun its ravages, and raged ſo furiouſly, that it had deſtroyed fourteen thouſand and ſeven hundred men, before its progreſs was ſtayed on his ſtanding with his cenſer between the living and the dead.

In the year 1453 B.C. while the Iſraelites were encamped at Kadeſh in the deſert of Zin, (ch. xx.) they diſcovered a freſh diſpoſition to rebellion, on account of the want of water; and Moſes was commanded by God to furniſh them with a ſupply out of the rock, as he had done formerly at Mount Horeb. On this occaſion, his conduct and that of Aaron were ſo diſpleaſing to God, that they were excluded from entering the promiſed land, and condemned to die in the wilderneſs; but, owing either to the brevity or imperfection of the narrative, the circumſtances in which their fault principally conſiſted do not ſufficiently appear. From Kadeſh the camp was removed to the foot of Mount Hor, on the frontier of the land of Edom. Here, in obedience to the divine command, Moſes took Aaron, and Eleazar his ſon, to the top of the mountain, and in the view of all the people ſtripped Aaron of his prieſtly robes, and put them on his ſon, inveſting him by that ceremony with the office of high-prieſt; which was no ſooner done than Aaron died, and was buried on that mountain with ſuch privacy, that the place of his interment could never afterwards be diſcovered.

The next encampment of the Iſraelites was at Zalmonah, (xxxiii. 41.) where, tired by the length of their journey, and impatient for more ſubſtantial bread than that made of manna, they began to murmur, not only againſt Moſes but againſt the Divine Being himſelf, for protracting their ſtay in the wilderneſs. But this evidence of their rebellious diſpoſition met with a ſpeedy and ſevere puniſhment: for it provoked God to ſend among them immenſe numbers of poiſonous ſerpents, (ch. xxi.) the bite of which proved mortal to vaſt multitudes of the ſeditious crew. This chaſtiſement awoke them to a ſenſe of their guilt, which they acknowledged before Moſes with profeſſions of ſincere repentance, entreating him to intercede with God for their deliverance from that dreadful evil. In anſwer to his prayers, he received a divine command to caſt a brazen ſerpent, of the ſame figure with thoſe that infeſted them, and to elevate it on a high pole, with a promiſe that as many as were bitten by thoſe reptiles ſhould receive a miraculous cure by looking upon it. The plague having been by this means removed, the Iſraelites reſumed their marches towards Canaan; and, being forbidden to commit hoſtilities againſt the Moabites and Ammonites, they ſucceſſively conquered the territories of the kings of the Amorites and of Baſhan, who endeavoured to obſtruct their progreſs, and encamped in a peaceful manner near the territories of Balak king of Moab. That prince, however, looked upon them with a jealous eye, (ch. xxii.) and entered into a ſecret alliance with the Midianites and Ammonites, for the purpoſe of oppoſing them; but, before he declared himſelf their enemy, he determined to follow the advice of Balaam, and attempt the ſeduction of them to idolatry with the aid of ſome of the moſt beautiful women in the country. With this view he ordered his ſubjects to celebrate a grand feaſt to Baal-Peor, and to invite the Iſraelites to it. At the feſtivals of this idol the moſt ſhameful kinds of debauchery were practiſed; and the Iſraelites who attended on the preſent occaſion had not the virtue to withſtand the faſcinating allurements of the females to whom they were introduced, but were ſeduced by them at firſt to drunkenneſs, afterwards to lewdneſs, and then to join in the rites of idolatrous worſhip; (ch. xxv.) With theſe deluders they became ſo enamoured, that they did not ſcruple to bring numbers of them into their camp; by which means the infection ſoon ſpread widely among the people. For this defection God puniſhed them with a peſtilence, which carried off twenty-three thouſand of the offenders; and he commanded Moſes to erect a ſpecial court of judicature, conſiſting of the heads of all the families, by whoſe ſentence a thouſand more were condemned and executed. Soon after this ſignal diſplay of the divine judgment on rebellion and idolatry, Moſes was ordered to take an account of all the children of Iſrael who were able to bear arms, that is, from twenty years of age and upwards, (ch. xxvi.) and found them to amount to ſix hundred and one thouſand ſeven hundred and thirty, beſides the Levites; in which liſt none of thoſe were to be found who were above twenty years of age at the time of the rebellion occaſioned by the falſe report of the ten cowardly meſſengers, excepting Joſhua and Caleb, all the reſt having periſhed in the wilderneſs, according to the ſentence pronounced againſt them by God himſelf.

As the time was now approaching when the Iſraelites were to enter the promiſed land, Moſes was alſo directed to prepare for his own death on Mount Nebo, (ch. xxvii. 12.) whence he was to take a view of that country which his conduct in the deſert of Zin had debarred him from entering. This notice of his death he could not but receive with joy, as a paſſport to a haven of repoſe after a life of inceſſant trouble and fatigue; and, finding his end ſo near, he diligently employed his few remaining days in ſettling the affairs of the public in the beſt order in his power. His firſt care was, to have Joſhua confirmed his ſucceſſor, in the moſt public and ſolemn manner; to which end he brought him forward in the ſight of the whole congregation, laid his hands upon him, and, having preſented him to Eleazar the high-prieſt, and given him all neceſſary directions, cauſed him to be proclaimed head and general of all Iſrael. He alſo appointed the limits of the land which they were to conquer, and the diſtribution of it by lot according to God's command; and added various other directions and regulations, relative to civil and eccleſiaſtical matters: (ch. xxviii–xxxv.) Afterwards he aſſembled the people around him, and recapitulated to them, in a long and pathetic ſpeech, all that had taken place ſince their departure from Egypt to that time. (Deut. i–xxviii.) In a ſubſequent aſſembly, he cauſed the whole nation ſolemnly to ratify the covenant which their fathers had made with God in Horeb; (ch. xxix.) and concluded with calling heaven and earth to witneſs the truth of what they had heard from him, the reaſonableneſs of thoſe laws which God had given them, and the certainty of thoſe bleſſings or curſes which would follow the obſervance or the breach of them; (ch. xxx. xxxi.) To impreſs what he had delivered the more ſtrongly on their minds, he compoſed a pſalm or canticle, (ch. xxxii.) in which the ſubſtance of his addreſſes is expreſſed in ſuch elegant and lively language, as juſtly entitle it, in the eſtimation of every reader of true taſte, to be pronounced an inimitable piece of ancient poetry. Having cauſed it to be read before all the people, he delivered it to Joſhua, to be afterwards learned by them and their poſterity. The laſt tranſaction of Moſes with the Iſraelites was to ſummon them once more, to receive his farewell, and prophetic bleſſing upon the people in general and upon each tribe in particular, (ch. xxxiii.) which in many reſpects agrees with that of Jacob, and is diſtinguiſhed by a beauty and ſublimity of expreſſion that appear to have acquired additional force from the proſpect of his departure and their approaching proſperity. No ſooner had he delivered his laſt bleſſing, than he went up alone to Mount Nebo, in the ſight of all Iſrael, (ch. xxxiv.) and from Piſgah its higheſt eminence had a proſpect of all thoſe regions which God had promiſed to the poſterity of Abraham. Immediately afterwards Moſes died, at the age of 120, in the year 1451 B.C. when his mental faculties were in perfect order, and neither his eyeſight nor his natural vigour were in the leaſt impaired; and he was buried, moſt probably by Joſhua and Eleazar, but with ſo much privacy, that the place of his interment, like that of Aaron's, has never ſince been diſcovered.

We have been led inſenſibly to detail the events of the life of this diſtinguiſhed lawgiver at much greater length than we uſually beſtow upon articles of biography. But we think our readers will readily excuſe us, when the importance of thoſe events is conſidered; and we firmly believe that no ſerious and conſiderate perſon, who will carefully read the whole, in conjunction with thoſe parts of Scripture to which we have continually referred, will have cauſe to think the time ill-beſtowed or miſ-ſpent.

That Moſes was an eminently-great man will be readily admitted by thoſe even who diſpute his claims to ſupernatural communications with the Deity. We cannot, however, give up our belief in his miracles without materially affecting the credibility of the whole hiſtory, and of the other facts dependent upon it; and we ſee ſufficient evidence to induce us to take the account as it ſtands in the Scriptures, which, though not without difficulties, is not wholly irreconcileable with the dictates of reaſon and ſound ſenſe. In proof of Moſes's genuine and ardent patriotiſm, an appeal may be made to the whole hiſtory of his life, and particularly to his diſintereſted behaviour on the approach of death, when he overlooked his own family, and nominated Joſhua his ſucceſſor, whoſe experience and valour peculiarly qualified him for ſuch a poſt at a period when the great ſtruggle was about to commence with the warlike nations of Canaan. He is commended as the *meekeſt of men;* and he certainly muſt have poſſeſſed no common ſhare of meekneſs, and of magnanimity, to bear as he did for forty years the trying provocations which he received, while governing and inſtructing a moſt obſtinate and rebellious people. His zeal for the honour of the one living and true God, forms a conſpicuous feature in his character; it is indeed the principle which at once lies at the foundation, and conſtitutes the central point, of all his inſtitutions. The writings which bear his name, whether conſidered in the light of hiſtorical documents, or as furniſhing us with a ſyſtem of legiſlation, are highly intereſting and important. In the former point of view, they ſupply us with the earlieſt records of the world and of the human race, from the creation to the birth of Abraham, compriſing a period of above two thouſand years; and a particular hiſtory of the Hebrew nation, his deſcendants, carried on in a regular ſeries, till the death of Moſes. Theſe documents are recommended by their conciſeneſs and ſimplicity; and not only by ſtrong internal marks of veracity, but alſo by the teſtimony of tradition, and the diſcoveries of philoſophy. Whether ſome parts of them are to be underſtood in a literal or allegorical ſenſe, has long been the ſubject of diſpute, and is a point which it does not belong to our immediate province to diſcuſs. With reſpect to the ſyſtem of legiſlation which theſe writings contain, as far as it is of a moral nature it is unqueſtionably pure and excellent; its political and judicial regulations are wiſe and equitable; and the ritual part of it, drawn up with a particular reference to the time and people, was admirably adapted to eſtabliſh and ſecure the worſhip of the one true God, by preſerving the Iſraelites from all intermixture with other nations, and from adopting any part of their idolatrous worſhip into their own. Speaking of the great excellence of theſe writings in point of compoſition, leaving all idea of divine inſpiration out of the queſtion, Dr. Geddes ſays, "I know not if it would be too much to affirm, that, whether they be conſidered as a compend of hiſtory, or as a digeſt of laws, or as a ſyſtem of theology, or as models of good writing, they are in ſome reſpects unequalled, in none overmatched, by the beſt productions of ancient times."

That the firſt five books of the Old Teſtament, commonly known by the name of the Books of Moſes, or the Pentateuch, were actually written by him, excepting the laſt chapter of Deuteronomy, (which is thought to have been added by Ezra,) was the general opinion both of Jews and Chriſtians, till between ſix and ſeven hundred years ago, when Aben Ezra, a Jewiſh doctor, raiſed ſome doubts on the ſubject, in his notes upon Deuteronomy. Theſe doubts he was led to entertain by certain paſſages, in which mention is made of events ſubſequent to the time of Moſes. But may not theſe paſſages well be ſuppoſed to have been added afterwards, like notes in the margin, whence in time they would be incorporated with the original text? The introduction of paſſages of a like nature into other ancient writings has been accounted for in this manner without any exception; and we ſee no reaſon why the ſame method of removing objections ſhould not be allowed to the advocate for the genuineneſs of the books attributed to the pen of Moſes. Others have objected, that Moſes always ſpeaks of himſelf in the third perſon. But this manner of writing is not peculiar to Moſes; it occurs in ſeveral of our beſt hiſtorians, ſuch as Xenophon, Cæſar, and Joſephus. Dr. Geddes thinks that the firſt appearance of the Pentateuch, in its preſent form, was under the reign of Solomon, when he imagines the books were compiled from the journal of Moſes, and other ancient documents. Beſides the Pentateuch, ſome authors have attributed to Moſes the Book of Job, and eleven of the Pſalms, from the 90th to the 100th both incluſive. A few fragments of other books, of a myſterious nature, pretendedly written by him, are alſo quoted by ſome of the ancients; but of their ſpuriouſneſs, the beſt Jewiſh as well as Chriſtian critics have been long perfectly ſatisfied. *Joſeph. Antiq.* lib. ii. iv. *Geddes's Pref. Prieſtley's Notes on Scripture.*

MOS'ES, *ſ.* in ſea-language, a very flat broad boat, uſed by merchant-ſhips, amongſt the Caribbee Iſlands, to bring hogſheads of ſugar off from the ſea-beach to the ſhipping, which are anchored in the roads.

MOS'ES CHORENEN'SIS, an hiſtorian and geographer, was archbiſhop of Chorene, now Kerona, in Armenia; and flouriſhed about the year 462. He was one of the moſt learned men of his nation, having ſtudied Greek at Athens, from which language he made ſeveral eſteemed verſions into the Armenian; he was alſo well acquainted with the Syriac, and was a proficient in muſic and poetry. His principal work is a "Hiſtory of Armenia," from the deluge to the middle of the fifth century, written in his native tongue, and divided into three books and a great number of chapters. This work was firſt given to the public, with a Latin verſion, by William and George, the ſons of William Whiſton, in 1736, Lond. 4to. with a preface and appendix. Though intermixed with fable, it is a valuable piece of hiſtory, containing many narratives from the national records, not to be met with elſewhere. The ſame author compoſed an "Abridgment of Geography," which was firſt publiſhed at Amſterdam in 1668, and was added to the edition of the Hiſtory of Armenia above-mentioned. He likewiſe compoſed ſome Sacred Canticles, which are ſung in Armenian, on the anniverſary of Chriſt's preſentation at the temple. *Saxii Onomaſt.*

MO'SES PO'INT, a cape on the eaſt coaſt of Newfoundland: five miles ſouth-weſt of Cape Bonaviſta.

MOSHAB'BEHITES, or ASSIMILATORS, a ſect of Mahometans, who allowed a reſemblance between God and his creatures, ſuppoſing him to be a figure compoſed of parts, or members, either ſpiritual or corporeal, and capable of local motion, of aſcent and deſcent, &c.

MO'SHAK, a town of Arabia, in the province of Yemen: twenty miles north-weſt of Doran.

MO'SHEIM (John-Lawrence Von), a learned German Lutheran divine, and celebrated eccleſiaſtical hiſtorian, was deſcended from a noble family, and born at Lubeck in the year 1694. When young, he cultivated an acquaintance with the muſes; and, though in more advanced life he no longer wrote poetry, he diſcovered the marks of his early taſte in his various literary productions. His noble birth ſeemed to open to his ambition a fair path to civil promotion; but his zeal for the intereſts of religion, his inſatiable thirſt after knowledge, and, more eſpecially, his predominant inclination for ſacred literature, induced him to conſecrate his admirable talents to the ſervice of the church. The fame of his acquirements was ſoon diffuſed over Germany, and the univerſities of that country vied with each other in loading him with literary honours. From various quarters he received invitations to profeſſorſhips; and the firſt which he appears to have accepted was from the king of Denmark, who was deſirous of ſecuring the benefit of his inſtructions to the univerſity of Copenhagen. From this place he was called by the duke of Brunſwick to the univerſity Helmſtadt, where he received the marks of diſtinction due to his eminent abilities; filled with applauſe the academical chair of divinity; was honoured with the character of eccleſiaſtical counſellor to the court; and preſided over the ſeminaries of learning in the duchy of Wolfembuttle and the principality of Blanckenburg. When king George II. formed the deſign of giving an uncommon degree of luſtre to the univerſity of Gottengen, by filling it with men of the firſt rank in the literary world, Dr. Moſheim was deemed worthy to appear at the head of that celebrated ſeat of learning, in the quality of chancellor; and here he died, univerſally lamented, in 1755, in the ſixty-firſt year of his age.

In depth of judgment, in extent of learning, in the powers of a noble and maſculine eloquence, in purity of taſte, and in a laborious application to all the various branches of erudition and philoſophy, Moſheim had certainly very few ſuperiors. He publiſhed a Latin tranſlation of the learned Dr. Cudworth's Intellectual Syſtem of the Univerſe, illuſtrated with large annotations, which ſhow that he poſſeſſed a profound acquaintance with ancient philoſophy and erudition. In the year which terminated his uſeful labours, he preſented the public with his "Eccleſiaſtical Hiſtory," which was a conſiderable enlargement, with great improvements, of a ſmaller work in 2 vols. 12mo. entitled "Elements of Chriſtian Hiſtory." This latter work was intended almoſt wholly for young ſtudents, as a compendium of their lectures. It became very popular, and gave occaſion to the Eccleſiaſtical Hiſtory, publiſhed in the Latin language, entitled *Inſtitutiones Hiſtoriæ Eccleſiaſticæ,* &c. 4to. This work is juſtly characteriſed by Dr. Maclaine, when he calls it, "a hiſtory of the Chriſtian church, compoſed with judgment, taſte, and candour; drawn, with uncommon diſcernment and induſtry, from the beſt ſources; enriched with much uſeful learning and ſeveral important diſcoveries; and connected with the hiſtory of arts, philoſophy, and civil government." To Dr. Maclaine the Engliſh reader is under great obligations, for furniſhing him with an elegant tranſlation of this work into his native idiom, enriched with his own judicious and valuable notes, and improved by uſeful chronological tables, which have been compiled with much attention and labour from the beſt authors. This tranſlation is entitled, "An Eccleſiaſtical Hiſtory, Ancient and Modern, from the Birth of Chriſt to the Beginning of the eighteenth Century," and has undergone numerous impreſſions, in 6 vols. 8vo. Dr. Moſheim was alſo author of, 3. De Rebus Chriſtianorum ante Conſtantinum, &c. 4to. 4. Hiſtoria Mich. Serveti, 1728, 4to. 5. Diſſertationes Sacræ, 1733, 4to. and various other learned and ingenious illuſtrations of the ſacred writings, as well as ſucceſsful labours in defence of Chriſtianity, a liſt of which we have not been able to procure. He likewiſe publiſhed a collection of Sermons, in the German language, which are ſaid to be excellent ſpecimens of ſuch kind of compoſitions, and have induced ſome writers to give our author the title of "the Bourdaloue of Germany." *Prefaces to Maclaine's Verſion of the Eccleſ. Hiſt.*

MOSHEL'LY, a town of Bengal: twenty-eight miles ſouth-eaſt of Kiſhenagur.

MO'SHO. See MOSCHO.

MOSIGKAU', a town of Germany, in the duchy of Anhalt Deſſau: four miles ſouth-weſt of Deſſau.

MOSI'NA, a town of South America, in the government of Caraccas: fifteen miles ſouth-weſt of Cumana.

MO'SIO, a town of Sweden, in the province of Nericia: three miles ſouth of Orebro.

MOS'KANITZ, a town of Iſtria: ten miles eaſt of Pedena.

MOS'KIRCHEN, a town of the duchy of Stiria: ſix miles eaſt-ſouth-eaſt of Voitſberg.

MOS'KOE, or MOS'KENES, an iſland in the North Sea, near the coaſt of Norway, ſituated to the ſouth-weſt of Maelſtrom. Lat. 67. 54. N.

MOSKOVSKAI'A, a government of Ruſſia, ſo called from Moſcow, or Moſkva, the capital. It is bounded on the north and north-weſt by Tverſkoe, on the weſt by Smolenſkoe, on the ſouth by the governments of Kaluga and Tula, and on the eaſt by Vladimirſkoe; about one hundred miles long, and ninety-two broad; and contains 1,140,000 inhabitants. Lat. 54. 50 to 56. 40. N. lon. 35. to 38. E.

MOSKOVSKAI'A, a fortreſs of Ruſſia, in the government of Caucaſus: 104 miles weſt-north-weſt of Ekaterinograd. Lat. 45. 12. N. lon. 41. 26. E.

MOS'KVA, a river of Ruſſia, which riſes near Ruza, paſſes by Moſcow, and runs into the Oka near Kolomna. See Moscow.

MOS'LY, a town of Poland, in the palatinate of Belcz: eight miles ſouth of Belcz.

MOSON'GO, a province of Africa, in the kingdom of Anziko, eaſt of Pombo.

MOSPO'NY, a town of the iſland of Ceylon: twenty-four miles eaſt of Candi.

MOS'QUE, or Mosk, *ſ.* [the Turkiſh *meſgid,* or *meſchit*, properly ſignifies a temple built of wood, ſuch as the Turks firſt uſed: hence the Spaniards derive their *meſcheta,* and the Italians *moſcheta,* and the French and Engliſh *moſque* and *moſk.* Borel derives the word from the Greek *μοσχος*, a calf, becauſe of the frequent mention of a cow in the Alcoran: but others, with the greateſt appearance of reaſon, derive it from the Arabic *maſgiad,* a place of worſhip.] A temple, or place of religious worſhip, among the Mahometans.—In this *moſque* we ſaw ſeveral large incenſe-pots, candleſticks for altars, and other church-furniture, being the ſpoils of Chriſtian churches at the taking of Cyprus. *Maundrel.*

Moſques are ſquare buildings, generally conſtructed of ſtone. Before the chief gate there is a ſquare court paved with white marble; and low galleries round it, whoſe roof is ſupported by marble pillars. In theſe galleries the Turks waſh themſelves before they go into the moſque. In each moſque there is a great number of lamps; and between theſe hang cryſtal rings, oſtriches' eggs, and other curioſities, which, when the lamps are lighted, make a fine ſhow. As it is not lawful to enter the moſque with ſtockings or ſhoes on, the pavements are covered with pieces of ſtuff ſewed together, each being wide enough to hold a row of men kneeling, ſitting, or proſtrate. The women are not allowed to enter the moſque, but ſtay in the porches without. About every moſque there are ſix high towers, called *minarets,* each of which has three little open galleries, one above another: theſe towers, as well as the moſques, are covered with lead, and adorned with gilding and other ornaments; and from thence, inſtead of a bell, the people are called to prayers by certain officers appointed for that purpoſe. Moſt of the moſques have a kind of hoſpital belonging to them, in which travellers of what religion ſoever, are entertained three days. Each moſque has alſo a place called *tarbe,* which is the burying-place of its founders; within which is a tomb ſix or ſeven feet long, covered with green velvet or ſatin; at the ends of which are two tapers, and round it ſeveral ſeats for thoſe who read the Koran and pray for the ſouls of the deceaſed.

MOSQUITO BAN'K, or Mosqui'tos, a cluſter of ſmall iſlands, near the coaſt of Honduras, which gives name to a tract of country on the continent, called the Moſquito Shore. Lat. 14. 30. N. lon. 82. 10. W.

MOSQUITO BA'Y, a bay on the eaſt coaſt of the iſland of St. Chriſtopher.

MOSQUITO CO'VE, a bay on the weſt coaſt of the iſland of Antigua. Lat. 17. 12. N. lon. 61. 35. W.

MOSQUITO CO'VE, a bay on the north coaſt of the iſland of Jamaica. Lat. 18. 28. N. lon. 78. 5. W.

MOSQUITO CO'VE, a bay on the coaſt of Weſt Greenland. Lat. 65. N. lon. 52. 50. W.

MOSQUITO I'SLAND, one of the ſmaller Virgin Iſlands, near the north coaſt of Virgin Gorda.

MOSQUITO I'SLANDS, ſmall iſlands on the coaſt of Main. Lat. 43. 55. N. lon. 69. 10. W.

MOSQUITO KE'Y, a ſmall iſland in the Spaniſh Main. Lat. 14. 25. N. lon. 82. 25. W.

MOSQUITO KE'YS, a cluſter of iſlets and rocks in the Spaniſh Main. Lat. 12. 47. N. lon. 82. 45. W.

MOSQUITO PO'INT, a cape at the entrance of Port Royal Harbour, Jamaica.

MOSQUITO PO'INT, a cape on the coaſt of Guiana, at the mouth of Eſſequibo.

MOSQUITO SHO'RE, a name given to a tract of country in North America, bounded on the north and eaſt by the ſea, on the ſouth by Nicaragua, and on the weſt by Honduras. The Spaniards, indeed, reckon this a part of the province of Honduras, though they have no ſettlements in the Moſquito country. When the Spaniards firſt invaded this part of Mexico, they barbarouſly maſſacred moſt of the natives; whence proceeds the inſuperable averſion of ſuch of them as eſcaped into the inacceſſible mountains, againſt the Spaniards; and for that reaſon they have always readily joined with any Europeans that come upon their coaſt in enterpriſes againſt the Spaniards, particularly with the Engliſh, who frequently come among them. The Moſquito Indians, being excellent markſmen, are employed by the Engliſh to ſtrike the manatee fiſh; and many of them ſail in Engliſh veſſels to Jamaica. When the duke of Albemarle was governor of the laſt-mentioned iſland, theſe people put themſelves under the protection of the crown of England, and their king received a commiſſion from him. Since which time, when their king dies, the next male heir goes to Jamaica, and receives a commiſſion accordingly; but before that he is not acknowledged as ſuch by his countrymen. The Engliſh evacuated this country in the year 1787, after having had poſſeſſion of it for about eighty years. But, though the Spaniards have now recovered it, the Moſquitos have an hereditary averſion towards them, and profeſs great attachment to our countrymen.

Captain Henderſon, of the 5th Weſt-India regiment, having (about the year 1807) been ſtationed in a military capacity at Honduras, availed himſelf of the opportunity thus afforded him for gaining acceſs to local information, in compoſing an account of that ſettlement and of the neighbouring Indians. Having been diſpatched to the Moſquito Shore, with preſents to the Indian chiefs, he learned to his coſt that the name of the ſhore had been very aptly beſtowed; the moſquito-gnat (Culex pipiens) being ſo troubleſome as to oblige even the natives to quit their dwellings in certain ſeaſons, and to paſs the night in their little barks on the water. He was curious to learn what ſtage of ſavage-ſociety the inhabitants of this quarter had reached, and found that they belonged to the claſs of "ſmall deſpotiſms;" which, in the opinion of a writer who is converſant with the progreſs of rude tribes, is one of the moſt advanced periods of ſavage-hiſtory. All the offices of domeſtic life are performed by women; the ſucceſſion to the crown is hereditary; and the royal power is completely deſpotic, abſorbing within itſelf the executive, legiſlative, and judicial, functions. They diſcover no trace of religious belief, except the adoration of evil ſpirits; and they have among them neither phyſician nor lawyer; but abound in conjurors. Polygamy is freely allowed; but adultery is puniſhed, though not capitally. They can ſupport long abſtinence from food, but are in the habit of indemnifying themſelves for it by the cuſtomary exceſſes of ſavages when proviſions come into their poſſeſſion; continuing their repaſt day and night, except in the ſhort intervals of ſleep, until the conſumption of their ſtock is completed. The warriors of the Moſquito tribe may amount to the number of fifteen hundred; and, ſmall as this force is, they are able to keep their inland-neighbours, whoſe manners are much ruder, in a ſtate of dependence. *Henderſon's Account of the Britiſh Settlement of Honduras,* Lond. 1809.

MOSQUI'TOS, a town of the iſland of Cuba: twenty-ſeven miles weſt of Havannah.

MOSS, *ſ.* [*muſcus*, Lat. meoꞅ, Sax.] A plant. See the article BOTANY, vol. iii. p. 280.—Though *moſs* was formerly ſuppoſed to be only an excreſcence produced from the earth and trees, yet it is no leſs a perfect plant than thoſe of greater magnitude, having roots, flowers, and ſeeds, yet cannot be propagated from ſeeds by any art. The botaniſts diſtinguiſh it into many ſpecies: it chiefly flouriſhes in cold countries, and in the winter ſeaſon, and is many times very injurious to fruit-trees; the only remedy in ſuch caſes, is to cut down part of the trees, and plough up the ground between thoſe left remaining; and in the ſpring, in moiſt weather, you ſhould with an iron inſtrument ſcrape off the *moſs*. *Miller.*—*Moſs* is a kind of mould of the earth and trees; but it may be better ſorted as a rudiment of germination. *Bacon.*—Such *moſſes* as grow upon walls, roofs of houſes, and other high places, have ſeeds that, when ſhaken out of their veſſels, appear like vapour or ſmoke. *Ray on the Creation.*

Houſes then were caves, or homely ſheds,
With twining oziers fenc'd, and *moſs* their beds. *Dryden.*

MOSS, Bottle; ſee SPLACHNUM. Club and Fir; ſee LYCOPODIUM. Heath; ſee CORALLOIDES. Tree; ſee LICHEN. Wall; ſee BRYUM. Water; ſee FONTINALIS.

MOSS, *ſ.* [*moſſa*, Su. Goth. *muſſa*, low Lat.] A moraſs, or boggy place. Still uſed in the north of England and Scotland.—In many of the *moſſes* of the Weſt Riding of Yorkſhire are often dug up birch-trees. *Evelyn.*—The juſtices of Northumberland and Cumberland may make order in ſeſſions for charging the reſpective counties for ſecuring the ſame againſt the moſs-troopers; that is, thieves and robbers, who, after having committed offences in the borders, do eſcape through the waſtes and *moſſes*. *Stat.* 13 & 14 *Ch.* II. c. 22.

To MOSS, *v. a.* To cover with moſs:

An oak whoſe boughs were *moſs'd* with age,
And high top bald with dry antiquity.
Shakeſpeare's As you like it.

Will theſe *moſs'd* trees,
That have out-liv'd the eagle, page thy heels,
And ſkip when thou point'ſt out? *Shakeſpeare's Timon.*

MOSS, a town of Norway, in the province of Aggerhuus, on the eaſt ſide of Chriſtiania Bay: twenty-eight miles ſouth of Chriſtiania, and fifteen north of Frederickſtadt. See MIOSS, vol. xv. p. 550.

MOSS, a river of Norway, which runs into the ſea near the town of Moſs.

MOSS (Robert), a learned Engliſh divine of the eſtabliſhed church, was born at Gillingham, in Norfolk, in the year 1666. He received his claſſical education at the free ſchool of Norwich; and in 1682 he was entered of Corpus Chriſti College, Cambridge, where he took his degrees, and was elected into a vacant Norfolk fellowſhip in that houſe. When he commenced preacher, his ſermons made great impreſſion, and he had full audiences whenever he was called to perform the duties of the pulpit. He offered himſelf as candidate for the office of public orator, and alſo for the maſterſhip of his college, but was unſucceſsful in both inſtances; it was, however, univerſally acknowledged that he loſt no credit by theſe competitions. In 1698, he was appointed preacher to the Society of Gray's-Inn, London; an office which he held through life. In the following year he was appointed preacher-aſſiſtant at the church of St. James, Weſtminſter, and was afterwards nominated chaplain in ordinary to king William III. he continued to hold the ſame ſtation under queen Anne; and, being one of the chaplains in waiting when her majeſty viſited the univerſity of Cambridge in 1705, he had the degree of doctor of divinity conferred upon him in the queen's preſence. Soon after this, an unſucceſsful attempt was made to eject him from his fellowſhip, on account of non-reſidence. In the year 1712, Dr. Moſs was nominated to the deanery of Ely, which led him to reſign his fellowſhip of his own accord. Upon the acceſſion of George I. Dr. Moſs was ſworn, a third time, chaplain in ordinary, which place he retained till 1718, when he was diſmiſſed on account of the part which he took in the Bangorian controverſy. He died in 1729, in the ſixty-third year of his age. He was author of a Collection of Sermons, publiſhed after his death; to which is prefixed, a character of the author, which ſays, "He was of ſo open and generous a diſpoſition, and ſuch a ſtranger to all artificial diſguiſe, that he affirmed, and you believed him; he promiſed, and you truſted him; you knew him, and you loved him." *Biog. Brit.*

MOSS'-BERRIES. See VACCINIUM.

MOSS'-CLAD, *adj.* Clad (as it were) with moſs:

For whom ſo oft in theſe inſpiring ſhades,
Or under Campden's *moſs-clad* mountains hoar,
You open'd all your ſacred ſtore. *Lyttelton.*

MOSS'-GROWN, *adj.* Covered or overgrown with moſs.—The *moſs-grown* domes with ſpiry turrets crown'd. *Pope's Eloiſa to Abelard.*

The rude and *moſs-grown* beech
O'er-canopies the glade. *Gray's Ode* 1.

MOSS-TROO'PERS, *ſ.* A kind of banditti that infeſted Scotland and the north of England, living by robbery and rapine, not unlike the tories of Ireland, the buccaneers in Jamaica, or banditti in Italy: the counties of Northumberland and Cumberland were charged with a yearly ſum, and a command of men, to be appointed by the juſtices of peace, to apprehend and ſuppreſs them. 4 *Jac.* I. c. 1. 13 & 14 *Car.* II. c. 22. 30 *Car.* II. c. 2. 6 *Geo.* II. c. 37.—The juſtices of Northumberland and Cumberland may make order in ſeſſions for charging the reſpective counties for ſecuring the ſame againſt the *moſs-troopers;* that is, thieves and robbers, who after having committed offences in the borders do eſcape through the waſtes and moſſes. 13, 14, *Car.* II. c. 22.

MOSS'A, a town of Germany, in the county of Goritz: five miles ſouth-weſt of Goritz.

MOSS'A, a town of France, in the department of the Seſia: twenty-three miles north-north-weſt Vercelli.

MOSSA'LE, a town of the duchy of Parma: nineteen miles ſouth of Parma.

MOSSA'R, a town of Lithuania, in the palatinate of Wilna: twenty-eight miles ſouth-eaſt of Breſlaw.

MOSSAW', a town of Bengal: ſeven miles north of Rajemal.

MOSS'EL BA'Y, or MUSCLE-BAY, a bay on the ſouth-eaſt coaſt of Africa. The outermoſt point of the bay, called Cape Saint Blaize, lies in lat. 34. 10. S. lon. 22. 18. E. The variation of the compaſs in 1797 was 27. 54. W. The time of high water at full and change about three o'clock, and the riſe and fall of the tides ſix or ſeven feet. During the ſummer-months, when the winds blow between eaſt and ſouth, or directly into the bay, a heavy ſwell breaks upon the beach, which makes it dangerous, and frequently impracticable, for boats to land; but theſe winds are never ſo violent nor ſo laſting as at the Cape; and ſhips may ride at anchor in perfect ſecurity about three quarters of a mile from the landing-place. The ſouth-weſt winds, that frequently blow with great violence from April to September, bring into the bay a moſt tremendous ſea, ſetting round Cape St. Blaize. At this ſeaſon of the year it would be highly imprudent for ſhips to enter into Moſſel-bay. A rill of water glides over the ſandy beach, where is the beſt landing, and is eaſily conveyed into caſks in the boats, by means of a hoſe. To the ſouth-eaſt of this landing-place is another ſmall cove, tolerably ſheltered, and deep enough to admit veſſels of ten or twelve feet draught of water. At either of theſe coves, piers for landing and ſhipping of goods might conveniently be conſtructed, and at a ſmall expenſe, as materials may be procured upon the ſpot. Boats, however, may land at every part of the bay; and the adjacent country would eaſily afford ſupplies for about five hundred men. The mouths of the rivers that fall into the bay are generally blocked up with ſand; they abound with various kinds of fiſh; and, at the rocky parts of the coaſt, muſcles and excellent oyſters are plentiful.

Moſſel-bay gives name to a diviſion of the diſtrict of Zwellendam, adjoining to it; and it is ſometimes called *Droogeveldt*, or Dry Country, extending from the Gauritz-river to the Great Brakka-river that falls into Moſſel-bay. The ſurface is hilly, and compoſed of a light ſandy ſoil, which, when the rains are favourable, is ſufficiently fertile in corn. The only natural product in the vegetable kingdom, that is uſeful as an article of commerce, is the aloe; but the heathy plants along the ſouthern are more favourable for ſheep than in the other parts of this diviſion. Beſides the fiſheries, the aloe and barilla might employ the Hottentots to advantage. As the former grows in every part of the diſtrict that ſurrounds the bay, that from the aſhes of which the latter is procured is equally abundant in the plain through which the Olifant-river flows at no great diſtance from the bay. Here alſo the cultivation of grain and pulſe might be greatly extended. *Barrow's Africa*, vol. ii.

Moſſel-bay is the ſame to which Vaſco de Gama gave the name of the *Bay of St. Blaiſe*, when he landed there in December 1497. Near a cape which ſtill retains the name of St. Blaiſe, is a cave in a high cliff, the foot of which is waſhed by the ſea, which, though four hundred feet above the high-water mark, is entirely overſpread with a thick layer of muſcle-ſhells. Lichtenſtein viſited it in 1805; and makes the breadth about twenty paces, the depth half as much, and the height about fifty. The mouth of the cave fronts the north-eaſt. In another cave, about fifty feet higher, there are no ſhells. It is certainly a curious queſtion, how theſe ſhells came into the place where they are now found. Barrow ſuppoſes that they were brought by the birds; Lichtenſtein, that they were brought by the Hottentots, who are ſuppoſed to have formerly reſorted to this place, and to have lived much on ſhell-fiſh: this is alſo the common opinion in the neighbourhood. The ſhells are none of them freſh, and are half buried in ſand and earth. This phenomenon, it ſeems, is very common on that coaſt. Barrow ſays that many thouſand waggon-loads may be met with in various places along the eaſtern coaſt, in ſituations which are ſeveral hundred feet above the level of the ſea. If the travellers juſt named had informed us of the nature of the rock, of the kind of excavations which the ſea has made in it, how high the obvious marks of the waſhings of the ſea extend, to what height gravel and other ſubſtances are ever thrown up by the wind or waves, we ſhould have had ſome data for deciding whether the ſea itſelf, without any other agent, can be ſuppoſed to have depoſited the ſhells where they are now found. As the matter ſtands, the ſuppoſition of Lichtenſtein may be accounted the moſt probable. What Barrow aſſerts, that in Lowenberg, near the Cape Town, wherever like caves have been diſcovered, abundance of live ſhell-fiſh are always found, is denied by Lichtenſtein, after having, as he tells us, examined many of thoſe caves very particularly, in order to ſatisfy himſelf of the truth. *Edinburgh Review of Lichtenſtein's Travels.*

MOSSELPAT'TY, a town of the iſland of Ceylon: ſixty-five miles weſt-north-weſt of Trincomalee.

MOSSENI'GA, a town of European Turkey, in the Morea: twenty miles eaſt of Navarin.

MOSSEQUE'JOS, a people and country of Africa, on the coaſt of Zanguebar, on the banks of the Quilamanca, about one hundred miles from the Indian Sea.

MOSS'ET, a town of France, in the department of the Eaſtern Pyrenees: twenty-four miles weſt of Perpignan, and ſix north-weſt of Prades.

MOSSIMPOU'R, a town of Hindooſtan, in Bahar; twenty-three miles ſouth-eaſt of Hajypour.

MOSS'INESS, *ſ.* The ſtate of being covered or overgrown with moſs.—The herbs withered at the top, ſheweth the earth to be very cold, and ſo doth the *moſſineſs* of trees. *Bacon.*

MOSS'ING, or MASSING, a town of Bavaria: twelve miles ſouth of Dingelfingen, and eight north-north-weſt of New Oetting.

MOSS'KIRCH. See MOESKIRCH, vol. xv. p. 610.

MOSS'O, a town of France, in the department of the Seſia: two miles north of Biella.

MOSS'ULA, or MARSOULA, a town of Africa, in the kingdom of Congo, at the mouth of the Onzo. Lat. 8. 10. S.

MOSSUM'BO, a town of Congo: twenty miles ſouth of Banza.

MOSS'Y, *adj.* Overgrown with moſs; covered with moſs.—Old trees are more *moſſy* far than young; for that the ſap is not ſo frank as to riſe all to the boughs, but tireth by the way, and putteth out moſs. *Bacon's Nat. Hiſt.*

About the *moſſy* brooks and ſprings,
And all inferiour beauteous things. *Cowley.*

The *moſſy* fountains and the ſylvan ſhades
Delight no more. *Pope's Meſſiah.*

MO'ST, *adj.* the ſuperlative of *more*; [mæꞅꞇ, Sax. *meeſt*, Dut. *Dr. Johnſon.*—Mr. Tooke has charged Junius with ſaying untruly that *moſt* is formed from the poſitive mæꞃe, having mæꞃꞃe as the comparative, and mæꞃeꞅꞇ, by contraction mæꞅꞇ, as the ſuperlative. But candour required that this ſingularity in the Saxon ſhould have been mentioned, that mæꞃe is uſed both as a poſitive, *magnus*, and a comparative, *major*; while mæꞃeꞅꞇ is the ſuperlative. *Todd.*] Conſiſting of the greateſt number; conſiſting of the greateſt quantity.—Garden-fruits which have any acrimony in them, and *moſt* ſorts of berries, will produce diarrhœas. *Arbuthnot.*—Greateſt. *Obſolete.*—They all repair'd both *moſt* and leaſt. *Spenſer.*

MO'ST, *adv.* [*maiſts*, Goth. mæꞅꞇ, Sax. *meeſt*, Dut. *meſt*, Dan.] In the greateſt degree.—That which will *moſt* influence their carriage will be the company they converſe with, and the faſhion of thoſe about them. *Locke on Education.*

Coward dogs
Moſt ſpend their mouths, when what they ſeem to threaten
Runs far before them. *Shakeſpeare.*

The particle noting the ſuperlative degree.—Competency of all other proportions is the *moſt* incentive to induſtry; too little makes men deſperate, and too much careleſs. *Decay of Chr. Piety.*—The faculties of the ſupreme ſpirit *moſt* certainly may be enlarged without bounds. *Cheyne.*

MO'ST; [this is a kind of ſubſtantive, being, according to its ſignification, ſingular or plural.] The greateſt number: *in this ſenſe it is plural.*—Many of the apoſtles' immediate diſciples ſent or carried the books of the four evangeliſts to *moſt* of the churches they had planted. *Addiſon on the Chr. Relig.*—Gravitation, not being eſſential to matter, ought not to be reckoned among thoſe laws which ariſe from the diſpoſition of bodies, ſuch as *moſt* of the laws of motion are. *Cheyne.*—The greateſt value: *in this ſenſe ſingular.*—A covetous man makes the *moſt* of what he has, and can get, without regard to Providence or Nature. *L'Eſtrange.*—The greateſt degree; the greateſt quantity; the utmoſt.—A Spaniard will live in Iriſh ground a quarter of a year, or ſome months at the *moſt*. *Bacon.*

MOST AN END. Moſt commonly. *A vulgar phraſe.*

MOS'T, or BRI'EX, a town of Bohemia, in the circle of Saatz, on the Bila. It is a royal town, and contains three cloiſters: twelve miles north of Saatz, and thirty-eight north-weſt of Prague. Lat. 50. 30. N. lon. 13. 40. E.

MOS'TA, or BILI'NA, a river of Bohemia, which runs into the Elbe near Auſſig.

MOSTAGAN', a town of Algiers: fifty miles eaſt-north-eaſt of Oran.

MOS'TAR, a ſeaport town of European Turkey, in Dalmatia, on the Narent; the harbour was the work of the Romans: ſixty miles north of Raguſa, and ſixty eaſt of Spalatro. Lat. 44. N. lon. 18. 0. E.

MOSTIGAN'NIM. See MUSTIGANNIM.

MOS'TIL, an iſland of Ruſſia, in the Penzinſkoe Sea. Lat. 60. 21. N. lon. 155. 14. E.

MO'STLY, *adv.* For the greateſt part.—This image of God, namely, natural reaſon, if totally or *moſtly* defaced, the right of government doth ceaſe. *Bacon.*

MOS'TOLOS, a town of Spain, in New Caſtile: eight miles weſt-ſouth-weſt of Madrid.

MO'STRA, *ſ.* in muſic books, a direct; the mark at the end of the lines, ſhowing with what note the next begins.

MO'STWHAT, *adv.* For the moſt part. *Obſolete.*—God's promiſes being the ground of hope, and thoſe promiſes being but ſeldom abſolute, *moſtwhat* conditionate, the Chriſtian grace of hope muſt be proportioned and attemperate to the promiſe; if it exceed that temper and proportion, it becomes a tympany of hope. *Hammond.*

MOS'TY, a town of Lithuania, in the palatinate of Novogrodek: forty miles weſt of Novogrodek.

MO'SUL, a large and handſome city of Aſiatic Turkey, in the province of Diarbekir, ſuppoſed to be the ancient *Nineveh*, ſituated in a plain on the weſt bank of the Tigris, which is here deep and rapid, and croſſed by a bridge of boats; ſurrounded with walls and ditches, and defended by a caſtle. This city contains good buildings, excluſively of the baths and moſques, and which are all built of hewn ſtone. The air is healthy in ſpring, hot in ſummer, feveriſh in autumn, and unpleaſantly cold in winter. The town is very populous, comprehending men of all religions; but the Curds form a majority of the inhabitants. The bazar, or market, is large and well ſupplied; and moſt of the articles, except clothing, are at a moderate price. Here are various manufactories, in ſome of which they excel the Europeans: their ſaddles, and trappings for horſes, in particular, are very elegant: they alſo make carpets of ſilk, with flowers wrought in them, which ſeem to vie with the beſt of our manufactures: they are alſo very dexterous in making edgings and trimmings of various kinds. Their manufactories in iron and copper too are very numerous. The ſpace within the walls is not entirely occupied with houſes, many places being covered with ruins, which extend to a great diſtance on the banks of the river, and which prove that this place has formerly been much more extenſive and populous than it is at preſent. Merchandiſe from India is brought hither by way of Baſſora, and European goods by the way of Aleppo. Lat. 36. 20. N. lon. 42. 8. E. *Jackſon's Journey from India.*

MOSUN'DAH, a town of Bengal: eighteen miles north-north-weſt of Calcutta.

MOSZ'BACH, a town of Saxony, in the circle of Neuſtadt: four miles ſouth-ſouth-weſt of Auma.

MOSZEI'SK, a town of Auſtrian Poland, in Galicia: fifteen miles eaſt of Lemberg.

MOSZLICK'ZKO, a town of Auſtrian Poland in Galicia: thirty-two miles weſt of Lemberg.

MOSZ'NO, a town of Ruſſian Poland, in the palatinate of Kiev: eighty-five miles ſouth-ſouth-eaſt of Kiev, and fifty-eight ſouth-eaſt of Bialacerkiev.

MOSZO'W, a town of Poland, in the palatinate of Braclaw: ſeventy miles eaſt of Braclaw.

MOT', *ſ.* [French.] A word. *Obſolete.*—I thought good to give you this little *mot* of advice. *Howel*, vol. ii. —A note which the huntſman winds on his horn. *Aſh.*—A motto: a ſentence added to a device.—With his big title, an Italian *mot.* *Bp. Hall's Satires.*—Expreſſing, by thoſe ſeveral *mots* connexed, that, with thoſe arms of counſel and ſtrength, the Genius was able to extinguiſh the king's enemies. *B. Jonſon's K. James's Entertainment.*

Fabius' perpetual golden coat,
Which might have "ſemper idem" for a *mot.* *Marſton.*

MOT', or MOD, *ſ.* in the Phœnician coſmogony, denoted either a ſlime, or rather an aqueous mixture, which was the ſeminal principle of all creatures, and the generation of the univerſe.

MO'TA (La), a town of Spain, in New Caſtile: thirty-five miles ſouth of Huete.

MO'TA (La), a town of Spain, in the province of Leon: twenty miles weſt-ſouth-weſt of Valladolid.

MO'TABLE, *adj.* [*motabilis*, Lat.] Moving; continually moving.

MOTACIL'LA, *ſ.* the WAGTAIL and WARBLER; a very extenſive genus of birds of the order paſſeres, including the nightingale, robin, wren, hedge-ſparrow, whinchat, ſtonechat, pettychaps, &c. to the amount (including Vaillant's new diſcoveries in Africa) of more than two hundred ſpecies. Generic characters—Bill ſubulate, ſtraight; the mandibles nearly equal; noſtrils ſuboval; tongue lacerate at the end; twelve feathers in the tail.

Of the *wagtails*, it is obſerved that their movements are extremely alert, and that their tails are perpendicularly long, which they perpetually jerk up and down. Their progreſſive motion is by running rather than ſpringing. They rarely perch on trees. Their flight is waving, and accompanied with a tittering ſound, and their food conſiſts of flies and other ſmall inſects, in purſuit of which they will often purſue the huſbandman with his plough, and the movements of flocks of ſheep. The *warblers* are compoſed of a great variety of birds, differing in many ſtriking particularities of habit as well as in ſize. They are found in almoſt all parts of the world, perch on trees, move by leaping, and rarely utter any ſounds during their flight. They are more numerous than any genus of birds, and abound principally in the warm latitudes of the globe, where inſects, their food, are found in never-failing ſupplies.

1. Motacilla luſcina, the nightingale: rufous-aſh; beneath white-aſh; tail-feathers rufous brown; bracelets cinereous. This enchanting bird has been alike appreciated in all countries, where the melody of its ſong has been heard. In Greek, it has been ſtyled by pre-eminence *αηδων*, from *αειδω*, to ſing. Its Latin appellation *luſcinia*, is of uncertain derivation; that of *philomela* is rather poetic, and ſignifies "a lover of ſong:" the Engliſh name is formed from the Saxon word ʒalan, to ſing. Every perſon, whoſe ear is not inſenſible to melody, muſt at the name of the nightingale, recal the charms of thoſe delightful evenings in ſpring, when the air is ſtill and ſerene, and all nature ſeems to liſten to the ſongſter of the grove. Other birds, the larks, the canaries, the linnets, the goldfinches, the blackbirds, the mocking-birds, excel in the ſeveral parts which they perform: but the nightingale combines the whole, and joins ſweetneſs of tone with variety and extent of execution. His notes aſſume each diverſity of character, and receive every change of modulation; not a part is repeated without variation; and the attention is kept perpetually awake, and charmed by the endleſs flexibility of ſtrains. The leader of the vernal chorus begins the prelude with a low and timid voice, and he prepares for the hymn to nature by aſſaying his powers and attuning his organs. "I always obſerve," ſays the Hon. Daines Barrington, "that my nightingale begins ſoftly, like the ancient orators; reſerving its breath to ſwell certain notes, which by this means had a moſt aſtoniſhing effect, and which eludes all verbal deſcription." It is by degrees that the ſound opens and ſwells; it burſts with loud and vivid flaſhes; it flows with ſmooth volubility, and ſhakes with rapid and violent articulations; the ſoft breathings of love and joy are poured from his inmoſt ſoul, and every heart beats uniſon, and melts with delicious languor. But, leſt this continual richneſs might ſatiate the ear, the ſtrains are at times relieved by pauſes, which beſtow dignity and elevation. The mild ſilence of evening heightens the general effect; and not a rival interrupts the ſolemn ſcene. To the moſt charming of theſe loud and high-ſwelling notes, the bird-

catchers have given the following names: ***Sweet, Sweet jug, Jug ſweet, Water bubble, Pipe rattle, Bell pipe, Scroty, Skeg, Skeg ſkeg, Swat ſwat ſwaty, Whitlow whitlow whitlow***, from ſome diſtant affinity the ſounds bear to theſe words.

The nightingale unqueſtionably excels all other birds in the ſoftneſs, mellowneſs, and duration, of its ſong, which ſometimes laſts without interruption twenty minutes. Barrington reckons ſixteen diſtinct notes between the higheſt and loweſt; and finds that its uninterrupted ſong fills a circle of a mile in diameter, which is equal to the power of the human voice. Mr. J. Hunter diſcovered that the muſcles of the larynx are ſtronger in this ſpecies than in any other; and even that they were ſtrongeſt in the male, which alone ſings. The tame nightingales ſing during ſix months in the year; and their ſong has not only more extent, but is more perfectly formed: whence Barrington infers, that in this ſpecies, as well as in many others, the male does not ſing wholly with the view of amuſing the female, or of relieving the tedium of incubation; a concluſion which is juſt and well-founded. When the nightingale is confined, his wants are ſupplied and anticipated, he enjoys the vernal mildneſs through the greater part of the year, and the melody of his ſong ceaſes only for a ſhort interval. Such is alſo the caſe with thoſe which are caught after they are grown up; within a few hours they often reſume their ſong, in all its richneſs of expreſſion. But the love of liberty is not extinguiſhed in their boſom: for the firſt week they can hardly ſupport their forlorn condition; they muſt be pinioned and fed. However, their paſſion for ſinging ſurmounts every deſponding recollection. The notes of other birds, the muſic of inſtruments, the accents of ſweet and ſonorous voices, ſtimulate and awaken their latent powers. They are eagerly attracted by ſweet ſounds, and ſeem particularly fond of *duettos;* which ſhows that they are not inſenſible to the effects of harmony. But they are not ſilent auditors; they ſtrike the uniſon, and ſtrive to excel their rivals. It is ſaid that a nightingale dropped dead at the feet of a perſon who ſung; another fretted, ſwelled its throat, and murmured diſcontent whenever a canary, which was beſide it, began to chant, till at laſt, by its menaces, it ſilenced its competitor. Real ſuperiority is not always exempt from jealouſy. May not this deſire of excelling be the reaſon why they chooſe advantageous ſituations, and delight to ſing to the returning echo? It really ſeems upon ſome ſuch principle, that the nightingales at Aleppo, as we are informed by Dr. Ruſſell, are taught to vie with each other in ſinging. In that part of the Levant they are bred up tame in great abundance, and let out to hire in the city; ſo that in the ſpring ſeaſon few entertainments are given without a concert of theſe birds, which begins at the command of their owner.

The nightingales differ much in the quality of their ſong; in ſome it is ſo inferior, that they are reckoned not worth keeping. It is even ſaid that their note is not the ſame in every country: the bird-fanciers in England prefer the nightingales of Surrey to thoſe of Middleſex; as they value moſt the goldfinches from Kent. This diverſity of ſong has been properly compared to the different dialects of the ſame language. It may ariſe from accidental cauſes: a nightingale happens to hear the ſweet muſic of ſome other birds, and, in the glow of emulation, improves his own; he communicates the melody to his young; and thus it is tranſmitted, with various alterations, through the ſucceeding races. After the month of June, the nightingale's ſong is gone; a raucous croaking ſucceeds, and the ſweet philomela is no longer recognized. No wonder that, in ancient Italy, it then received another name; for, in regard to ſong, it is quite a different bird; and even the dull colours of its plumage aſſume a duller hue.

"A muſician," ſays Friſch, "ought to ſtudy the ſong of the nightingale, and write it." This is what Kircher formerly attempted, and which has been lately tried by Daines Barrington: yet he owns that he could not ſucceed; for, though the notes were played by an excellent performer on the flute, they bore no reſemblance to the nightingale's ſong. The animated organ of voice can alone aſpire to the muſic of nature; and the rare accompliſhment of a ſoft, clear, flexible, ſonorous tone, of a delicate and diſcerning ear, and of an exquiſite ſenſibility, may ſometimes partly ſucceed. Buffon mentions two perſons, who, though they had not noted a ſingle bar, imitated the nightingale ſo accurately, as to deceive the hearer: they rather whiſtled than ſung: the one whiſtled ſo ſoftly, that it was impoſſible to perceive the motion of his lips; the other blew with more force, and his attitude was ſomewhat conſtrained, though his imitation was ſtill perfect. Sixty years ago, there was a perſon in London who attracted the nightingales with his ſong; inſomuch that they alighted on him, and allowed themſelves to be caught by the hand. This is recorded in the Annual Regiſter for 1764.

The nightingales are very ſolitary; they migrate alone, appearing in April and May, and retiring in Auguſt The union between the ſexes in the ſpring ſeems to increaſe their averſion to ſociety; they ſelect certain tracts, and oppoſe the encroachments of others on their territories. But this conduct is not occaſioned by rivalſhip, as ſome have ſuppoſed: it is ſuggeſted by the ſolicitude for the maintenance of their young, and regulated by the extent of ground neceſſary to afford ſufficient food. They begin to build about the opening of May. The materials are leaves, ruſhes, ſtalks of coarſe graſs, and the inſide is lined with ſmall fibres and roots, horſehair, and a ſort of bur. They are placed in a favourable aſpect, turned ſomewhat to the eaſt, near water, and commonly on the loweſt branches of ſhrubs, as white-thorns, ſloes, elm-hedges, &c. or in a tuft of graſs under buſhes. And hence their eggs and their young, and ſometimes the mother, are often devoured by polecats, weaſels, adders, &c. In our climate the female lays four or five eggs, of an uniform greeniſh brown, except that the brown predominates at the obtuſe end, and the green at the acute. She hatches alone, and never leaves her ſtation but for food, and then only in the evening, and when hard preſſed with hunger; during her abſence, the male ſeems to attend the neſt. In eighteen or twenty days the young begin to burſt their ſhells, and the number of the cock birds is generally double that of the hens. And hence, when in April a cock is caught, the hen ſoon finds another mate, the loſs of which is ſupplied by a third, and ſo on; inſomuch that the ſucceſſive ſeizure of three or four males has little effect on the multiplication of the brood. The hen diſgorges the food for the young, as in the canaries; and the cock aſſiſts. He now ceaſes to ſing, and is totally abſorbed in the concerns of his family: and even during incubation, it is ſaid, he ſeldom ſings very near the neſt, leſt he ſhould diſcover it; but, if a perſon approaches it, his paternal ſolicitude drowns the ſuggeſtions of prudence, and his ſhrieks only increaſe the danger. In leſs than a fortnight the young are fledged, and at this time we ought to remove thoſe intended to be trained. After they are flown, the parents make a ſecond hatch, and then a third; but the laſt fails if the cold ſets in early. In hot countries, they breed four times annually; but the late hatches are always ſcanty.

In the month of Auguſt, both the old and young nightingales emerge from the woods, and haunt the buſhes, the quickſet-hedges, and the new-ploughed fields, where they find greater plenty of worms and inſects. They are ſpread generally throughout Europe, even to Sweden and Siberia, where they ſing delightfully; but there are countries in Europe, as well as in Aſia, which are not ſuited to them, and where they never fix their abode: for inſtance, in Bugey as far as the heights of Nantua; a part of Holland, Scotland, Ireland, the northern part of Wales, and northern part of England, according to Mr. Pennant, except Yorkſhire. Mr. Pennant's words are theſe: "It is not found in North Wales, or in any of the Engliſh counties north of it, except Yorkſhire, where they are met with in great plenty about Doncaſter. It is alſo remarkable (Mr. Pennant adds) that this bird does not migrate ſo far weſt as Cornwall; a county where the ſeaſons are ſo mild, that myrtles flouriſh in open air during the whole year." They are univerſally obſerved to be birds of paſſage; and thoſe which are confined appear impatient and reſtleſs in the ſpring and autumn, eſpecially during the night, their uſual periods of migration: a proof that their peregrinations are occaſioned by incitements very different from the want of food, or the deſire of warmth.

This bird is peculiar to the old continent; and, though the miſſionaries and voyagers ſpeak of the nightingales of Canada, of Louiſiana, the Antilles, &c. the latter is only a kind of mocking-bird; and that of Louiſiana is the ſame, ſince, according to Dupratz, it is found in Martinique and Guadaloupe; and it is manifeſt, from Charlevoix's account, that the one of Canada is either not a nightingale at all, or is of a very degenerate ſort. It is indeed poſſible that the nightingale, which viſits the northern parts of Europe and Aſia, may have traverſed the narrow ſeas, which, at thoſe high latitudes, divide the two continents; or it might have been ſwept acroſs by a violent wind, or carried by ſome ſhip.

As theſe birds, at leaſt the males, paſs the nights of ſpring in ſinging, the ancients believed that during that ſeaſon they never ſlept; and hence they inferred that the fleſh had a ſoporific quality, and imagined that its heart and eyes laid under a perſon's head would keep him awake. This notion ſpread; and, being transferred into the arts, the nightingale became the emblem of vigilance. But the moderns, who have obſerved with greater accuracy, find that in the ſeaſon of love the nightingales ſleep during the day, and that in winter their diurnal ſlumbers precede the reſuming of their ſong.

Nightingales hide themſelves in the thickeſt buſhes: they live upon aquatic and other inſects, ſmall worms, &c. they alſo eat figs, berries, &c. But, as it would be difficult always to provide ſuch food, ſeveral kinds of paſte have been contrived, which agree very well with them. Buffon mentions one of theſe birds which reached the age of ſeventeen years. It began to turn grey the ſeventh year; and at fifteen, its wing and tail quills were entirely white; but ſtill it had none of the ills of old age; it was ever joyous, warbled as in its earlier years, and careſſed the hand that fed it.

All ſorts of ſnares ſucceed with the nightingale; they are not ſhy, though timorous. If they be let looſe in a place where there are other birds in cages, they fly directly towards theſe; and this is one method among many others of catching them. They are caught by the call, by lime-twigs in titmice-traps, and nooſes ſet where the ground is newly ploughed, where are previouſly ſcattered the nymphæ of ants, mites, or whatever reſembles theſe, as ſmall bits of the whites of hard eggs, &c. None but the vileſt epicure would think of eating theſe charming ſongſters; yet we are told that their fleſh is equal to that of the ortolan, and they are fatted in Gaſcony for the table. Every one muſt have read of the feaſt of Heliogabalus, on nightingales' tongues; and of that famed diſh of the Roman tragedian Æſop, which was compoſed of the tongues of every ſinging or talking bird: a diſh which is ſaid to have coſt no leſs than 6843l. 10s. of our money.

From the time of Homer to the preſent day, the poets have ever conſidered the nightingale as a melancholy bird; and the tragic fable of Philomela ſtill continues to be aſſociated with it. Æſchylus, Sophocles, and Euripides, all concur in deſcribing the nightingale's ſtrains as fraught with melancholy. One inſtance from the latter will ſuffice:

On thee, who build'ſt thy tuneful ſeat
Protected by the leafy groves, I call,
O nightingale, thy accents ever ſweet,
Their murmuring, *melancholy*, fall
Prolong; O come, and with thy *plaintive* ſtrain
Aid me to utter my diſtreſs.
Thy woes, O Helen, let the ſong expreſs,
And thoſe of Troy, now levelled with the plain
By Grecian might. *Potter.*

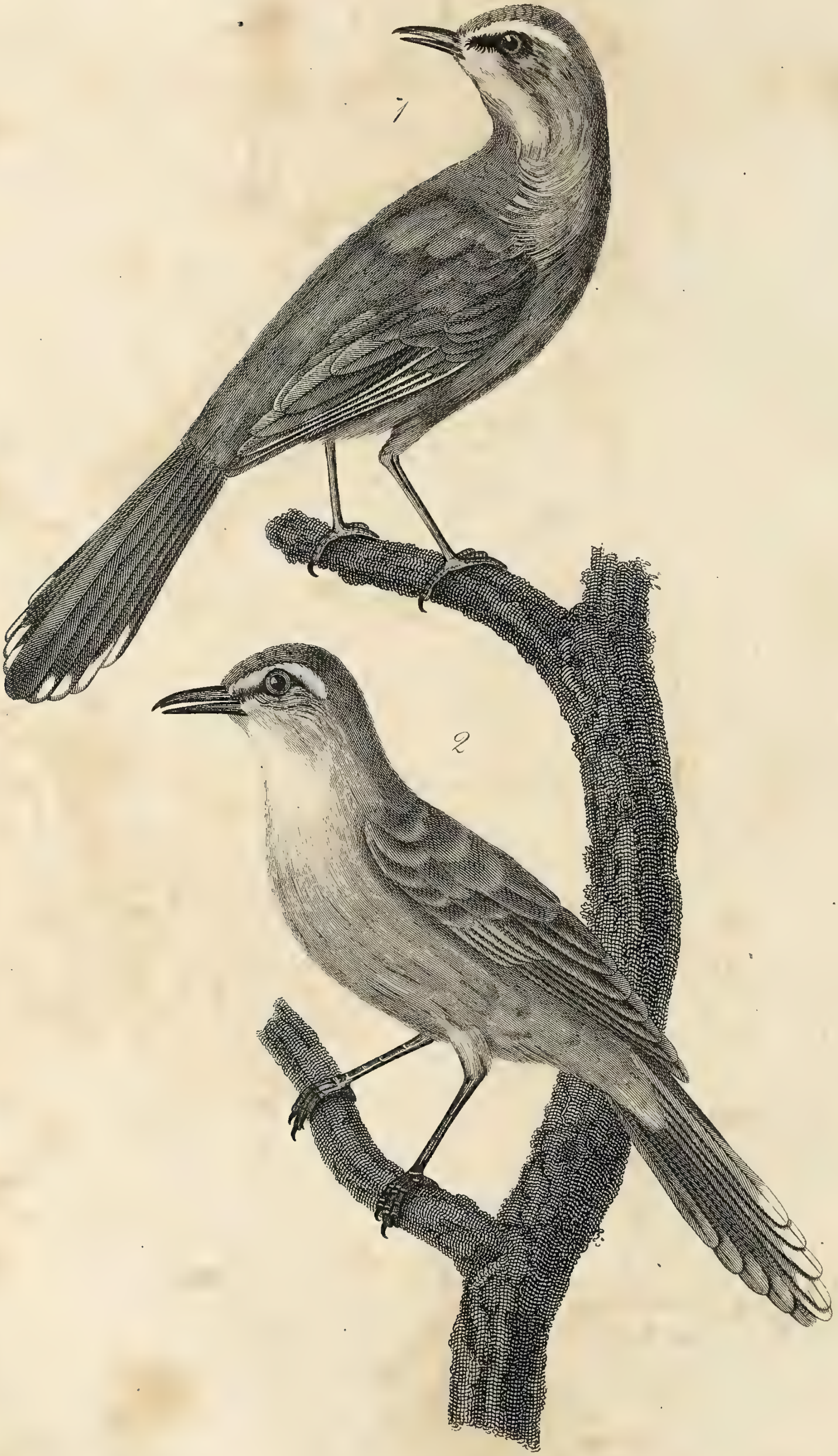
Virgil, Horace, Catullus, and Ovid, follow the example of the Greek poets, and perpetuate this claſſical error, which pervades almoſt all the deſcriptions of the nightingale in the modern poets. Thus, it is celebrated as a melancholy bird, and exquiſitely deſcribed as ſuch, by Milton, in the moſt beautiful of all beautiful poems, the Penſeroſo:

Sweet bird, that ſhunn'ſt the noiſe of folly,
Moſt muſical, moſt *melancholy*,
Thee, chantreſs, oft the woods among
I woo to hear thy evening ſong.

The nightingale, however, melancholy as ſhe has been repreſented, is, in fact, a cheerful bird; ſhe is ſorrowful only by name; ſhe ſings by day as well as by night, and is, as Martial calls her, the moſt garrulous of all our ſinging-birds. Her notes, ſtrong and ſonorous, wild and mellow, are to the higheſt degree enlivening, when heard at higheſt noon; and only penſive and melancholy, when all nature is lulled to repoſe, and our feelings are huſhed to ſilence; when every ſound, whether of the woods, the diſtant chimings of a cathedral, or the rolling of remote waters, come at intervals on the ear, and produce nearly the ſame emotions as the notes of the nightingale herſelf. It is from aſſociation, that ſhe derives moſt of her powers of diſpoſing the heart to melancholy impreſſions: cheerful and happy herſelf, ſhe has, aided by the gloom and ſilence of night, power to elicit tears from all that liſten to her warblings: like the infant, in an elegant Perſian poem of Sadi, ſhe ſmiles and is happy, while all around her is ſilent and ſad. The nightingale was the favourite bird of Sophocles and Taſſo, and the ſubject of many an Arabic and Perſian allegory. Pliny has deſcribed the effect of this bird's exquiſite note with appropriate warmth; and ſome of our early Engliſh poets have delineated this ſongſter from nature, rather than from the deſcriptions of the ancients. Chaucer calls her note "merry;" and Iſaac Walton, a writer of genuine feeling and claſſical ſimplicity, adds another teſtimony to the cheerful note of this bird: "He, that at midnight, when the very labourers ſleep ſecurely, ſhould hear, as I have heard, the clear air, the ſweet deſcants, the natural riſing and falling, the doubling and redoubling, of her voice, might well be lifted above earth, and ſay, Lord! what muſic haſt thou provided for thy ſaints in heaven, when thou affordeſt bad men ſuch muſic upon earth!" Mr. Coleridge has vindicated the ſprightlineſs of the nightingale's tones in a poem, rich in Miltonic harmony, and in the ſenſible imagery of nature:

All is ſtill;
A balmy night! and, though the ſtars be dim,
Yet let us think upon the vernal ſhowers
That gladden the green earth, and we ſhall find
A pleaſure in the dimneſs of the ſtars.
And hark! the nightingale begins its ſong.
'*Moſt muſical, moſt melancholy,*' bird!
A melancholy bird! O idle thought!
In Nature there is nothing melancholy.
But ſome night-wandering man whoſe heart was pierc'd
With the remembrance of a grievous wrong,
Or ſlow diſtemper, or neglected love,
(And ſo, poor wretch! fill'd all things with himſelf,
And made all gentle ſounds tell back the tale
Of his own ſorrows,) he, and ſuch as he,
Firſt nam'd theſe notes a melancholy ſtrain;
And many a poet echoes the conceit;
And youths and maidens moſt poetical,
Who loſe the deep'ning twilights of the ſpring
In ball-rooms and hot theatres, they ſtill,
Full of meek ſympathy, muſt heave their ſighs

O'er



The African Nightingale, male and female.

Engraved for the Encyclopædia Londinensis 1.1817.

O'er Philomela's pity-pleading ſtrains.
My friend, and my friend's ſiſter! we have learnt
A different lore: we may not thus profane
Nature's ſweet voices always full of love
And joyance! 'Tis the *merry* nightingale
That crowds, and hurries, and precipitates,
With *faſt thick warble*, his delicious notes,
As he were fearful that an April night
Would be too ſhort for him to utter forth
His love-chant, and diſburthen his full ſoul
Of all its muſic!

The plumage of this bird is much inferior to its ſong. All the upper part of the body is brown, more or leſs ruſty; the throat, breaſt, and belly, are aſh-colour; the inferior coverts of the tail and wings are of a ferruginous caſt in the males, the quills of the wings of a browniſh grey verging on rufous, and the tail of a deep tawny rufous; the bill is brown; irides hazel; and its eyes remarkably large, lucid, and piercing; legs brown, with a ſhade of fleſh-colour; the ground colour of the feathers is deep cinereous. It has been alleged, that the nightingales bred in the ſouthern climates have a darker plumage, and thoſe raiſed in the northern countries a whiter. The young cocks are alſo ſaid to be paler than young hens; and in general the colour of the young ones is the moſt variable before moulting, that is, before the end of July; and it is then ſo like that of the redſtart, that it would be difficult to diſtinguiſh them, unleſs by the difference of their chirping. Total length, ſix inches and a quarter: the bill, eight lines, yellow within, and having a large opening; the edges of the upper mandible ſcalloped near the point; the outer toe connected to the middle one at its baſe; the nails ſlender, the hind one the ſtrongeſt; the alar extent, nine inches; the tail thirty lines, conſiſting of twelve quills, and exceeding the wings ſixteen lines. The tip of the tongue is furniſhed with threads, and truncated, which was known to the ancients; and ſeems to have given riſe to the fable of Philomela, whoſe tongue was cut off.

There are two other varieties of this bird, allowed to be equally melodious in their ſong, viz.

β. M. luſcinia major, the greater nightingale, mentioned by authors as being conſiderably larger than the other, and, according to Friſch, ſings rather better. The plumage is ſaid to be rufous and aſh-colour mixed. This author alſo ſpeaks of a third, ſaid to be ſmaller than the other two, whoſe ſong is only in proportion to its ſize. Theſe are met with chiefly in Sileſia.

γ. M. luſcinia alba, the white nightingale: ſize of the common ſpecies, but wholly white. Others have been known with the head, neck, wings, and tail, white; the reſt of the plumage pale brown and white, mixed.

2. Motacilla coryphæus, the African nightingale. This ſpecies is ſo named by Vaillant as being qualified to diſpute the palm of melody with the nightingale of Europe, which moreover it much reſembles in ſhape, ſize, and graceful motions. Its mode of ſinging is not ſo ſhrill and ſo varied; but it is more equally continued, conſequently more mellow and affecting. The expreſſion of the European coryphæus is more lively and animated; that of Africa more tender and voluptuous: the ſong of the former ſpeaks more perhaps to the ear, of the latter to the heart. In ſhort, the nightingale is a maſter, who, by the efforts of art, execution of voice, and the difficulty of the ſong, ſeems to force applauſe; while the coryphæus, by the ſimplicity and mild harmony of his notes, appears only to awaken ſenſibility: in a word, the one expreſſes enjoyment, the other the mild ſentiment which leads to it. Like the common nightingale, the male only of this ſpecies is endowed with a delightful voice, and the ſeaſon of love is the only time they ſing, beginning an hour or two before the riſing and ſetting of the ſun. When the weather is calm and ſerene, their ſong continues the greateſt part of the night; and after a mild rain, when the ſky is cloudy but not ſtormy, they may be heard all day.

Nature, in beſtowing upon this bird a faſcinating voice, has denied it brilliancy of colour. Nothing can be more plain and ſimple than its plumage, which is the ſame in all ſeaſons; but at the ſame time its ſhape is elegant, and its motions graceful. Its large brown eyes and white eyebrows, ſhaded by a ſpot between them and the noſtrils, form an agreeable and lively phyſiognomy. The upper ſurface of the body and tail are of a dull brown; the lateral tail-quills are brown-grey at their origin, blackiſh farther on and within, and white at the tips; the front of the neck is blue-grey, with a patch of white on the throat; the reſt of the under ſurface, i. e. the breaſt, flanks, thighs, and under tail-coverts, is reddiſh-brown. The bill, legs, feet, and nails, are blackiſh; tail tapering. See the annexed Plate, fig. 1. The female (fig. 2.) is ſomewhat ſmaller than the male; her upper plumage is lighter; the under parts are entirely of that blue-grey which in the male appears only on the neck: in other reſpects they are perfectly ſimilar.

They pair in October; and at that time the male is in full ſong. In November they ſeek out a retired and ſecure place, at the foot of a thick buſh; there they make their neſt of graſs and moſs, ſecured and lined with hair. As ſoon as the neſt is finiſhed, the female lays an egg each day till they amount to five at the moſt, or three at the leaſt; they are of a pale greeniſh-blue, but inclining to greeniſh-brown at the large end. In ſome of the neſts, Vaillant obſerved the egg of the creſted cuckoo had been dropped; this egg was entirely white, and twice the ſize of the nightingale's egg. While the female ſits, the male perches on a neighbouring tree, or on a buſh, and ſings for hours together.

The African nightingale has the ſame attitudes and geſtures with the European ſort, and that ſtrange kind of curioſity which draws him towards mankind. He has alſo thoſe motions of the tail which are underſtood by the generic term *motacilla*. The coryphæus feeds on inſects, worms, ant-eggs, and all ſorts of berries. It inhabits the mimoſa-woods from the Camdeboo to the river Sondag and Swart-kop; their ſong enlivens this wild barren land, when the cool evening ſucceeds the heat of the burning ſun. Vaillant ſays they were attracted in great numbers by the fire he lighted up in the night. He took a complete neſt, but was not ſucceſsful in rearing them; yet he thinks they might be preſerved if treated in the manner our bird-fanciers uſe in rearing nightingales and linnets; and their ſong would well repay the pains.

3. Motacilla calidris, the hang-neſt warbler: ſize of a robin; bill blackiſh; the under mandible fleſh-colour; upper parts of the plumage greeniſh brown, paleſt towards the rump; all but the two middle tail-feathers are rufous within; ſides of the head and under parts of the body reddiſh orange; through each eye a duſky line, and a ſecond beneath the eye, pointing downwards; the wing-coverts have yellowiſh edges, and moſt of the quills are rufous on the inner webs; legs blackiſh. Native of Jamaica. It makes a very curious penſile neſt, compoſed chiefly of the herb called Tragopogon, or old man's beard.

4. Motacilla Bonarienſis, the Buenos-Ayres warbler: ſize of a linnet; bill blackiſh; irides cheſnut; upper part of the head, back, wings, and tail, a full black; throat, fore part of the neck, and ſides of the body, ferruginous; between the bill and eyes white; chin, middle of the belly, and outer tail-feathers, white; hind claw large. Native of Buenos-Ayres.

5. Motacilla palmorum, the palm warbler: length five inches: bill ſharp-pointed; irides pale brown. The plumage on the upper parts brown, deepeſt on the head; rump and upper tail-coverts olive green; wings and tail brown, with paler edges; the two outer feathers have a band of white on the inner web, near the tip; under parts

of the body yellowiſh white as far as the belly; from thence pale yellow. Inhabits St. Domingo. This bird lives both on ſeeds and fruits: keeps among the palm-trees, in which it makes its neſt, and is thence named. It lays two or three eggs only. The ſong conſiſts of few notes, neither varied nor ſtriking, though not unpleaſant, being ſoft and mellow. The negroes call it *bimbelé.*

6. Motacilla bananivora, the banana warbler: length three inches and three quarters: bill black, pointed, and bent; upper parts deep grey; almoſt black; approaching to brown on the wing-coverts and tail; the laſt tipped with white, and on the firſt a white ſpot; the ſhoulders of the wings are yellow; over the eyes a ſtreak of white; and a black one from the baſe of the bill quite to the hind head; throat greyiſh aſh-colour; breaſt, belly, and rump, pale yellow; ſides, thighs, and vent, yellow and grey mixed; legs ſlate-colour. This inhabits St. Domingo, and makes its neſt on the withs which entwine among the trees; and is often ſeen on the bananas, on which it is ſuppoſed to feed, as well as on oranges, papaws, and other fruits; though it is ſaid to eat ſeeds and inſects likewiſe. Found often among the buſhes in the untilled grounds; flies by jerks, but quick, making a little note at the ſame time. The ſong is little varied, and not remarkable. It is known in its native place by the name of *bananiſte.*

7. Motacilla vermivora, the worm-eater: ſize of a hedge ſparrow; bill duſky; beneath fleſh-coloured; from the corner of the mouth, through the eye, a narrow black line; juſt above the eye a yellowiſh line; above that an arch of black; remainder of the head, throat, and breaſt, reddiſh-yellow, gradually growing white towards the tail; the whole upper ſide, wings, and tail, dark olive green; inner coverts of the wings, and under the tail, aſh-colour; legs fleſh-colour. Inhabits Pennſylvania, where it is migratory, coming in July, and going northward; but is not ſeen there in autumn on its return.

8. Motacilla Madagaſcarienſis, the Madagaſcar warbler: ſize of the nightingale; bill deep brown; head rufous; behind each eye a brown ſpot; the upper parts of the body olive brown; throat white; breaſt pale rufous; belly rufous brown, inclining to olive; tail above brown; beneath, inclining to olive; legs deep brown. Native of Madagaſcar, where they call it *foudi-jala.*

9. Motacilla modularis, the hedge-ſparrow: this well-known bird meaſures five inches and a quarter: the bill is blackiſh; irides hazel; the head deep brown, mixed with aſh-colour; cheeks marked with oblong ſpots of dirty white; back and wing-coverts duſky, edged with reddiſh brown; quills and tail duſky; rump greeniſh brown; throat and breaſt dull aſh-colour; belly dirty white; ſides, thighs, and vent, tawny brown; legs dull fleſh-colour. In the female the colours are leſs vivid than in the male. This bird frequents the hedges in England, and is very common. Makes its neſt of moſs and wool, lining it with hair: and lays four or five eggs, of a delicate pale blue. With us, and the more northern regions, it is ſeen at all ſeaſons; but in France it is migratory, coming in October and departing northward in ſpring: however, a few ſtay behind; for now and then a neſt is found in France, though rarely. This is a winter-ſongſter: and its note would be thought pleaſant, did it not remind us of the approach of winter, beginning with the firſt froſts, and continuing till ſpring. Its often repeating the words *tit, tit, tit,* has occaſioned its being called *titling;* a name it is known by in many places. The cuckow very frequently drops her egg in the neſt of this bird.

10. Motacilla juncorum, the ruſh-warbler: leſs than the hedge-ſparrow; bill brown; general colour of the plumage the ſame, but paleſt beneath; the tail rather forked; legs brown. Inhabits Virginia and Carolina: feeds on inſects, and is much of the nature of the hedge-ſparrow; is not numerous, but moſt common near houſes in Carolina and Virginia the whole year.

11. Motacilla aquatica, the aquatic warbler. Scopoli deſcribes his bird as having the upper parts pale rufous, ſpotted with brown; the throat and breaſt both inclined to rufous; and the belly and rump whitiſh; there is a whitiſh ſpot above the outer corner of the eye, and a band of white at the baſe of the wing; the tail-feathers pointed. It builds on the ground; is often ſeen ſitting on the tops of plants; migrates early in autumn; and is called by the Italians *griſato.*

12. Motacilla ſchœnobænus, the reed-warbler: ſize of the pettichaps: bill blackiſh; the head, hind part of the neck, breaſt, back, rump, wing and tail coverts, brown and rufous; throat, fore part of the neck, belly, ſides, thighs, and vent, inclined to rufous; quills and tail brown; legs whitiſh. This is found both in France and Italy, and is likewiſe an inhabitant of Sweden. Whether it migrates in the laſt, we are not told; but it is known to winter in the ſouth of France, changing its place, like the whinchat in England. It builds its neſt in the woods, which is chiefly compoſed of moſs and wool; and lays four or five ſky-blue eggs. The young are readily brought up; and the bird is in general tame and familiar. Its ſong is not unpleaſant, beſides treating us with it during the winter-ſeaſon.

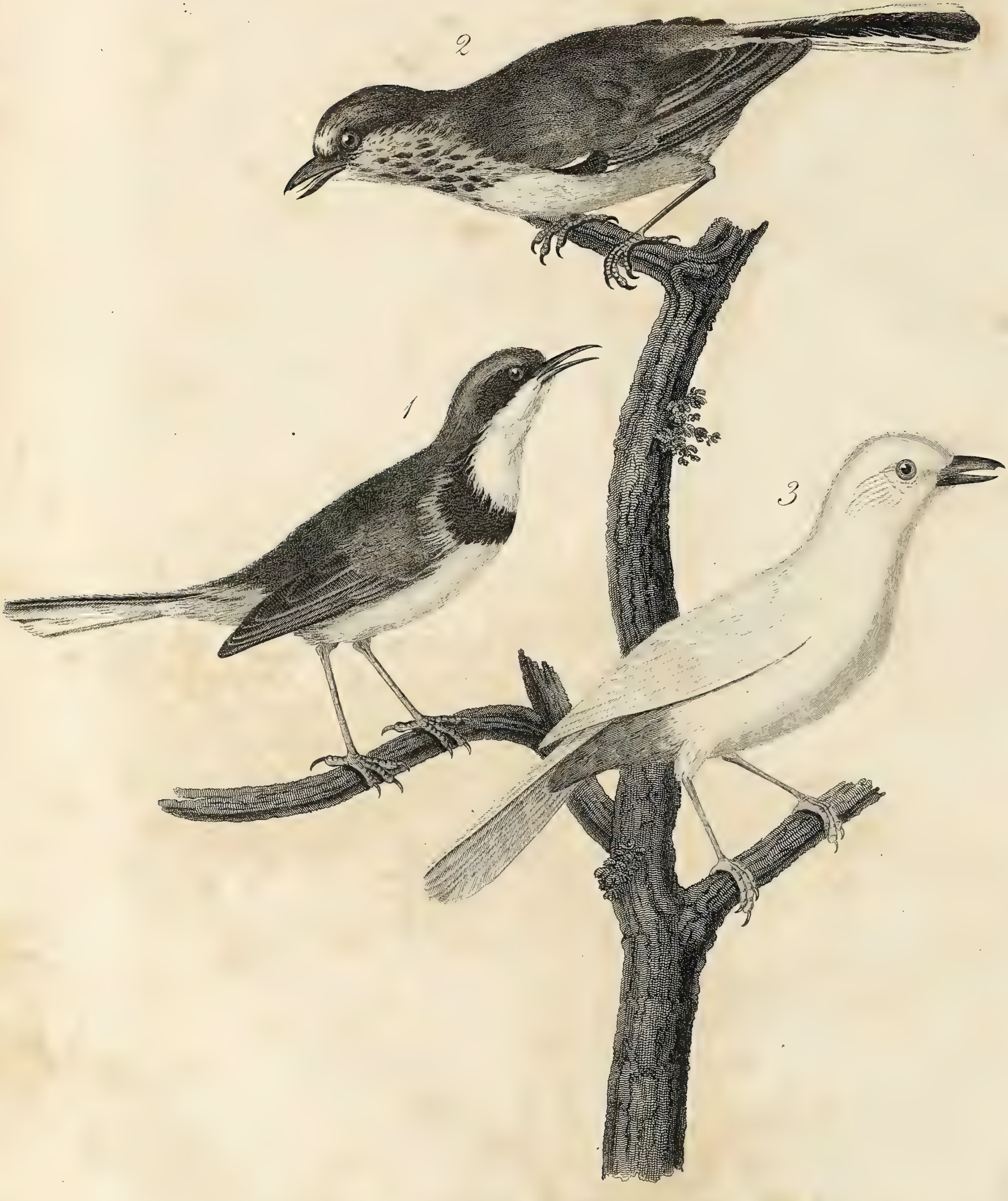
13. Motacilla campeſtris, the field-warbler: ſize of the hedge-ſparrow, but the bill ſtouter, and black; the head and neck are greeniſh aſh-colour; the upper parts of the body, wings, and tail, rufous brown; the under parts of the body are browniſh white; legs brown. Inhabits Jamaica.

14. Motacilla macroura, the great-tailed warbler: length ſix inches: bill brown; upper parts of the body brown; the under yellowiſh white, daſhed with blackiſh on the breaſt and ſides, and ſome minute ſpots on the throat and chin; from the noſtrils a white line paſſes above the eye; the tail is wedge-ſhaped, and occupies above one-half of the length of the bird: the legs are reddiſh. Native of the Cape of Good Hope.

15. Motacilla longicauda, the long-tailed warbler: top of the head pale rufous; hind part of the neck, back, rump, wing-coverts, and tail, pale olive green; quills olive brown: the tail is long and ſlender, compoſed of very narrow feathers; the two middle ones as long as the body. This inhabits China, and is frequent among the trees with which the Chineſe adorn the courts about their houſes, being very tame. It has an agreeable note.

16. Motacilla citrinus, the long-tailed African warbler. This, like the preceding, is diſtinguiſhed from the European warblers by a long tapering tail. It inhabits the country of the Namaquois from the Black-ſpine river till under the tropic; but not on this ſide; thus it is met with only in a certain ſpace, along the weſt coaſt. They live in ſociety, feeding on worms, ſpiders, and other kinds of inſects. At the end of the rainy ſeaſon, theſe little flocks ſeparate, and pair; and during the ſeaſon of love one male and one female only are found together. The neſt is made of the down of plants; it is of an oval ſhape, and is entirely cloſed, except a little hole about two-thirds of its height, which ſerves for an entrance; it is admirably conſtructed, and ſecurely faſtened in the middle of a ſhrub of moderate height. The eggs are five or ſix in number, of a reddiſh-white ſpotted with brown.

This ſpecies is ſomething leſs than our M. curruca, or babbler; but of a more lengthened form, the tail being as long as the whole body. In the male, the top of the head, the back part of the neck, the mantle, ſcapularies, wings, and tail, are light brown, tinged with yellow or dun-colour; the throat and front of the neck are whitiſh; and lower down, on each ſide the breaſt, are two brown ſpots, with ſome ſmaller ones, but too faint, and not ſufficiently regular, to deſerve the name of a collar; the reſt of the under plumage is faint yellow, inclining to white under the tail; the legs and feet are yellowiſh, the bill brown, the eyes red. The female is rather ſmaller than the male, and has no ſpots on the breaſt; the dun-colour is redder, and yellow much fainter.



1. The Black-breasted Pettychaps. 2. Grey Pettychaps.
3. Variety of the same. All of the natural size

J. Pass, sculp.

Engraved for the Encyclopædia Londinensis 1817

17. Motacilla curucca, the babbler: length five inches; bill blackiſh; crown of the head cinereous; the reſt of the upper parts inclining to brown; beneath the eye a ſtreak of deep aſh-colour; the under parts, and the edge of the wing, rufous white; quills brown, edged within with white, and outwardly with rufous grey; tail brown, edged with grey; the inner web cinereous, bordered with white; the middle feather the ſhorteſt, making the tail ſomewhat forked; legs brown. This ſpecies inhabits France and Italy; frequenting the hedges and building therein, not far from the ground. The eggs are greeniſh, dotted with brown. The food, for the moſt part, is caterpillars. Scopoli obſerves, that it is a reſtleſs noiſy bird, imitating the notes of other birds; and hence it is called *babbler*. It is frequent in the gardens of Piſa in ſummer, where it is called *bianchetto*.

18. Motacilla paſſerina, the paſſerine warbler: five inches and a quarter in length; bill ſlender and ſharp, and of a brown colour; irides red brown; the upper parts of the body pale aſh-colour; the under parts of a greyiſh white; the ſides inclining to brown; over the eye a ſmall whitiſh ſtreak; quills and tail duſky; legs lead-colour. Inhabits various parts of Europe, but not England. It is found in France, where it is called *paſſerinette;* by the people of Bologna, *chivin;* at Marſeilles, *bocafigulo;* and *borin* by the Genoeſe. It makes its neſt on ſome low buſh near the ground; ſuch as a gooſeberry-buſh. It is compoſed of dry herbs, largeſt on the outſide, and finer within. The eggs are four in number, dirty white, ſpotted with green of two colours; moſt ſo about the large end. It has no other note than a chirp, which it repeats when hopping from one ſhrub to another.

19. Motacilla hortenſis, the pettichaps. During the mild influence of ſummer, this is one of the livelieſt birds we know: each motion is expreſſive, each accent is cheerful, and each geſture diſplays the tenderneſs of love. Theſe warblers arrive when the trees put forth their leaves, and begin to expand their bloſſoms; they diſperſe over a large extent; ſome inhabit our gardens, others prefer clumps and avenues; ſome conceal themſelves among reeds, and many retire to the heart of large woods. Poſſeſſed of every other pleaſing acquirement, beauty alone is wanting; but nature has here checked her profuſion, and withheld decoration. Their plumage is dark and obſcure. The robe of the nightingale is brown rufous, that of the pettichaps brown grey; it is alſo lightly tinged with ruſty on the fringe of the coverts of the wings, and along the webs of the ſmall quills; the large quills are of a blackiſh cinereous; and ſo are alſo the quills of the tail, of which the two outermoſt are white on their exterior ſide, and at the tips on both ſides: over the eye there extends, from the bill, a white line like an eyebrow; and under the eye, and a little behind, there is a blackiſh ſpot; and this ſpot borders with the white on the throat, which has a ruſty caſt on the ſides, of a deeper colour under the belly. This is about the ſize of the nightingale: its total length ſix inches; its alar extent eight inches ten lines; its bill, from the tip to the angles, eight lines and a half; its tail two inches ſix lines; its foot ten lines. It aſſociates with the other ſpecies in gardens, in thickets, and in fields of peaſe and beans; they ſit on the ſtakes which prop theſe; and there they frolic, build their neſt, and continually go out and in, till harveſt, which precedes their departure, forces them from their aſylum, or rather from their ſeat of incubation. It is amuſing to ſee them play together, grow angry, and chaſe each other; their attacks are gentle, and their quarrels commonly end in ſongs. The pettichaps has been regarded as the emblem of volatile amours, while the turtle was the image of ardent and ſteady love: yet the pettichaps, though lively and joyous, maintains a faithful and ſtrong attachment; while the turtle, all ſad and plaintive, infringes often on the connubial rights. The male of the pettichaps laviſhes a thouſand little careſſes on his mate during incubation; he ſhares with her the ſolicitude for their tender young, and does not abandon her even after the education of their family.

The neſt is compoſed of dry herbs and ſtalks of hemp, and lined with a little hair. It contains commonly five eggs, which the mother deſerts if they are touched: this approach of an enemy ſhe regards as a bad omen for the expected family. Nor is it poſſible to deceive her with the eggs of other birds. "I have often ſet ſtrange eggs under ſeveral ſmall birds," ſays viſcount Querhoënt; "thoſe of the titmice under wrens, thoſe of the linnet under the red-breaſt; but I could never make the pettichaps hatch them; they always broke them: and, when I ſubſtituted other young ones, they ſoon killed them." From what wonderful inſtinct, then, do the pettichaps hatch the egg which the cuckoo drops into their neſt after deſtroying their own? and how can they foſter the ugly uſurper as their own progeny? The pettichaps is of a timid character: it flies from birds as ſmall as itſelf; and with better reaſon it makes a rapid retreat from the ſhrike, its formidable enemy; but the danger is forgotten the moment it is paſt, and the little warbler again reſumes its cheerfulneſs, and friſks, and ſings. Almoſt all of them retire at the ſame time, in the middle of autumn; and ſcarcely any remain in October. Their departure precedes the cold weather, which deſtroys the inſects, and blaſts the ſmall fruits, on which they ſubſiſt; for they not only catch flies and gnats, and ſearch for worms, but they eat the berries of ivy, mezereon, and brambles; they grow fat during the maturity of the elders, dwarf-elders, and privets, which afford them abundant food.

In the ſouthern provinces of France, and in Italy, theſe birds generally abound, and are called *epicurean warblers*. In England, they are moſt frequent in Lancaſhire; and the male and female are much alike. Though well-known birds, nothing can exceed the confuſion which nomenclators have introduced into the article of the pettichaps, or fauvette warbler. Gmelin and Latham have tranſferred the Greek name *hippolais*, which Linnæus had injudiciouſly applied to this bird, and have beſtowed it on another bird about one-third of the ſize; and at the ſame time they have given the pettichaps the epithet *hortenſis*. Yet, while theſe two authors agree in the application of the terms, the one aſſerts that the Motacilla hortenſis is larger than the redpole or black-cap, but the other repreſents it as ſmaller than even the linnet.

20. Motacilla hippolais, the ſmaller pettichaps: bill ſhort; the upper mandible black; the under bluiſh; inſide of the mouth fleſh-colour; above and below the eye a yellowiſh line; head, neck, and upper parts, greeniſh aſh-colour; quills and tail mouſe-colour, with greeniſh edges and black ſhafts; under wing-coverts yellow; belly ſilvery white; the breaſt darker, and tinged with yellow; legs lead-coloured. This is frequent in ſeveral parts of England, and a neſt of an arched form, compoſed of dry bents, mixed with a little moſs, and thickly lined with feathers: it is placed on the ground under a tuft of graſs, or at the bottom of a buſh. The eggs are five in number, white, ſprinkled all over with ſmall red ſpots, moſt ſo at the largeſt end. In Dorſetſhire it is known by the name of *hay-bird*; in Yorkſhire it is called the *beam-bird*.

21. Motacilla melogaſter, the black-breaſted pettichaps. This ſpecies has a black collar, or rather a broad ſemilunar ſtripe which goes entirely round the lower front of the neck, above which the neck is of a moſt delicate white. The upper ſurface is entirely of a greyiſh green, or olive-colour; the wing-quills are blackiſh, bordered with olive; ſo are the middle tail-quills; the lateral ones are partly white, ſo that the under part of the tail appears quite white. All the under ſurface of the body is yellowiſh white. A black patch covers the upper part of the cheek, at the extremity of which patch lies the eye, which is brown; the bill is black; legs and feet yellowiſh. The male is about the ſize of the ſmaller pettichaps of Europe, juſt deſcribed; and is repreſented on Plate II.

fig. 1. The female is ſomething leſs; ſhe has no collar, nor does the male aſſume this diſtinction till his ſecond moult. The male and female are always found together. The warble of the male is very agreeable, eſpecially in the warm ſeaſon. They begin to pair in November, and their eggs are found at the beginning of December. They build their neſts in thickets, or among herbs and humble plants; the eggs, uſually ſix, are reddiſh white.

This bird, like the European pettichaps, is one of thoſe to whom the cuckoo confides the care of bringing up her young. Near the end of December, Vaillant found a young cuckoo, as big as a blackbird, in one of theſe neſts; it filled up the whole neſt, nay, it had even ſtretched and ſpoiled the ſhape of it. "I was ſurpriſed," ſays that curious obſerver, "to ſee with what attention thoſe little birds fed this enormous glutton, whoſe head was always out of the neſt, its mouth wide open, and ever craving. Six days after I firſt ſaw it, it took flight, having quite broken the neſt to pieces to get out; it fixed its abode upon a mimoſa-tree, where its foſter father and mother went regularly to feed it." The black-breaſt is common from the Elephant River to the tropic; rare towards the Cape; but more plentiful from lat. 28. to the tropic, eſpecially on the borders of the Great or Orange River; found alſo in Caffraria, but not common.

22. Motacilla ruficapa, the red-headed pettichaps. This has the manners of the preceding, inhabiting and neſting among low ſhrubs and plants. The neſt is conſtructed of hairy ſtalks and moſs, and a warm lining of the ſame kind of hair and feathers. Eggs from four to ſix, white, with very ſmall vinous ſpots. Inhabits the Camdeboo country; more rarely among the Caffres and Namaquois. It is about the ſize of the babbler, M. curucca. The top of the head is of a red-brown or tan-colour; the tail is ſquare, or ſtraight, and the wings hardly cover the rump. The upper ſurface of the body is browniſh-grey; the under parts cinereous, whiter on the belly. The eyes are red-brown; legs and feet yellowiſh. The female is rather ſmaller; but has not the head redder than the reſt of the body.

23. Motacilla viridis, the olive-green pettichaps: length of the male four inches and one-eighth, of the female four inches. Vaillant met with a ſingle pair of this ſpecies when encamped at Pampoen-kraal, in his voyage through Africa. The male, he ſays, came night and morning, and cheered his ſolitude with a moſt melodious ſong, perching on the top of the hut, not at all daunted at the ſight of the people. (The female was equally familiar, hopping in every corner of the hut, about the tents, and among the cattle, in ſearch of food.) His ſong was the more grateful to our traveller, as the rainy ſeaſon was begun, and no other bird was heard in the country. Vaillant, however, took the liberty to ſhoot this kind muſician and his lady, and carried them off when he moved his tents, very unwillingly, as he ſays; but, as he could find no more of that ſpecies in the neighbourhood, he would not leave his collection incomplete.

The tail is very ſhort, and the wings reach almoſt to the end of it; ſo that the ſpecies is diſtinguiſhed by a ſhort and ſtunted make. All the upper ſurface is of a beautiful yellowiſh-green. The under part of the tail is whitiſh; and the inner part of the wing-quills are light black. All the under parts are white; the eyes are light brown; bill greyiſh; legs and feet pale yellow. In the female, the green colour is more ſlightly ſhaded with yellow: and the white of the under parts is not ſo pure, but takes an olive tint. It is probably a bird of paſſage in the Auteniquois country, where Vaillant met with it; ſo that nothing is known of its neſting or incubation.

24. Motacilla griſea, the grey pettichaps. This ſpecies is very numerous on the borders of the river Gaus, Goud, (Gold,) or Gaurits; and thence to the Brake Rivier, or River Saumatre, but not beyond. Theſe birds live in ſociety; they are very briſk, and full of motion; little flocks, from eight to twelve in number, are met with continually on the mimoſa-trees, running along the branches inceſſantly, ſeeking for inſects, and the larvæ and eggs of butterflies, in the chinks of the bark and under the leaves; theſe are their chief food. While thus foraging, they emit a faint warble, which might eaſily be miſtaken for that of the long-tailed titmouſe when hopping from tree to tree. Vaillant does not deſcribe their neſt, or manner of incubation, not having been in that part of the country in the pairing-ſeaſon: but he ſuppoſes the ſmall flocks he met with to have been each one complete family. Hence it appears probable that each female lays eight or ten eggs, or perhaps more. The bill and legs of this ſpecies are blackiſh. The whole upper ſurface of the body, with the great and ſmall wing-coverts, and the outer barbs of their quills, are ſlate-colour. The throat is prettily ſpotted with black on a cinereous ground; the under parts of the body are moſtly cinereous; but the lower belly and under tail-coverts are dark red. The lateral tail-quills are moſtly white outwardly; the mid-quills are black, as are the interior barbs of the wing-quills. The eyes are greeniſh grey. This is ſhown on the Plate, at fig. 2. The female is exactly ſimilar to the male in colour; but, contrary to the ordinary rule in birds of this genus, ſhe is nearly one-fourth larger.

Vaillant alſo met with a beautiful variety of the ſame, with the greateſt part of the plumage, eſpecially the wings and tail, entirely white; but the lower belly and vent red. See fig. 3.

25. Motacilla rufa, the rufous warbler: about four inches three-quarters in length: bill grey brown; upper parts of the body rufous grey; under parts pale rufous; on each ſide of the head a longitudinal ſtreak of the ſame beneath the eyes; quills rufous grey, edged with pale rufous; tail the ſame; legs brown. This bird is not ſeen in England; but in France and Germany it frequents gardens, making its neſt in ſome low buſh or plant, lined with hair. It lays five eggs, which are of a greeniſh white, ſpotted with brown.

26. Motacilla ciliata, the double-browed warbler: a black brow over each eye, and a ſimilar one underneath. The top of the head is red, like the M. rufa; but this has a long tapering tail, and is about the ſize of the long-tailed African warbler; the upper plumage is red-brown; the under parts white, inclining to reddiſh on the flanks and under the tail. The female is ſmaller; has not the double eyebrow, which belongs excluſively to the male; the top of the head is not ſo ſtrong a red; in other reſpects there is no difference. This ſeems to be a rare ſpecies, inhabiting the country of Karow in Africa. Its neſting is not known, nor even whether it breeds in that diſtrict or not.

27. Motacilla ſalicaria, the ſedge-warbler: ſize of the blackcap, but more ſlender: bill black; head brown, marked with duſky ſtreaks; cheeks brown; over each eye a white line, and above that a black one; upper parts of the neck and back reddiſh-brown, marked with black; wing-coverts and quills duſky, the firſt edged with pale brown; the under parts are white, but the breaſt and belly have a yellow tinge; tail brown; legs duſky. This bird is common in England, and frequents places where reeds and ſedges grow, among which it ſometimes makes its neſt, and ſometimes on the loweſt branches of trees or buſhes. The neſt is compoſed of ſtraw and dried fibres of plants, lined with hair: the eggs five in number, of a dirty white, marbled with brown. It is obſerved to imitate the note of the ſwallow, ſkylark, houſe-ſparrow, and other birds, in a pleaſing but hurrying manner; and ſings all night. Whether it leaves us in the winter is not aſcertained.

28. Motacilla ſylvia, the white-throat: length about five inches and a half: bill black, at the baſe whitiſh; irides cheſnut; head browniſh aſh-colour; the back reddiſh; ſmaller wing-coverts pale brown; the greater brown with reddiſh margins; throat white; breaſt and belly reddiſh

diſh white; tail and quills duſky, edged with pale brown, except the outer feather, which has the outer web wholly white, and inner the ſame, half-way from the baſe; legs pale brown. The female differs in having the breaſt and belly wholly white. This is a bird of paſſage, viſiting us in ſpring, and leaving us in autumn; but during the ſummer is very common in England. It frequents the hedges, and makes a neſt two or three feet from the ground, compoſed of moſs, and dry ſtalks of herbs. The eggs are five in number, of a greeniſh grey, marked with rufous and brown ſpots. It is common in France, and in many other parts of the European continent; and is called by the people of Provence *le paſſerine*.

β. There is a variety of this bird obſerved in France, differing only in having the general caſt of the plumage more inclined to fulvous or red.

29. Motacilla ſylviella, the ſmaller white-throat: ſize of the yellow wren, and of the ſame ſlender ſhape: bill duſky; irides dark; upper parts of the plumage pale cinereous brown, ſomewhat darker on the crown; under parts, from the chin to the vent, duſky white; tail two inches in length, of the ſame colour as the body, except the outer feather, which is paler on the outer web; legs deep brown. Male and female much alike. This bird inhabits England, and other parts of Europe; though the ſpecies are ſo minute as ſeldom to be noticed. In England it was firſt obſerved near Bulſtrode in Buckinghamſhire; where it builds in brambles and other low buſhes. The neſt is compoſed of dry bents mixed with wool, lined with a few hairs of a horſe or cow. The eggs are white, marked with ſmall dots of brown, and larger irregular blotches of the ſame towards the larger end; the ſmall end is quite plain.

30. Motacilla ficedula, the epicurean warbler, or fig-pecker. This is a ſmall bird, yet in delicacy of taſte it challenges the ortolan. Length five inches: bill blackiſh; upper parts grey brown; round the eye rufous white; under parts greyiſh white, with a tinge of brown on the breaſt; ſmaller wing-coverts grey brown; the greater cinereous brown, tipped with white, forming a band acroſs the wing; quills cinereous brown, edged with greyiſh brown, but the three neareſt the body with white; tail duſky, edged with grey brown; legs blackiſh. The female is much paler than the male. This bird has been much eſteemed in all ages for the delicate flavour of its fleſh. It is not found in England, but is met with in moſt of the intermediate parts between Sweden and Greece; yet it is only a ſummer-inhabitant in thoſe countries, probably retiring ſtill more ſouth at the approach of winter. In the Iſle of Cyprus and Candy they abound greatly, inſomuch as to be an article of commerce. They are ſalted and potted in great numbers, and tranſported into other countries. They alſo tranſport them in veſſels filled with vinegar and ſweet herbs; and the Iſle of Cyprus alone collects from a thouſand to twelve hundred of theſe pots every year. Their chief food is inſects, except in autumn, when they make great havoc among the figs and grapes; whence it is ſuppoſed their great delicacy in ſome meaſure ariſes.

31. Motacilla nævia, the freckled warbler, or fig-eater. Length five inches and a half: bill reddiſh brown; upper parts of the body and wings rufous, varied with yellowiſh and aſh-colour; beneath white; breaſt yellowiſh, freckled with black ſpots; quills blackiſh, edged with white; tail the ſame; legs reddiſh; claws black. This is common in Italy, and feeds chiefly on figs. It makes the neſt about a foot from the ground, on ſome ſhrub or ſtrong plant; is not eaſily frightened from the neſt; and will ſooner loſe its life than ſuffer the young to be hurt.

32. Motacilla alpina, the alpine warbler: length ſeven inches: bill blackiſh; upper part of the head and neck cinereous grey; back the ſame, mixed with brown; wing-coverts blackiſh, tipped with white; ſecond quills brown, with the outer edges pale rufous; the prime one the ſame, with whitiſh edges; upper tail-coverts brown, edged with greeniſh grey, and towards the tip pale rufous; the tail-feathers marked with a pale rufous ſpot on the inner ſide at the tip; throat white, ſpotted with brown; breaſt cinereous grey; the reſt of the under parts grey, with a mixture of rufous and white; legs yellowiſh. Inhabits the Alps, and the high mountains of Auvergne and Dauphiny. They keep within theſe limits, except the extreme ſnows drive them from thence: are ſeen moſtly on the ground; ſeldom perch on trees, and are very ſhy birds.

33. Motacilla patagonica, the patagonian warbler. This, as its name implies, is a large ſpecies; length nine inches: bill bent at the tip, and black, with cinereous edges; upper parts of the body and tail, cinereous; beneath paler, marked with white ſtreaks; chin and throat quite white; over the eye a ſtreak of the ſame, reaching on each ſide almoſt to the hind head; wings dark aſh-colour, marked with pale brown, and a bar of the ſame acroſs the coverts; the quills have brown edges; outer tail-feathers white; legs black. The female has fewer ſtreaks of white on the breaſt. Native of Terra del Fuego. It varies in ſize; and is met with on the ſea-beach, and is ſuppoſed to live on ſhell-fiſh or ſea-worms.

34. Motacilla Provincialis, the Provençal warbler: about the ſize of a wren; but, as the tail is half the length, meaſures about five inches. The bill is black, with a white baſe, and the upper mandible curved at the tip; irides red; eyelids deep crimſon; upper parts of the head, neck, and body, duſky reddiſh brown; breaſt and belly deep ferruginous; middle of the belly white, quills duſky, edged with white; baſtard wing white; exterior web of the outer tail-feathers white; the reſt duſky, and half the length of the bird; legs yellow. Native of Provence in France, and of Dartford in England; generally found among cabbages, where it ſearches for food, ſuch as caterpillars and inſects which harbour there: it alſo takes up its nocturnal abode under the ſhelter of the leaves. It is likewiſe met with in England in all ſeaſons of the year; but very ſparingly.

35. Motacilla Africana, the African warbler: length ſeven inches and a quarter: bill horn-colour; crown of the head rufous, daſhed with blackiſh; hind part of the neck, back, and ſcapulars, black, edged with rufous grey; rump, and upper tail-coverts, the ſame, but the margins rufous: under parts dirty white; in ſome birds daſhed with black on the ſides; on each ſide of the throat a longitudinal ſtreak of black; quills brown, fringed with rufous; tail looſely webbed, the four middle feathers brown, with rufous margins; legs grey brown. Native of the Cape of Good Hope.

The coloniſts at the Cape give the name of *capoc-vogel*, down-bird, to all birds who build their neſts with the down of plants, as they denominate all plants that bear a down *capoc-boſchje, capoc-boom*, down-tree, or down-ſhrub: hence Vaillant has called this ſpecies *capocier*. It is very common about Cape Town, and eſpecially in Swartland and the downs of Saldana-bay. As the people never hunt them, they are ſo tame, that you may eaſily get near enough to them to knock them down with a ſtick. Nay, they will come in at the doors and windows of houſes with great familiarity, and, without regarding the perſons preſent, will go to the diſhes, plates, and pans, that ſtand aſide, and feed upon the little ſcraps of meat that remain. If they happen to alight upon a plate of mutton-fat, they could fill their bellies with great eaſe and pleaſure; but, ſo fond are they of greaſe, that, if they find a candle inſtead, they will take the pains with their weak bill to pick it clean off the wick. Hence, Vaillant ſays, in the family where he lodged they were commonly called *vet-vreetertje*, little fat-eater. With regard to mutton-fat, he obſerves, that, in the diſtricts which furniſh but little paſture for cows, they uſe the fat of the ſheep's-tails inſtead of butter; and this is particularly the caſe in Swartland.

Finding theſe birds return ſo frequently and familiarly to feed at the houſe where Vaillant lodged, he took the pains to watch for whole days together, to aſcertain the quantity of food they might take, and how many meals they made in a day. A male and female who came regularly together ſeveral times a-day into his room, he having had the precaution of placing food they were fond of within their reach, conſumed in the courſe of four and twenty hours about a quarter of an ounce of fat between them, for they had no young at that time. Their viſits were at fixed times; they generally came about break of day, at eleven in the morning, at three in the afternoon, and about ſunſet; as ſoon as they were ſatisfied, they returned to the thickets; and never failed to repeat their viſits the next day, though he often caught one or other of them and detained it ſome time; and had fixed a bit of red tape to each of them, that he might always be able to diſtinguiſh that couple. And they well knew their benefactor, as he ſays; for, when hunting near the ſpot, they would follow him for five hundred paces, flying from buſh to buſh, the male repeating his little ſong of *frit-frit-frit, fritraratiti, frit-tatariti*, wagging his long tail and flapping his wings. "The ſeaſon of love being come, (continues Vaillaint,) I found the viſits of my two comrades become leſs frequent. Whether they were fully occupied in that which blunts every other taſte, and ſo gave themſelves up in ſolitude to the company of each other; or whether, the rains being over, and the inſects re-appearing every-where, they found plenty of food out of doors, certain it is that I now ſaw them very ſeldom. This neglect laſted more than a fortnight; after which they ſuddenly renewed their viſits with more aſſiduity than ever, and I preſently diſcovered the intereſted motive which brought them back. In their former viſits, they had not failed to take notice of the wool, moſs, and hemp, which I uſed in ſtuffing dead animals, for my table was always loaded with ſuch materials: finding it no doubt more convenient to come to me, therefore, to get materials for a neſt, than to fly about and pick the woolly down from the ſhrubs, they often carried away pieces bigger than themſelves.

"Having watched them, I ſoon found the ſituation they had choſen for conſtructing the cradle which was to contain the fruit of their loves, which the female, from her ſize, appeared quite ready to depoſit. In one corner of my friend Slader's kitchen-garden, near a little ſpring, and under the ſhade of the only tree in the place, grew one of thoſe tall plants called by the coloniſts at the Cape *capoc-boſchje*, or woolly or downy tree: here I found my pair of birds had begun their operations, having covered the bed or fork of the ſhrub with a layer of moſs to receive their woolly neſt. The firſt materials were laid on the 11th of October; the labour of the ſecond day produced a mis-ſhapen maſs of about four inches thick, the diameter five or ſix: this was the foundation of the neſt, which conſiſted of moſs, ſome flax interwoven with bits of herbs, and a good deal of wool preſſed and platted together. The whole of the ſecond day I remained near the neſt, which the female never quitted during the hours of labour, that is, from the moment I opened my windows till ten in the morning, and from five o'clock in the evening till ſeven. During the morning of the 12th, the male made twenty-nine journeys to my room to fetch materials, (from the garden to the houſe was about one hundred paces at the moſt,) and in the evening ſeventeen only: he however aſſiſted the female a good deal in treading the wool with his feet, and preſſing it with his body in order to make a firm but ſoft mattreſs. When the male arrived with a piece of wool or moſs in his bill, he laid it down at the edge of the neſt, or in the fork of a branch within reach of the female, and then away he flew for another load; thus having made four or five journeys without interruption, then he ſet to work to help the female in the conſtruction of the neſt, which pleaſing toil was frequently interrupted by mutual careſſes, though the female often appeared very impatient at being impeded in the needful taſk of finiſhing the neſt, and would endeavour to beat off the male, but he generally ſucceeded in making her ſubmit, and then proclaimed his victory and happineſs by a ſong: this I have ſeen repeated eight times in one morning. On the third day, this couple began to raiſe the ſides or walls of the neſt. Having made the bottom even by treading it and rubbing their breaſts againſt it, then by turning over they formed firſt a flat ledge, which they afterwards raiſed up by leaning and puſhing againſt it; they increaſed the height by heaping on wool previouſly beaten and preſſed within the neſt with their breaſts and pinions, taking care to pierce it with their bills alſo, in order to interweave a more ſolid maſs. The branches of the ſhrub were entirely included in the exterior thickneſs of the neſt, no part of them appearing within.

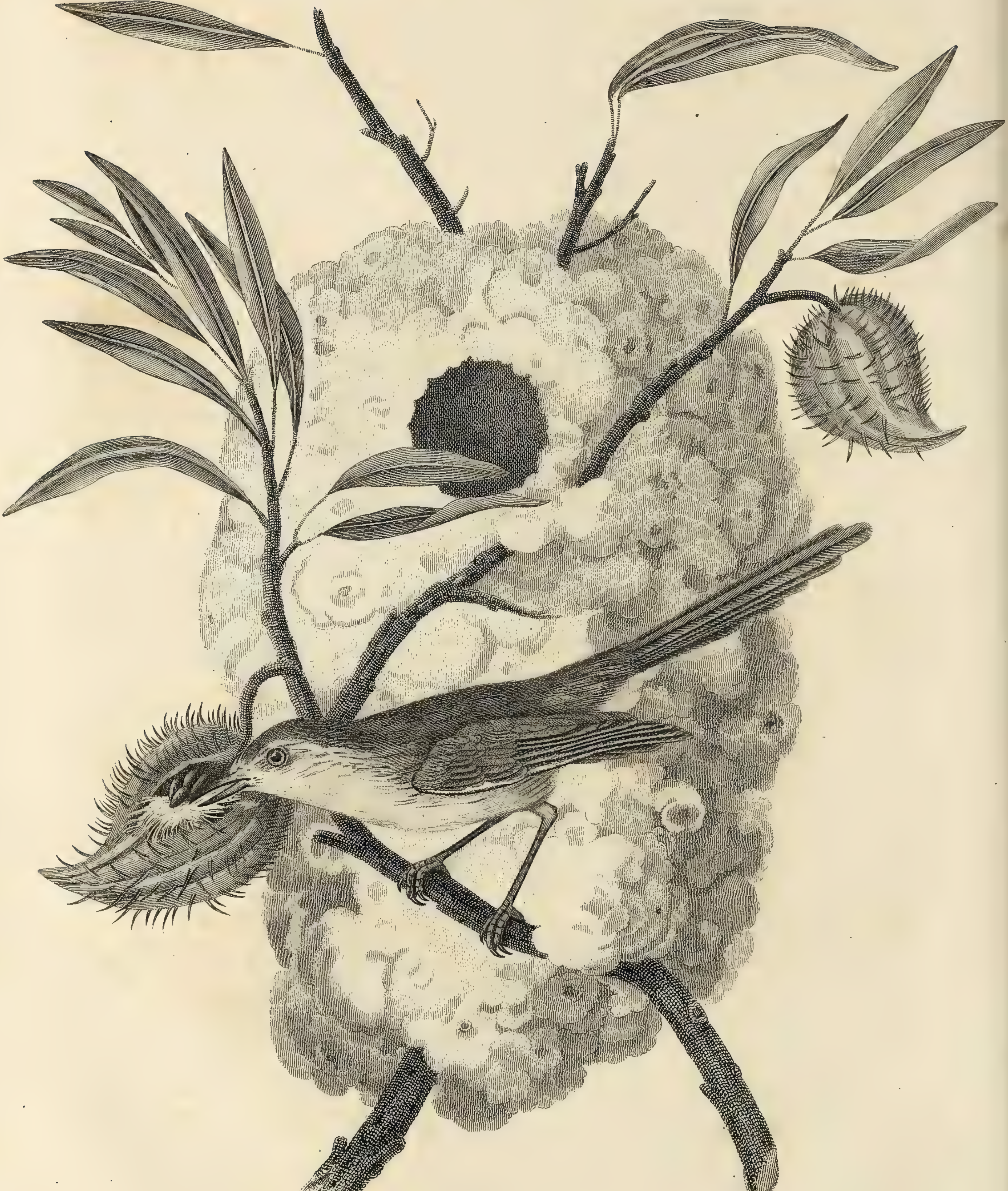
"This labour demanded a conſiderable quantity of materials, and indeed I was aſtoniſhed to ſee how much they uſed. On the ſeventh day, the neſt was finiſhed, except ſome little reparation in certain parts. Putting in my finger on that day, I felt an egg, which had been laid probably that very day; for on the evening before, the top not being covered in, I could ſee no egg. This beautiful edifice, when completed, was as white as ſnow, about nine inches high outſide, but ſo thick that it was not above five inches high at the moſt within. Its outward ſhape was very irregular, on account of the branches which it was neceſſary to work in; but the interior was exactly in the ſhape of a hen's egg with the narrow end upwards, the greateſt diameter five inches, the ſmaller one four. The aperture, or entrance, appeared to be at leaſt two-thirds of the total height of the neſt as ſeen from without, but it was in fact very little above the floor or bottom within; this aperture was an inch and a half wide, and entirely round. The inſide of the neſt was ſo finely wrought, and ſo ſmooth, as to look like beautiful linen cloth a little worn; the texture was ſo firm and cloſe, that nothing could be pulled away without tearing it. This ſolid edifice, however, required ſeven days' hard labour; preſſing and rubbing the materials with their breaſts, beating them with their pinions; interweaving threads of wool, by driving them through with their bills, &c. the work is indeed admirable, when we conſider the weakneſs of the architects. All was complete, and an egg laid, on the evening of the 18th of October. On the 19th I found a ſecond egg, which was laid in the morning; no egg was laid on the 20th. On the 22d, at my firſt viſit, I found the fourth, and the ſame evening the fifth. On the 23d no egg. On the 24th in the morning another egg; and a ſeventh on the morning of the 25th, on which day the female began to ſit. The eggs were all of a pale green, with rufous-brown ſpots. I obſerved, that, during the whole time of building and laying, the neſt was conſtantly watched; the male or female, often both, kept near at hand, conſtantly alarmed at any viſit of curioſity, or at the approach of any other birds whom ſuch a commodious habitation would have ſuited very well, and who often endeavoured to take poſſeſſion; and I believe, that, without my aſſiſtance, it would have been ſeized upon by a pair of titmice, who were ſtronger than the owners. Theſe kinds of burglaries are not unfrequent among birds, eſpecially thoſe whoſe neſts are conſtructed in this manner; ſo that I have many times obſerved the poſſeſſors of a neſt not to be the birds that built it. It is not therefore among men only that the weak are oppreſſed by the ſtrong.

"The male and female ſat upon the eggs alternately; and I was as regular as they; for, excepting when at meals or at reſt, I kept watching them continually, concealing myſelf in a neighbouring thicket. The male however did not take ſo great a ſhare in hatching as the female; for ſhe often remained on the eggs for three hours together, but he never more than half an hour at a time; and that was only when ſhe was obliged to quit her poſt in queſt of food; and then ſhe ſoon returned ſtraight to the neſt, called out the male, and took his place;

if

MOTACILLA.

Plate III.



The African Warbler (female) and Nest.

J.Pa.

Engraved for the Encyclopædia Londinensis, 1817.

if he did not come out directly, ſhe went in and drove him off; for I never ſaw them both ſit together, not even in the night; at leaſt, however late I might ſtay at my poſt, I never ſaw the male enter with his female at thoſe times, but ſhe kept her poſt the whole night. While the female ſat on the eggs during the day, the male, on a neighbouring buſh, kept cheering her with his ſong; if any ſtranger came into the garden, or even one of my dogs, the female was preſently informed of it by a piercing cry from the male, which made her as ſuddenly pop out of the neſt, but ſhe went in again as ſoon as the danger was paſt. But my appearance in the garden never cauſed any alarm. I obſerved that the maſe paſſed the night on a neighbouring branch, no doubt to guard againſt any thing that might alarm the female or injure the brood; and, if any fright occaſioned her to quit the eggs, it was never for more than four or five minutes at a time. During the time of incubation, the male frequently made advances, but the female would never admit his embraces; ſhe continued, however, to lay eggs after this, but always out of the neſt and upon the ground; and what ſurpriſed me, as ſoon as ſhe had laid one, ſhe called the male, and they both ſet about breaking it to pieces with their bills, after which they devoured the yolk. At length, on the 7th of November, on the fourteenth day of incubation, at ſeven in the morning, which was my firſt viſit, I found four young, which probably had been hatched in the night; three hours after, that is, at ten o'clock, the other three had made their appearance. The young were hatched entirely bare of feathers, and their eyes were cloſed.

“The mother remained over the young during the whole of the firſt day, and did not feed them till evening. She cleared the neſt of the egg-ſhells, throwing them out by degrees as the three laſt came forth. The ſecond day, the father and mother brought food to the young ones ſeveral times, and the neſt was not left vacant a moment. On the third day, the top of the head, the wings, back, and rump, of the young birds, were covered with down of a browniſh colour, and their eyes were half opened; on the fourth day, their eyes were nearly open, and that ſame evening entirely ſo. On the fifth, the wing and tail feathers began to riſe a line or two, and thoſe alſo of the rump and ſides, whoſe tubes or quills were now viſible. They now began to require a good deal of food. The ſixth day I ſpent entirely in watching the neſt; and had my dinner brought to me, that I might not loſe ſight of it for a moment. Between ſeven and ten in the morning, the father and mother had made fifty-three journeys, bringing each time little green caterpillars, ſpiders, and ant-eggs. Towards noon they made nineteen journeys; but from three o'clock till ſunſet the number of their journeys amounted to ſixty-ſix. On the eighth day, the wing and tail feathers, and the plumage of the upper ſurface of the body, and of the belly, were ſo complete, that the ſkin was now viſible only on the lower belly. On the tenth, eleventh, and twelfth, days, they required ſo much food, that the old ones did nothing but fly backwards and forwards in queſt of it; on the eleventh, which I devoted entirely to them, theſe poor birds made 200 journeys; but what is remarkable, I never obſerved that they brought any drink. But, as both male and female went quite into the neſt to feed the young, it may be ſaid that I could not ſee whether they gave them water or not; yet, as I never ſaw them return without bringing food in their mouth, it is certain that they never went to fetch water only; and I cannot doubt but, if the little ones had had need of drink, the father and mother would have made journeys on purpoſe. On the fifteenth day, when I came to pay my morning-viſit, I found that three of the young birds had quitted the neſt. To bring them to this, the father and mother no longer went in to feed, but called them out; ſo that hunger brought them out one after the other. At noon the neſt was empty and abandoned; the young ones got among the hedges and under leaves in the garden, where I ſaw the old ones carry them food for ſeveral days, after which they formed a flock, and lived all together in the moſt perfect harmony. The old ones did not fail to ſhow the new brood the way into the houſe, where they often came to forage as their parents had ſo ſucceſsfully done. On quitting the neſt, the young were brown on the upper ſurface, each feather edged with rufous; and the under parts of the body yellowiſh white.

“From the obſervations I have detailed, which I pledge myſelf are correct, it appears, that theſe birds are ſix or ſeven days building their neſt, that they ſit thirteen or fourteen, and that the young in about the ſame ſpace are ready to quit the neſt. I expected that the little family would return to their neſt at night; but I was deceived; they came back no more. Finding this, I took the neſt away, and cut it quite through longitudinally, in order to examine it minutely, and find all its dimenſions, which I have given above. I found many of theſe neſts in my travels; they were all alike, but more or leſs white, from the nature or tint of the cottony down which had been uſed in their conſtruction.”

The female is of a red-brown on the upper ſurface, yellowiſh-white underneath; the tail is long and taper; bill brown, legs and feet red. The male is ſomewhat larger; his body is of a more decided brown, and on his breaſt and front of his neck are ſome ſpots of a lengthened form along the middle of each feather. The eyes in both ſexes are light brown. This ſpecies inhabits not only the environs of the Cape, but many other diſtricts, eſpecially the eaſt coaſt and the borders of the Sondag and Swartkop. The laying is from five eggs to eight. The eggs of the creſted cuckow are often found in theſe neſts, which is very remarkable; for that bird, being very little leſs than the European cuckow, could never get into the neſt to lay an egg. This curious neſt, and the female bird, are copied from Vaillant on the annexed Plate III.

36. Motacilla Novæboracenſis, the New-York warbler: ſize of the tit-lark: bill black, and bent towards the tip; all the upper parts are cinereous and deep brown mixed; over the eye, from the noſtrils, a ſtreak of white; the under parts yellowiſh, ſtreaked with black; the ſtreaks broadeſt on the ſides and breaſt, nearly reſembling the tit-lark: legs pale reddiſh brown. Inhabits New York and Louiſiana.

37. Motacilla umbria, the umbroſe warbler: upper parts grey brown: beneath white, with a few black ſpots; back with duſky ſpots; rump yellowiſh; wing-coverts, tail-feathers, and upper coverts, black, edged with white; bill black; greater quill-feathers and legs blackiſh; five inches and a half long. Inhabits Louiſiana.

38. Motacilla flavicollis, the yellow-throated warbler: five inches and a quarter long: above grey; beneath white; throat pale yellow; front, eyebrows, and ſides of the neck, black; wings with a double white band; tail-feathers black, lateral ones white on the inner ſide; bill black with a yellow ſpot each ſide the baſe; legs brown. Inhabits Carolina.

39. Motacilla aurata, the golden-necked wagtail: ſize of the nightingale; but reſembles the preceding. Judging from a diſſection of the throat, Vaillant ſuppoſes it to have a fine voice; but as he met with it in the rainy ſeaſon at the Cape, when moſt of the warblers of that country are mute, he was not able to aſcertain the fact. The plumage of this bird would be very dull and uniform, were it not enlivened by a beautiful plate of gold-yellow which covers the throat and part of the front of the neck; the breaſt and reſt of the under part of the body pure white. A fainter yellow forms an edging to the lateral tail-feathers, and appears on the middle of the firſt wing-quills, and at the edges of the great coverts. A yellow mark, as deep as that on the breaſt, goes round the forehead above the eyes. The upper ſurface, including head, wings, and tail, is of a light brown colour; bill, feet, and nails, black; eyes reddiſh. The female reſembles the

male, with the uſual exception, namely, that her colours are fainter, eſpecially the yellow on the throat. Inhabits the Auteniquois foreſt, but not plentiful.

40. Motacilla trichias, the orange-thighed warbler: olive, beneath white; head with a tranſverſe white bar; thighs and vent orange. Inhabits Louiſiana: five inches and a half long; tail rounded.

41. Motacilla ruficauda, the rufous-tailed warbler: length five inches and a quarter: upper parts, as far as the rump, brown, tinged with rufous on the back; wing-coverts and tail rufous; quills margined with rufous; throat white, ſurrounded with pale rufous, dotted with brown; breaſt light brown; the reſt of the under parts white, with a rufous tinge on the under tail-coverts. Native of Cayenne.

42. Motacilla fuſcicollis, the brown-throated warbler: ſize of the yellow wren: bill broadened, and flat at the baſe; upper parts of the head and body greeniſh brown; throat the ſame; wing-coverts and quills brown, margined with pale rufous, thoſe of the tail greeniſh; breaſt and belly yellow, with a fulvous tinge. Native of Cayenne.

43. Motacilla cœruleſcens, the blue-grey warbler: very ſmall, meaſuring in length only four inches and a half: the plumage on the upper parts is cinereous blue; throat black; and reſt of the under parts white. Native of St. Domingo.

44. Motacilla Americana, the American warbler: bill pale; head, hind part of the neck, back, and tail, cinereous blue; between the ſhoulders olive yellow; throat and breaſt yellow; belly white; tips of the wing-coverts the ſame, forming a bar; end of the tail very pale; legs pale brown. Native of America.

45. Motacilla penſilis, the Penſile warbler: length five inches: bill duſky; head greyiſh black; over the eye, a ſtreak of white: between the bill and eye, a range of yellow dots; wing-coverts white and black, in bands; quills bordered with grey; throat, neck, and breaſt, yellow; ſides of the neck marked with black ſpots; belly white; ſides dotted with black; tail and quills dark grey, and the four outer feathers marked with large ſpots of white; legs grey. This beautiful little bird inhabits St. Domingo, and ſome of the Weſt-India iſlands, where it feeds chiefly on inſects and fruits; and has a very delicate ſong, which is continued throughout the year. "The ſagacity diſplayed by this bird," ſays Mr. Bingley, "in building and placing its neſt, is truly remarkable. She does not fix it at the forking of the branches, as is uſual with moſt other birds, but ſuſpends it to binders hanging from the netting, which ſhe forms from tree to tree, eſpecially thoſe which fall from branches that hang over the rivers and deep ravines. The neſt conſiſts of dry blades of graſs, the ribs of leaves, and exceedingly ſmall roots, interwoven with the greateſt art; it is faſtened on, or rather it is worked into, the pendent ſtrings. It is in fact a ſmall bed rolled into a ball, ſo thick and compacted as to exclude the rain; and it rocks in the wind without receiving any harm. But the elements are not the only enemies againſt which this bird has to ſtruggle; with wonderful ſagacity it provides for the protection of its neſt from other accidents. The opening is not made on the top or ſide of the neſt, but at the bottom: nor is the entrance direct. After the bird has made its way into the veſtibule, it muſt paſs over a kind of partition, and through another aperture, before it aſcends into the abode of its family. This lodgment is round and ſoft, being lined with a ſpecies of lichen, which grows on trees, or with the ſilky down of plants." The eggs are three or four in number; but the bird hatches more than once in the year; for young ones have been obſerved in June; again in March; and a third time at the end of Auguſt, or beginning of September.

46. Motacilla alba, the white water-wagtail: length ſeven inches, of which the tail is one half: bill black; irides hazel; hind part of the head, and nape of the neck, black; forehead, round the eyes, and ſides of the neck, white; chin, fore part of the neck, and breaſt, black; upper parts of the body, wing-coverts, and rump, cinereous; greater wing-coverts, and ſecondary quills, duſky, edged with grey; greater quills blackiſh; lower parts of the breaſt and belly white; the four middle tail-feathers are black, edged with grey; the others are white, except at the baſe, and tips of the inner webs, which are duſky; legs black. In the female the top of the head inclines to brown. Some individuals have only a creſcent of black on the breaſt, the chin and throat being quite white. Theſe birds frequent watery places, feeding on flies, gnats, and other inſects. They make their neſt on the ground, compoſed of dry graſs, fine fibres of roots, and moſs, lined with hair or feathers. The eggs are five in number, white, ſpotted with brown; they have only one brood in a year. It is a ſpecies very far ſpread, being found throughout the whole of the old continent. It is migratory; with us it ſhifts its quarters to the ſouth, as the winter approaches. In Scotland, and in the north of England, they are ſcarcely ever ſeen in the hard weather. But in the ſpring and ſummer months there is not a brook purling along between the green confinement of two flowery hedges, not a rivulet winding through the green meadow, not a river pacing acroſs the country, which is not frequented by this well-coloured and elegantly-ſhaped little creature. We even ſee him often in the ſtreets of country-towns, following, with a quick pace, the half-drowned fly or moth which the canal ſtream carries away. Next to the robin-red-breaſt and the ſparrow, they come neareſt to our habitations. Thus the wagtails are much in motion; ſeldom perch, and perpetually flirt their long and ſlender tail, principally after picking up ſome food from the ground, as if that tail were a kind of lever or counterpoiſe, uſed to reſtore the body to its equilibrium upon the legs. They are obſerved to frequent, in France, thoſe ſtreams where women come to waſh their linen; probably not ignorant that the ſoap, whoſe froth floats upon the water, attracts thoſe inſects which are moſt acceptable to them. From that circumſtance they are called *lavandieres*, "waſherwomen," by the French ornithologiſts.

47. Motacilla albida, the whitiſh wagtail: whitiſh; back, wing-coverts, and tail, pale aſh; bill and legs purpliſh. This is marked by Gmelin as a doubtful ſpecies, and is probably only a variety of the preceding. We have alſo another variety to notice.

β. Cinereous; breaſt black; frontlet, chin, cheeks, an oblique band on the wings, and the two outmoſt tail-feathers, white.

48. Motacilla Maderaſpatenſis, the Madras wagtail: bill, head, neck, breaſt, and upper parts of the body, black: under parts white; an oblique band of white croſs the wings; middle tail-feathers black; outer ones white. Native of Madras.

49. Motacilla cinerea, the cinereous wagtail: length ſix inches three quarters: bill brown; upper parts of the head, neck, and body, cinereous grey; the under white; acroſs the breaſt a browniſh band; wing-coverts and ſecondaries blackiſh, edged with white; greater quills blackiſh brown; tail duſky black, margined with white; legs brown. The female wants the band on the breaſt.

We have not this bird in England, though authors talk of it as common on the continent, where it is frequently ſeen in the ſummer-months in numbers, in the paſtures among cattle; retiring to the ſtreams when the flies become ſcarce. Part of theſe only are ſuppoſed to migrate. It differs from ours in conſtructing the neſt, which it does on ſome low willow near the ground, and hatches twice in the year.

50. Motacilla boarula, the grey wagtail: length ſeven inches and a half: bill brown; upper parts greeniſh aſh-colour; over the eye a pale ſtreak; ſides of the head aſh-colour; chin and throat black; upper tail-coverts, and under parts of the body, yellow; under tail-coverts

deeper yellow; wing-coverts brown, edged with aſh-colour; quills brown; ſecondaries white at the baſe and brown at the ends; tail the longeſt of all the ſpecies; the outer feather white; the next has the inſide and tip white, the outſide blackiſh; third nearly the ſame, but has the inner edge black; the others black, with greeniſh edges; legs yellowiſh brown. The female has no black on the throat. This is the common water-wagtail of theſe kingdoms, frequenting the banks of ponds and ſmall ſtreams, for the ſake of inſects, on which it feeds. The neſt is on the ground, not far from the water, compoſed of dried fibres and moſs, lined with hair, feathers, or wool. The eggs, from ſix to eight in number, are dull white, marked with yellow ſpots. This is a very elegant bird, and only loſes of its beauty by being common. It is found on the European continent in various parts, and ſeems more hardy than the others. Linnæus ſays it is gregarious; but with us it was ſeen only ſingle, except in pairing-time. It is called at Bologna by the names of *boarola* or *boarina*, whence the Linnæan name. It is alſo found in Senegal, where the fleſh is remarkably fat and fine, and little inferior to the ortolan.

β. M. Javenſis, a variety of this ſpecies found in Java, with the head, upper parts of the body, and upper tail-coverts, olive yellow; throat and neck grey; reſt of the under parts yellow; and greater wing-coverts brown. In all other reſpects it exactly correſponds with ours.

51. Motacilla Indica, the Indian wagtail: bill pale rufous; irides yellow; head, hind part of the neck, back, and rump, greeniſh grey; throat, breaſt, and belly, light yellow; on the breaſt are two black curved bands, joining at their ends; the ſmaller wing-coverts are like the back; the others yellow, and the ſecond quills part brown and part yellow; the two middle tail-feathers greeniſh grey; others blackiſh brown; the two outer ones white, as are the thighs and vent; legs pale rufous.

52. Motacilla viridis, the green wagtail: length four inches: head cinereous; neck, back, and breaſt, pale green; wings and tail cinereous, edged with white; belly white. Found in the iſland of Ceylon.

53. Motacilla Tchutſchenſis, the Tchutſchian wagtail: crown of the head, and back, deep olive brown; between the upper mandible and eye a ſpot of white; wing-coverts and primaries deep brown, the firſt croſſed with two bars of white; breaſt and belly white, daſhed with ruſt-colour; vent pale yellow; tail very long; the whole of the outer and half of the inner web of the outer tail-feather white; all the reſt duſky; legs black. Found off the coaſt of Tchutſchi.

54. Motacilla Capenſis, the Cape wagtail: ſize of the white wagtail: bill duſky; upper parts brown; the under white, inclining to duſky on the ſides; over the eye a whitiſh ſtreak; acroſs the breaſt a duſky band; quills brown, edged with grey; tail black, except the two outer feathers, the ends of which are white; legs duſky. Inhabits the Cape of Good Hope.

55. Motacilla Afra, the African wagtail. This is a ſmall ſpecies: bill black, broad at the baſe, and a little curved; upper parts of the body yellowiſh brown; beneath yellow, except the under tail-coverts, which are white; over the eye a ſtreak of black; wings, tail, and legs, black. Found in the country about the Cape.

56. Motacilla flava, the yellow wagtail: length ſix inches and a half: bill black; irides hazel; head, and upper parts of the body, olive green; under parts, from the breaſt, bright yellow; on the throat a few black ſpots; over the eye a ſtreak of yellow; through the eye another of duſky; and beneath the eye a third of the ſame colour. The tail is black, except two of the outer feathers, which are half black half white; legs black. The female is much leſs bright in colour: the ſtreak over the eye whitiſh, and wants the black markings on the throat. This bird is common in moiſt meadows and corn-fields in England in the ſummer-time, migrating, or at leaſt ſhifting its quarters, in the winter. In France it is ſeen at all times of the year, except the winter is uncommonly ſevere, changing the uplands for the ſides of gentle ſtreams, when food grows ſcarce in the firſt; and, from obſervation, it ſeems to have the ſame economy in the county of Hampſhire, in England. It makes its neſt in the corn-fields, on the ground, compoſing it of bents and fibres of roots, lined with hair. The eggs are five in number, varied with duſky ſpots and lines.

β. There is a variety of this, with the upper part of the plumage cinereous grey: beneath yellow; over the eye a line of yellow; greater wing-coverts tipped with white, forming a band acroſs the wing; quills and tail black; legs pale red. Found in the Iſle of Timor, in the Eaſt Indies.

57. Motacilla citreola, the yellow-headed wagtail. Larger than the preceding, but not unlike it: head, neck, and all beneath, yellow; on the nape is a blackiſh creſcent; back bluiſh aſh-colour; wings and tail like the yellow wagtail. This ſpecies is very common in Siberia, even to the arctic circle; and is found alſo in Ruſſia, but leſs numerous.

58. Motacilla tiphia, the green Indian wagtail. Size of the pettichaps: bill blackiſh, and yellow at the baſe; upper parts of the plumage olive green, paleſt on the rump; cheeks and under parts greeniſh yellow; ſmaller wing-coverts deep brown; the others tipped with white, forming two bars on the wing; quills and tail black, with the edges yellow; legs blackiſh. Native of Bengal.

59. Motacilla Sinenſis, the Chineſe wagtail: length ſix inches: bill pale red; general colour of the plumage green; from the eye to the nape a pale ſtreak; a ſpot on the ear; under parts of the body fleſh-coloured; tail pointed; legs duſky. Inhabits China.

60. Motacilla Singalenſis, the Cingaleſe wagtail: length four inches and a half: bill brown; plumage above changeable green; beneath the neck orange; breaſt and belly yellow. Native likewiſe of Ceylon.

61. Motacilla Zeylonica, the Ceylon wagtail: length four inches and a half: bill a trifle bent, and of a bluiſh-grey colour; crown and nape black; back green; beneath wholly of a light yellow; wings black, croſſed with two bars of white. Found in all parts of Ceylon.

62. Motacilla olivacea, the olive wagtail: ſize of the hedge-ſparrow: bill whitiſh, beſet with pale yellow feathers; the head, upper parts of the body, wings, and tail, olive; breaſt and belly white. Native of Ceylon. It jerks up the tail ſo high as to make an acute angle.

63. Motacilla caryophyllacea, the pink wagtail: ſize of the willow-wren: bill reddiſh; general colour of the plumage a pale pink; wings and tail duſky; legs red. Inhabits Ceylon.

64. Motacilla albicapilla, the white-crowned wagtail: length ſeven inches: bill black; plumage on all the upper parts black; the under duſky white; chin pure white; on the crown of the head a white ſpot, and behind the eye another; legs black. Native of China.

65. Motacilla griſea, the griſly wagtail: length four inches and a half: bill black; crown of the head duſky black; throat, fore part of the neck, and breaſt, black; through the eye a white ſtreak; upper parts of the body, wings, and tail, cinereous grey; the feathers of the firſt bordered with grey, and the laſt tipped with white; belly, thighs, and vent, white; legs cinereous. The female has the upper parts more aſh-coloured than the male, and the black parts not ſo deep. Native of Cayenne.

66. Motacilla arenarea, the ſand-wagtail. This is ſomewhat larger than the Cape wagtail; however this, the white wagtail, and the Cape wagtail, are very nearly of a ſize. In plumage, manners, and habits, it reſembles the white wagtail; it is however ſufficiently diſtinct. Seldom more than one pair are ſeen together, for the males fight deſperately whenever they meet; if a larger company be obſerved, it conſiſts aſſuredly of the parent-birds and the young who have but lately quitted the neſt, and are not yet provided with habitations for them-

ſelves. White and black are the only colours of the plumage; yet theſe are ſo agreeably diſpoſed as to form a very pretty bird. A ſtripe of white goes over each eye, and reaches a good way back; the throat, front of the neck, flanks, all the belly, and under the tail, are white alſo. The head, back, and ſides of the neck, are of a decided jet black, and a patch of the ſame extends to the breaſt; the mantle, ſcapulars, back, and the middle quills of the tail and wings, are black alſo; the latter taſtily fringed with white; and there are two white ſpots on each ſide, juſt at the pinions. The lateral tail-feathers have progreſſively more white as they recede from the middle, ſo that the two outer ones are black only at their origin. The bill and feet are black; the eyes brown. The female is ſomewhat ſmaller; the black colour of her plumage rather inclines to grey; but the diſpoſition of the colours is preciſely the ſame, and it is very hard to diſtinguiſh them, for it is not till the third moult that the male is of a more decided black than the female. When young, the reſemblance is complete, both male and female being of a ſlate-colour, much lighter than the adult female. The full-grown male has a ſharp cry, which is its call; and alſo a little ſong, expreſſing *pzit-pzit, prizizi-prizizi,* the note of pleaſure and gaiety. Theſe birds ſeldom build upon high trees; but commonly on rocks, or on the ſandy ſhore, where they may be ſeen running with vaſt ſwiftneſs, ſhaking their tails, and picking up all the inſects they meet with in their way; flies alſo they will purſue, and catch them on the wing, but not ſo dexterouſly as the fly-catchers, becauſe they have neither the large bill nor the convenient briſtles of thoſe birds. They will ſometimes go into the water up to their bellies in purſuit of an inſect appearing on the ſurface.

The wagtails of Africa are more ſhy and timid than thoſe of Europe. The preſent ſpecies builds a neſt on low buſhes near rivers; ſometimes in a hole in a rock ſtanding in the water; or in the trunk of a dead or worm-eaten tree floated on-ſhore from ſome river. The compoſition of the neſt is plants and moſs, lined with hair and feathers; the eggs are five in number, and the male ſhares with his female the taſk of incubation. This ſpecies is firſt met with on the banks of Orange River, in the 28th degree of S. lat. but not farther ſouth; from that point to the tropics, it inhabits the banks of all the rivers, but not on this ſide of Orange River, nor in the parallel parts of Caffraria on the eaſt coaſt. The Namaquois call it *a-guimp*, or "runner upon the ſand."

67. Motacilla variegata, the variegated wagtail. The male of this ſpecies has a narrow black collar on the lower part of the neck in front. It is about the ſize of the common wagtail; it perches on trees, differing from the preceding, which prefers running on the ground. Its legs are ſhorter than the generality of wagtails have them; but what determines it to belong to this genus, Vaillant ſays, is the ſhape of the wing, the firſt and laſt feathers being longeſt, and forming a returning angle about their middle, like thoſe of the ſnipes, plovers, and ſome others. In ſhort, this is a real wagtail; it wags its tail as it runs along the ground in ſearch of worms. Its cry and call are ſimilar to thoſe of the preceding. The top of the head and back of the neck are light brown with an olivaceous tint; the ſame prevails over the mantle and ſcapulars. The wings are black; there is a whitiſh ſpot in the middle, and the larger coverts are edged with white; below this edging, the large feathers are marked with yellow. The under part of the plumage is a compoſition of brown and dirty white, on which appears the browniſh-black collar or breaſt-band. The four middle feathers of the tail are black; the others more white as they recede from theſe. The eye is brown; the bill yellowiſh; the legs red. The female has no collar. It ſeems to be a rare ſpecies; Vaillant met with it in Caffraria only, but never diſcovered its neſt.

68. Motacilla ſtriata, the ſtriated wagtail. This ſpecies has "ſtriæ acroſs the tail, evident not to the ſight only, but to the touch, by paſſing the fingers over the ſtems of the two mid-quills, where theſe ſtriæ riſe and fall." It has alſo a white ſpot on each ſhoulder, ariſing from the top of the wing-coverts and from ſome of the ſcapular feathers, which laſt have moſtly a black ſpot at their tips. On the middle of the belly appears a red ſpot, and the under tail-coverts are of the ſame colour. The reſt of the plumage is gloſſy black, except that the extremities of the wing-quills incline to brown. The lateral feathers of the tail are tapered. The bill and feet are black; the eyes maroon-colour. The female is ſmaller, and of a duller black. This ſpecies inhabits the buſhes and mimoſa-woods of Caffraria; ſaid alſo to inhabit Bengal; makes its neſt on the ground under a thick buſh; lays four grey eggs, which the male and female ſit on by turns. Its cry may be expreſſed by ***tac-tac-trac, tac-tac-trac,*** which the male repeats inceſſantly, clapping his wings and raiſing his tail at the ſame time.

69. Motacilla rubra, the red-vented wagtail. Inhabits the ſame places as the preceding. "The whole of the under part of the body, from the lower part of the breaſt including the under tail-coverts and the plumage of the thighs, is decidedly red, a little paler on the lower belly." The rump, the upper tail-coverts, the tail itſelf, (except the two middle feathers which are blackiſh-brown,) are of a ſtrong red, like the under parts of the body. The head, neck, mantle, and upper wing-coverts, are jet black; the large wing-quills are black, growing browner towards their points; the under wing-coverts are red. The bill and feet are black; the eyes red. The female differs only in being ſomewhat leſs than the male. The neſt Vaillant never met with; nothing therefore is known of its manner of incubation. The note was very ſimilar to that of our robin-redbreaſt.

70. Motacilla curſor, the running wagtail. The largeſt and ſtouteſt of the African ſpecies. It frequents the ſcorched and barren plains, and lives ſolitary. Ever upon the ground, and running, it eaſily tires out and eſcapes the fowler, for it is very cunning; it ſeems fonder of running than of flying, eſpecially when in danger. The running wagtail, however, finds abundant proviſion in theſe barren ſpots; for inſects, and eſpecially graſshoppers, are its principal food. You need not expect to ſee more than one male and female in the ſame canton, and them only by chance, ſince, being always on the ground, the ſcattered ſhrubs in the plains of Nameroo hide them from the view; but the piercing cry of the male to his female may be heard at ſome diſtance, and thus betrays him; then your only chance is to ſhoot before the pair fly off to the next buſh; for, when once alarmed, all purſuit is vain. The length of the male, by a line drawn from the extremity of the bill to the tip of the tail, is ſeven inches and three lines. "The top of the head from the eyes and noſtrils, is entirely white. The tail, which is tapered, is white at the ſides, and black in the middle; i. e. the two mid-quills are black, the reſt white." The lower belly and under tail-coverts are white alſo. The reſt of the plumage is jet black, like the blackbird of Europe. The bill, which is hooked at the tip of the upper mandible, is black; ſo are the legs, feet, and nails; the legs are very long, and formed for running. The eyes are dark brown. The female is ſomewhat leſs; and not of ſo jet a black, but rather tinged with brown. Vaillant was not able to ſpeak with certainty of their mode of incubation; but has no doubt that, like the reſt of the wagtails of the plain, they build on the ground, and even in holes.

71. Motacilla familiaris, the familiar wagtail. In every claſs of animals there are ſome ſpecies, which, while they preſerve their liberty, are in ſome ſort domeſticated, and, finding no danger in the ſociety of man, venture to approach him, and to live as it were with him. Thus they procure comforts which we ſuffer them to enjoy in peace, becauſe, happily for them, we find no advantage in enſlaving them. Such, among birds, are the ſwallows, who neſtle and rear their young almoſt in our houſes; and the ſtorks, which in Holland are ſo familiar, that they

walk fearleſsly in the fiſh-markets, where they find abundant nouriſhment, as each dealer throws them ſome offal; and theſe birds may be careſſed and ſtroked like dogs. There are even reptiles familiariſed in this way; for at Surinam you may find in almoſt every houſe a ſerpent or two of one particular ſpecies, which take up their abode there, and are never diſturbed, becauſe they do no hurt, but catch mice as nimbly as a cat. "And who knows," ſays Vaillant, "if man had never abuſed the power which ſtrength or cunning has given him; who knows, I ſay, but all animals would have regarded him with love, or at leaſt not have ſhunned him? None has been more qualified to make obſervations upon this ſubject than myſelf; for, in the midſt of deſerts where man has not yet eſtabliſhed nor exerciſed his power, we may fairly judge of the nature of animals with reſpect to man. And I have always found, in wild uninhabited places, many animals not only eaſy of approach, but which even come to meet us, and look at us; and I have ſeen many wild birds taken with the hand. But the caſe was ſoon altered, when they began to find the danger of ſuch viſitors; it was then neceſſary for us to move farther inland, and abuſe the confidence of more inexperienced victims."

Of all the familiar birds, none equalled the preſent ſpecies, which Vaillant and his Hottentots called *vrintje*, or little friend. The ſame birds followed them during ſeveral ſtages or encampments; moving as they did, and reſting when they reſted. One pair in particular, remained all the while that Vaillant was encamped on the banks of the Great River, which was a conſiderable time, becauſe he made ſeveral excurſions while his tents and cattle remained there; and the ſame couple followed him to his forlorn habitation, called Schæmacher, mentioned in his ſecond voyage. Upon his quitting that place, they left him, it being the love-ſeaſon, when they were impelled to build a neſt, and provide for a new progeny.

This ſpecies, like the reſt, is ever in motion, flapping its wings and wagging its tail. It rarely ſtands upon the ground, and never remains there longer than is neceſſary for picking up an inſect or a worm, which it eſpies at a conſiderable diſtance, and darts upon from ſome little riſing, or from a ſhrub, or from a ſtone, or even from a piece of horſe-dung; for it ſeems to diſdain touching the earth with its foot. The couple which accompanied Vaillant were generally perched on the end of the beam of one of his carts, or upon the axle-tree; but, when they had made a good meal, their favourite place was one upon each horn of a giraffe, the ſkin of which was ſtretched out upon a hurdle to dry. He could almoſt at any time take the male in his hand and careſs it, but the female was more ſhy. Upon the whole, he is of opinion, that no animal would be more eaſily tamed and domeſticated.

The male of this ſpecies is about the ſize of a ſparrow; the female rather leſs. The ſpecific character is, "the ears, rump, and outer barbs of the lateral tail-quills, rufous." The reſt of the plumage is a delicate brown-grey, ſlightly tinged with red, darker on the upper ſurface, breaſt, and ſides; fainter on the neck, and on the belly whitiſh; the wing-quills and their coverts are dark brown fringed with light brown; the intermediate tail-feathers are entirely of the latter colour; the bill and eyes are brown; the legs and feet black. The plumage of the female is in all parts fainter. Buffon's *traquet du Cap* reſembles this, and is perhaps the ſame. Yet he deſcribes the upper ſurface to be very dark green, whereas no ſhade of green appears in the preſent ſpecies. Neither does he mention the red over the ears; but, as that does not appear till the bird is full-grown, it is poſſible Buffon might have received a young one from the Cape. The familiar wagtail inhabits all the weſt coaſt of Africa to the tropic. It makes a neſt under a ſtone, or in a hole in the ground: the eggs are four in number, of a greeniſh grey colour ſpotted with brown. The male ſhares with the female in the cares of incubation; they are always together. The young, when able to fly, ſtill follow the parents, forming a little flock or family, till the pairing-time ſeparates them to provide for themſelves in like manner.

72. Motacilla œnanthe, the wheatear: length five inches and a half: bill black; irides hazel; top of the head, hind part of the neck, and back, bluiſh grey; over the eye a ſtreak of white; through the eye another of black, which widens into a large patch behind it; the quills are black, with tawny edges; rump, upper tail-coverts, and baſe half of the tail, white; the other half black; under parts of the body yellowiſh white, changing to pure white at the vent; breaſt tinged with red; legs black. The female has the mark over the eyes rather obſcure: and inſtead of the black mark under it, a patch of brown; the tail is not ſo deeply marked with white. This bird viſits England annually in the middle of March, and leaves us again in September. The females arrive firſt, about a fortnight before the males: they keep coming till the middle of May. In ſome parts of England they are in vaſt plenty, and are much eſteemed. About Eaſtbourn, in Suſſex, they are taken in ſnares made of horſe-hair, placed beneath a long turf: being very timid birds, the motion of a cloud, or the appearance of a hawk, will drive them for ſhelter into theſe traps, and ſo they are taken. The numbers annually enſnared in that diſtrict alone, are ſaid to amount to upwards of 1800 dozen, which uſually ſell for ſixpence per dozen. Quantities of theſe birds are eaten on the ſpot by the neighbouring inhabitants; others are ſent up to the London poulterers; and many are potted, being as much eſteemed in England as the ortolan on the continent. Their food is inſects only, though in rainy ſummers they feed much on earth-worms, whence they are fatteſt in ſuch ſeaſons.

This ſpecies is met with in moſt parts of Europe, even as far as Greenland; and has alſo been ſent to England from the Eaſt-Indies. It chiefly frequents heaths; but, except in particular ſpots, as before mentioned, one only ſees here and there a few ſcattered pairs. The neſt is uſually placed under ſhelter of ſome turf, clod, or ſtone, always on the ground, and not unfrequently in ſome deſerted rabbit-burrow. It is compoſed of dry graſs or moſs, mixed with wool, fur of the rabbit, &c. or lined with hair and feathers. The eggs are from five to eight in number, of a light blue, with a deeper blue circle at the large end. The young are hatched in the middle of May.

β. The grey wheatear: this differs from the firſt in having a mixture of whitiſh and fulvous feathers on the upper parts, and very ſmall grey ſpots on the lower part of the neck; the two middle tail-feathers are wholly black; the others as in the common wheatear, and fringed with pale rufous; legs brown.

γ. The white-fronted wheatear: in this the forehead is white; the upper parts of the body aſh-coloured, irregularly mixed with grey brown; the rump cinereous.

δ. The white-backed wheatear: found by Scopoli about Dwina: wholly white above; throat, wings, and two middle tail-feathers, black; and two ſpots of black on the other tail-feathers.

73. Motacilla maculata, the ſpotted wheatear: ſize of a lark: the upper parts brown, ſpotted with duſky black; rump, and upper tail-coverts, plain brown; wing-coverts and quills black, margined with duſky white; the prime quills black; round the eyes yellowiſh white; under parts dull white, ſpotted with black on the neck and breaſt, and daſhed with the ſame on the ſides; tail white at the baſe, black above, and duſky beneath; the two outer feathers white on the outer webs, and tips of both webs; legs yellowiſh brown. Inhabits Provence in France; accompanies the ortolan, and is frequently taken with that bird.

74. Motacilla Maſſilienſis, the Marſeilles wheatear: ſize of the preceding: bill duſky; top of the head, and hind part of the neck, pale rufous brown; the feathers margined with blackiſh; upper part of the back rufous;

ſmaller wing-coverts black, margined with rufous, and the quills the ſame, but ſome of the outer ones margined with rufous white near the ends; under the eyes a yellowiſh white ſpot; the under parts reddiſh white, marked with ſmall blackiſh ſpots about the neck and breaſt; tail duſky black; the two middle feathers margined with rufous, the four next with white, and the two outermoſt wholly white; legs yellowiſh. This is found about Marſeilles, in France, where it is called *fiſt*, from its making a cry like that word; when diſturbed, inſtead of flying away, it ſquats beneath ſome ſtone or other ſhelter, till all is quiet.

75. Motacilla pileata, the hooded wheatear: length ſix inches: bill black; head black, uniting on each ſide the neck with a deep creſcent of the ſame; over the eye a white ſtreak; forehead and chin white, back and wings ruſſet brown; rump and belly white; tail white, except the whole of the two middle feathers, and ends of all the reſt, which are black. Brought from the Cape of Good Hope, where it is called *ſchaap wagter*.

76. Motacilla aurantia, the orange-breaſted wheatear: length ſix inches: upper parts black-brown and greeniſh-brown mixed; ſmaller wing-coverts the ſame; the greater white, throat dirty white; fore part of the neck the ſame, mixed with black; breaſt orange, paleſt towards the belly; upper and under tail-coverts white; tail feathers brown; all but the two middle ones have the ends white. This is alſo a native of the Cape of Good Hope.

77. Motacilla Hottentotta, the Hottentot wheatear: a large ſpecies; length eight inches: bill ten lines long; top of the head, and breaſt, irregularly marked with pale and dark brown; the reſt of the upper parts to the rump fulvous brown; on the rump a pale fulvous band; throat dirty white, tinged with brown: upper part of the belly, and ſides, fulvous, the lower belly dirty white; under tail-coverts yellowiſh, the upper white; baſe of the tail white, the reſt black; the tip dirty white, except the two middle feathers, which are black, with fulvous tips; wings brown, the edges fringed with yellowiſh. Found at the Cape of Good Hope.

This is the Traquet imitateur of Vaillant, (Oiſeaux d'Afrique, Pl. 181.) who adds, that it mimics the notes of all birds; alſo the crowing of a cock, the cackling of hens, the gabbling of geeſe, the bleating of ſheep, the barking of dogs, &c.

78. Motacilla leucorhoa, the rufous wheatear: length ſeven inches: bill black; upper parts rufous brown; wing-coverts brown, edged with rufous; quills the ſame; under parts of the body yellowiſh white, inclining to reddiſh on the breaſt; rump, upper and under tail-coverts, and baſe of the tail, white; the reſt the ſame as the quills; legs black. Inhabits Senegal.

79. Motacilla ſtapizina, the vinaceous wheatear: ſize of the common wheatear: head, neck, back, and breaſt, vinaceous, or light claret-colour; deepeſt on the back, and fainteſt on the breaſt; acroſs the lower part of the back is a creſcent of black ſpots; chin, cheeks, and throat, black; rump, lower belly, and upper tail-coverts, white; wings brown; the two middle tail-feathers black; the reſt white, with a narrow border of black; bill and legs blackiſh. The female is like the male, except that the black mark is round and behind the eyes only, and not under the throat, which is white.

β. There is a variety of this bird, which differs in having its colour ruſty yellow inſtead of vinaceous; and the baſe of the tail yellow. Theſe wheatears are found at Gibraltar, in Italy, about Bologna, in Siberia, and Kamtſchatka.

80. Motacilla formicivora, the ant-eater wheatear. This ſpecies, though not larger than the Hottentot wheatear, is however much ſtouter, the bill thicker, tail ſhorter, and legs ſtronger. It differs alſo in colour, and is much more ſhy; it frequents neither the Dutch ſettlements nor the hordes of the ſavages, but remains in the open country, and chiefly where it finds thoſe hillocks which are raiſed by the ants of Africa; upon theſe it perches, feeding on the larvæ of thoſe induſtrious inſects. But the ſolid abodes conſtructed by theſe ants would be impenetrable by the bill of the wheatear, were it not for a quadruped, the great ant-eater of the Cape, (a ſpecies totally different from the ant-eaters of the new world, but deſcribed by Buffon in his Supplement,) which turns up the ant-hills with his ſnout, and devours the inhabitants. In theſe ruined habitations the ant-eater wheatear builds and rears its young, finiſhing the buſineſs of deſtruction which the real ant-eaters had begun. But ſometimes the wheatear builds under a mole-hill, or in a hole in a rock; laying four or five white eggs. Theſe birds commonly fly in pairs, and the young ones continue with the parents longer than ſome ſpecies we have mentioned. The male differs from the female by a white ſpot on the ſhoulder, ariſing from the ſmaller coverts of the pinions; and ſome of the intermediate wing-feathers are white at their ſides. But the general colour of the plumage is dull brown on the upper ſurface of the body, wings, and tail; fainter on the belly and under parts. The throat is tinged with rufous, as well as ſome of the feathers of the neck and breaſt. The bill, feet, and nails, are black; the eyes dark brown. The white ſpot on the wing does not appear till the ſecond moult. The female is rather ſmaller; and, what does not often happen, of a darker brown on the body. This ſpecies was found near the Sondag and Swartkop rivers, about Caffraria; and differs from the Hottentot wheatear in perching on high trees. Its note or cry is *trrrri-hir-hi-hirrr*, dwelling much upon the *r*.

81. Motacilla imperator, the commander wheatear. This reſembles the preceding, and like that frequents the ant-hills to feed upon the larvæ of thoſe induſtrious inſects. They go in little flocks, conſiſting of the parents and the young brood, which do not ſeparate till the latter are fit to produce a new generation. Why Vaillant called this ſpecies *commandeur*, we cannot tell. The plumage is black with a browniſh tinge in certain poſitions, except the pinions of the wings, which are fleſh-colour, more intenſe in the male. The female is ſmaller than the male; both have the bill and feet black, and the eyes reddiſh-brown. This is abſolutely a new ſpecies, inhabiting the weſtern coaſt of Africa, from the 28th degree of ſouth latitude to the tropic. Vaillant had not an opportunity of examining the eggs or neſt; but was aſſured by the ſavages that they neſtled in deep holes under ground, which appeared likely, as thoſe he ſhot had commonly their plumage ſoiled with earth; and, from the number generally ſeen together, it is evident they lay from five to eight eggs, for a flock ſeldom conſiſts of leſs than ſeven, including the parent-birds, or more than ten. The plumage of the young bird is of a reddiſh-brown, and the ſhoulder-knot white; at which time it might be eaſily miſtaken for the ant-eater, only that the latter has a much ſtouter bill. Several of this ſpecies have been brought from Malymba; they are exactly ſimilar to thoſe from the ſouth of Africa.

82. Motacilla alauda, the lark-wheatear. With this ſpecies Vaillant concludes his liſt of wagtails, proceeding then to the larks; and he obſerves that the preſent may be conſidered as a connecting link between thoſe two genera. With the exterior appearance of the larks, the bird unites the manners and flight of the European wheatear, M. œnanthe. Yet it does not find that abundant food which the cultivated lands of Europe preſent; however, among the barren ſands and parched mountains of Africa, it diſcovers ſome open places ſuited to its inſtincts and to its wants. Under a heap of ſtones, or in a hole, the lark-wheatear fixes its ſolitary dwelling, and brings up its young. This bird is very ſhy, and runs into its hole at the leaſt appearance of danger. Differing in theſe reſpects from the larks, it reſembles them in the ſtoutneſs of body, the ſhape of the bill, and laſtly in the length of the hinder claw of the foot. The plumage is generally black; but the round tips of moſt of the feathers are yellow, and give the appearance of ſcales; the ends

of the laſt alar feathers, and the tip of the tail, are yellow alſo; and ſome yellow appears on the under parts. The bill is yellow at the baſe, black at the tip; the feet and nails browniſh black, the eyes red brown. The male is ſtouter than the female; the black on his head has a purple gloſs, which does not appear at all in the female; nor are the ſcales on the plumage of ſo bright a yellow in the female. This ſpecies inhabits the country of the Great Namaquois, in barren plains, and at the foot of rugged hills; but ſpends only the ſummer there. The eggs are about five, of a pale blue with reddiſh ſpots.

83. Motacilla rubetra, the whinchat: length five inches: bill black; irides hazel; upper parts of the head, neck, back, and rump, blackiſh, edged with rufous; from the bill ariſes a ſtreak of white, which paſſes over the eye on each ſide; beneath this the cheeks are blackiſh; chin white; the reſt of the under parts rufous white; paleſt on the belly, and inclining to reddiſh on the breaſt; on the wing, near the ſhoulder, is a tranſverſe white mark, and another ſmaller near the baſtard wing, on the outer edge; the tail is white for two-thirds from the baſe, the reſt blackiſh, except the middle feathers, which are wholly of this laſt colour; legs black. The female differs in being paler, and the ſpots on the wings much leſs perceivable: the white trace over the eye is far leſs conſpicuous; and, inſtead of black, the ſides of the head are of the ſame colour as the other parts of it. This bird is common in England, and is ſeen on the heaths during the ſummer months, where it breeds. It lays five dirty white eggs, dotted with black. Latham has ſeen them in Kent throughout the year. This is common alſo on the continent of Europe, in France, Italy, Germany, and the more temperate parts of Ruſſia. Its food is chiefly inſects: and is ſaid to be nearly as good as the ortolan, when fat.

84. Motacilla fervida, the ſultry whinchat: ſize of the preceding: bill black; upper parts of the head, neck, body, and wings, deep brown; edges of the feathers rufous; on the wings are two white ſpots, as in the laſt ſpecies; the under parts are yellowiſh white, inclining to rufous on the breaſt; tail duſky, with pale margins; legs black. Native of Senegal.

85. Motacilla montanella, the Siberian whinchat: larger than the preceding: crown of the head browniſh black; over the eyes a yellow ſtreak; chin of the ſame colour, though in ſome birds both are white; ears black, placed on a bed of grey; back teſtaceous, ſpotted with brown; beneath pale ochre-colour; the feathers on the throat brown at the baſe; wings brown; the quills edged with grey, and the ſecondaries with white; tail pale aſh-colour; the two middle feathers, and the outer one, ſhorter than the others. This viſits the Daurian Alps in February, with the flocks of hawfinches.

86. Motacilla tractrac, the African whinchat. This ſpecies inhabits the Auteniquois country, perching on buſhes. It is about the ſize of the European whinchat, but extremely wild and ſhy, rarely approaching the haunts of men; ſometimes it may be ſeen in the cattle-incloſures; but, if a man approach, flies off directly; then you may diſcover that the rump is white, as are alſo the four lateral tail-feathers, which it ſpreads much as it flies. It is called *trac-trac*, becauſe it ſeems to expreſs that ſyllable repeatedly in its cry. In flapping its wing, and ſhaking its tail, it reſembles the reſt of the ſpecies. There is nothing ſtriking in the plumage. It is cinereous grey on the head and mantle, lighter on the lower part of the back, and entirely white on the tail-coverts; the front of the neck and breaſt are lightiſh grey; the reſt of the under part white. The twelve tail-feathers are black tipped with white, and of equal length; the four firſt on each ſide are edged outwardly with white, the fourth and third have it only toward their origin, the third, however, rather more than the fourth; the two laſt, i. e. the outermoſt of all, are white all along. The wing-feathers are brown, edged, the firſt of them with light brown, the laſt with white. The bill, legs, and feet, are black; the eye, which is very large, nut-brown; a row of white feathers encircles the eyelids. This bird digs a hole for its neſt at the foot of a dwarf-tree or buſh; the eggs are four in number, greyiſh, with an infinite number of brown dots. Though this ſpecies be very difficult of approach, M. Vaillant ſucceeded in killing eight males and five females. The latter were rather ſmaller, and the white over the vent not ſo extenſive. In the young bird the feathers of the mantle are bordered with rufous.

87. Motacilla montana, the mountain whinchat. This ſpecies in its manners reſembles the rock-thruſh, or that ſpecies which Vaillant calls *rocard*, which is the African rock-thruſh. Neither are found but in rocky mountains, in the holes of which they make a neſt; and few birds are equal in cunning to theſe: their diſpoſition is nearly the ſame. This mountain bird is rarely ſeen on the plain; it never deſcends but in time of great drought, when the ſun has evaporated all moiſture from the rocks; then it takes long journeys to reach a ſpring or a river. This bird tries the ſkill and patience of the fowler; at the leaſt appearance of danger, it flies to the top of a high rock; the report of a gun drives it to the other ſide of the mountain, or into a deep hole, till the danger be paſt.

The general plumage of this ſpecies, in its perfect ſtate, that is, after the firſt moult of the ſecond year, is black; but the belly, ſhoulders, the coverts of the tail, and the margins of its lateral feathers, are white. The eyes are brown; bill and feet black. The female reſembles the male in colour, but is rather leſs. The young birds, until the ſecond moult, both males and females, are of a delicate ſlate-colour, bluiſh on the body, paler beneath; the wing-feathers are blackiſh margined with grey; the middle feathers of the tail black, the laterals partly white; the rump white; the ſhoulders very light grey; the bill and feet brown; the eyes reddiſh brown. At that inexperienced age they are eaſily killed. In the middle age, or after the ſecond moult, the plumage varies greatly in different individuals; they are then diverſely ſpotted with grey, white, and black; for part of the firſt plumage remains in different places. Sometimes the mantle only remains grey, or perhaps even only on one ſide; ſometimes the head continues grey; in other birds the grey and black feathers are about equally diſtributed. Only the plumage of the rump and the lateral tail-feathers keep always the ſame colours. Rarely but in the pairing-ſeaſon are theſe birds ſeen in couples: when the young begin to fly, the family remains together for a ſhort time; but, the moment they are able to provide for themſelves, they ſeparate, and live apart. Even the old ones, having no longer a brood to take care of, forget each other, and live apart till the ſeaſon of love calls them together again; then they call to each other with a loud cry that makes the hollow rocks reſound. From the difficulty of reaching the place where theſe birds build their neſts, Vaillant was never able to procure the eggs. He met with the ſpecies in the Namaquois country only; they feed on worms and ſoft inſects.

88. Motacilla magna, the great warbler. This meaſures ſeven inches and a half in length: bill an inch long; the head brown, mixed with darker brown; upper part of the neck and body pale brown; throat whitiſh, mixed with brown; breaſt brown; wing-coverts, and outer edge of the quills the ſame; within, half brown, half rufous; the tail is alſo of theſe two laſt colours, and the two outer feathers white on the outer webs; the under part of the body pale rufous.

89. Motacilla Philippenſis, the Philippine warbler: length ſix inches and a quarter: bill dirty yellow; head reddiſh white, in ſome parts inclining to yellow; the neck dirty red; acroſs the breaſt a bluiſh band; belly and vent reddiſh white; back, wings, and tail, violet black; acroſs the middle of the wing-coverts is a long white mark; on the outer edge of the wing, below this, is another; and ſome of the greater coverts being edged with white, make

a third in the middle of the wing; the outer tail-feathers are edged with rufous white on the outer web; legs ferruginous. Inhabits the Philippine Iſles.

90. Motacilla Coromandelica, the Coromandel warbler: ſize of the titmouſe: bill black; irides rufous yellow; head, neck, breaſt, and ſmaller wing-coverts, black; on each feather is a yellowiſh ſpot; the reſt of the coverts edged with yellow, and on the middle of them a ſpot of white; quills and tail black; rump pale rufous; belly the ſame, croſſed with irregular black bands; legs black. Inhabits the coaſt of Coromandel.

91. Motacilla perſpicillata, the ſpectacle warbler: ſize of a goldfinch; and of a fine black-colour, except the wing-coverts, on which is a ſpot of white. In ſome birds the under tail-coverts are alſo white; but what characteriſes this ſpecies, is a naked yellowiſh wrinkled ſkin, which encircles the eye all round, giving the appearance of wearing ſpectacles; the irides are yellow, and the pupil blue; the tail is even at the end, but, when ſpread, forms an almoſt equilateral triangle. Inhabits the neighbourhood of the river Plata, in South America: eſpecially about Montevideo.

92. Motacilla rubicola, the ſtonechat, or moor-titling: length more than four inches and three quarters: bill black; upper parts of the body mixed blackiſh and pale rufous; the feathers margined with ruſt-colour, but the head, neck, and throat, are nearly black; on each ſide the neck a tranſverſe ſtreak of white; breaſt reddiſh yellow; belly paler; vent white; the edges and ends of the two outer tail-feathers pale ferruginous; the reſt black; quills duſky, with ferruginous margins; thoſe next the body marked with a white ſpot near the bottoms; and on the wing-coverts is another of the ſame; legs black. The female has colours much leſs vivid; top of the head like the upper parts, and not black; the ſides and throat paleſt: the white on the ſides of the neck not ſo conſpicuous, and the breaſt and belly much paler; the white ſpot on the wings the ſame. This birds inhabits the heaths and commons in England, living on inſects of all kinds. It makes its neſt early, at the foot of ſome low buſh, or under a hollow ſtone. The eggs are five or ſix in number, of a bluiſh green, ſparingly marked with faint rufous ſpots. It is ſo very crafty as not to betray the place of the neſt; never alighting but at ſome diſtance, and creeping on the ground to it by the greateſt ſtealth; ſo that the neſt is only found by the mereſt chance. It is a reſtleſs bird, inceſſantly flying from buſh to buſh. With us it is not migratory; but is oftener ſeen in the moiſter places in winter, when the food becomes ſcarce in the dry. It has never been remarked as having any ſong. It has a cry exactly imitating the clicking of of two ſtones together, one being held in each hand; which will eaſily account for its being called the *ſtonechat*, or *ſtone-chatter*.

93. Motacilla paſtor, the African ſtonechat. This ſo much reſembles the ſtonechat of Europe, that perhaps it may be only a variety formed by the difference of climate; and whatever Buffon has related of the habits of that ſpecies may be applied to this, which is very common about the Cape of Good Hope, along the whole eaſtern coaſt, and in the interior country, chiefly in burnt-up uncultivated places. It does not frequent trees, or at leaſt only the loweſt branches, or a withered trunk; it generally prefers the loweſt tufts, or even a ſingle ſtem; for though it inhabits the Auteniquois country, which contains vaſt foreſts, it is ſeldom found in the woods. It is not a bird of paſſage, but conſtantly remains in that part of Africa we are ſpeaking of. The male and female are generally ſeen together; they are fond of perching ſide by ſide on a heath-plant or on any ſingle ſtalk, ſo that it is eaſy to kill both together, eſpecially as they are not ſhy; when they fly off ſeparately, they only ſkim along the ground till they meet again on the next low perch they find in their way; they wag their tail, flap their wings, and are always in action. When near inhabited ſpots, they frequent the incloſures of cattle, where they find abundant nouriſhment. They are moſt frequent in Swartland and in the barren plains about the Cape. They hide their neſt with the greateſt care under a mole-hill at the foot of a ſhrub, or in a hole in a rock, or even under a heap of ſtones. The laying is five eggs, ſpotted with light brown; the male and female ſit by turns.

The male is of the ſize and appearance of our ſtonechat. The head and throat are very dark brown, almoſt black; at the ſides of the neck is a broad white patch, which becomes narrower towards the hind-head; and another white ſpot on the middle of the wing. The upper and under tail-coverts and belly are white; the mantle and ſcapulars black brown; the breaſt dark red, lighter on the flanks. The bill and legs are black. The female is ſomewhat leſs, and differs totally in colours; for whatever in the male is nearly black is in her light brown; ſhe has no white but on the wings, tail, and belly; at a certain age a few white feathers appear on the part where the male has a complete white collar; her bill and feet are brown. The young birds are almoſt entirely of a light brown, having ſome white only on the belly, on the middle of the wing, and at the laſt quill on each ſide of the tail. The deſcription given by Buffon of his *motteux verdatre*, our M. aurantia, (ſp. 76. p. 88.) agrees very well with the female of this, except that the length of ſix inches is rather exaggerated. The ſettlers, being accuſtomed to ſee this ſpecies among their cattle, in the incloſures, where they find plenty of the worms they are ſo fond of, call it *ſchaapwagtertje*, which ſignifies "little ſhepherd." Vaillant therefore calls it *traquet patre;* and it is repreſented (from his work) on the annexed Plate IV. fig. 1.

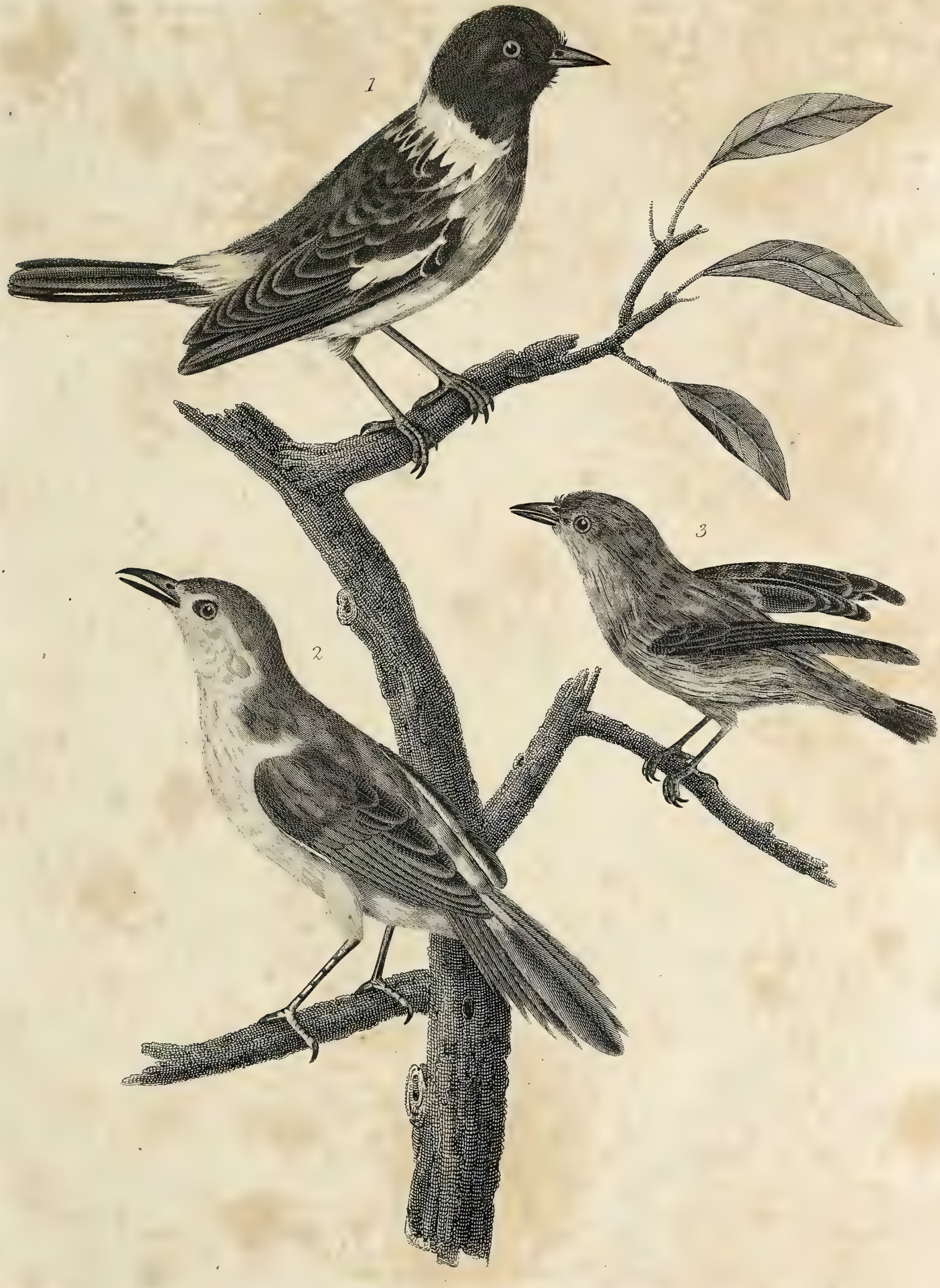
94. Motacilla atricapilla, the black-cap: length five inches and a quarter: bill brown; the top of the head black; upper parts of the body greeniſh aſh-colour; ſides of the head, and under parts, grey, changing to very light grey, or almoſt white, towards the vent; the quills and tail cinereous brown, margined with the ſame colour as the upper parts; the tail has the two middle feathers the ſhorteſt; legs lead-colour. The female differs from the male only in having the head of a ferruginous cheſnut-colour inſtead of black.

This bird is frequent in England, and other parts of Europe, as far as Italy; in all which places it is known to breed; coming in ſpring, and retiring in September. With us it makes but one neſt in the year, which is generally placed in ſome low buſh, not far from the ground. It is compoſed of dried ſtalks, mixed with a little wool and green moſs round the verge: the inſide lined with the fibres of roots, thinly covered with black horſe-hair. The eggs are five in number: of a pale reddiſh brown, mottled with a deeper colour, and ſprinkled with a few dark ſpots. The male takes turn with the female during incubation; and the young very early leap out of the neſt, eſpecially if any one approaches it, and forſake it for ever after. Their food is not confined to inſects; as, in defect of them, they will eat the fruits of ſpurge-laurel, ſervice, and ivy. They ſeem to be very fond of the laſt, as they much frequent ſuch trees as are overgrown with it; and the berries of ivy are found in their ſtomach, at times when there is plenty of inſects of all kinds. Their ſong is much eſteemed, and in many things almoſt like the nightingale. "The black-cap," ſays Mr. White, in his Hiſtory of Selborne, "has a full, ſweet, deep, loud, and wild, pipe; yet that ſtrain is of ſhort continuance, and his motions are deſultory; but, when he ſits calmly and engages in ſong in earneſt, he pours forth very ſweet, but inward, melody, and expreſſes great variety of ſoft and gentle modulations, ſuperior perhaps to thoſe of any of our warblers, the nightingale excepted. Black-caps moſtly haunt our orchards and gardens: while they warble, their throats are wonderfully diſtended." In Norfolk, they are called the *mock-nightingale*.

Of this there are three other varieties:—β. Differs from the preceding, in being wholly variegated with white and black

MOTACILLA.

Plate IV.



1. African Stonechat. 2. Sharp-tailed Warbler. 3. Red Warbler.

Engraved for the Encyclopaedia Londinensis, 1817.

black only.—γ. Somewhat bigger: the upper parts of a very deep and almoſt blackiſh colour; the throat white; and the ſides grey.—δ. Top of the head blackiſh; ſides and back pale brown, with a tinge of green; above the eye a ſtreak of white; under parts grey. Found in Louiſiana.

95. Motacilla melanocephala, the black-headed warbler. This is a ſmall ſpecies; upper parts of the plumage greeniſh-aſh; beneath grey; crown black; eyes with a red band. Inhabits Sardinia.

96. Motacilla turdus, the thruſh-warbler. This may be compared, for its mellow tones, to the black-cap; yet its ſong is better ſuſtained and more connected; and perhaps would be better deſignated by comparing it, though on a ſmaller ſcale with the ſolitary thruſh, Turdus ſolitarius.

Like moſt ſinging-birds, it is in the coolneſs of the morning, and a ſhort time before the ſetting of the ſun, that this bird delights to warble out its ſweet ſoft notes. The male only ſings: the female has a kind of cry, *tritric-tric—tritric-tric*, often repeated; and the male calls in the ſame accents when ſeeking his mate. It is only in the pairing-ſeaſon that the male warbles his ſong, which may be called the ſong of love, ſince he is ſilent all the reſt of the year, or at leaſt he at other times only utters the cry we have ſpoken of. In October, November, and December, the neſts of theſe birds are found, always a few feet from the ground, in a thick tuft of underwood. The laying is four or five eggs, ſometimes only three; of a very faint green with brown patches, eſpecially at the great end. As ſoon as the young are hatched, the male aſſiſts the female in tending them; and he ſings only at ſuch times as, after being fed, they repoſe beneath the mother's wings. Their chief food is inſects, caterpillars, and ſome kinds of berries. The ſpecies of birds in the deſerts of Africa who live upon inſects is very numerous; for the ſoil, being at no time much cooled, abounds with vaſt quantities of inſects all the year; and nature has therefore placed, ſays Vaillant, in thoſe regions, a proportion of animals deſtined to deſtroy them, in order to keep up the balance neceſſary for the continuance of her work. And, if ſome of theſe ſpecies (of birds) peck occaſionally at fruit, it is not for the purpoſe of eating, but to ſqueeze out a juice to quench their thirſt.

In the neſt of a thruſh-warbler, Vaillant one day found an egg belonging to that ſpecies of cuckoo which he calls the *criard;* but whether this bird is in the habit of nurſing a ſtrange progeny could not be known, becauſe the cuckoo's egg, which lay in the neſt with two others belonging to the owner of it, was no longer there when he viſited the place a ſecond time, but the female had in the mean time laid two other eggs, which ſhe was hatching with the two firſt. The ſhell of the cuckoo's egg lay on the ground, which ſhowed that it had been thrown out and rejected. It is therefore apparent, that all the birds to whom the cuckoos confide their eggs do not take equal care of them.

The male of this ſpecies is ſomething ſmaller than our nightingale. His colours are not ſhowy; brown-grey on the head, neck, mantle, and wings; ruſt-colour on the upper tail-coverts and rump; white, ſhaded with brown, is the prevailing colour on the under parts of the body; a cleaner white covers the throat and front of the neck, with ſome lines of a blackiſh caſt. A white line towards the forehead ſtretches like a brow over the eye, and runs towards the hind-head. The wings are enlivened by a white feſtoon which goes round the larger covertures and part of the ſcapulars; a ſimilar edging appears on the tips of the lateral tail-quills, which are ſhorter than the mid-quills, and of a greyiſh-brown colour, as well as the outer barbs of the reſt, which within are blackiſh, as well as the inner barbs of the wing-quills. The eyes are very large, of a light-brown colour; bill and feet the ſame. The mouth, tongue, and baſe of the lower mandible, are yellow. The female is ſomewhat ſmaller; of a fainter brown, the white inclining to rufous; but eſpecially the red on her rump is not ſo ſtrong. Inhabits the pleaſant ſhores of the Gamtoos, and the mimoſa-woods on the borders of Sondag and Swart-kop rivers.

97. Motacilla hirundinacea, the ſwallow-warbler: black, with a gloſs of ſteel-blue; throat, breaſt, and vent, crimſon; belly white, with a longitudinal black band. Inhabits New Holland.

98. Motacilla acutipenna, the ſharp-tailed warbler. Vaillant deſcribes this as the only bird he met with in Africa having a pointed tail, ſomewhat reſembling that of the Hirundo pelaſgia, or aculeated ſwallow, (ſee vol. x. p. 201.) yet the points of the feathers are not ſo long nor ſo finely tapered as in that bird. Every tail-feather, except the two ſhorteſt on each ſide, end in a bare unbarbed point, like ſo many needles, ſo that the ſpecies is eaſily known at firſt ſight. Its chirping is very agreeable. Its colour is totally different from the reſt of the African fig-eaters. The upper ſurface, including head, wings, and tail, is entirely of a bright red; the under part, from the throat to the belly, is lemon-colour, growing fainter towards the lower-belly, which is white, as well as the under tail-coverts. The two primary wing-quills are browniſh, as are the tips of the ſeven or eight following. The bill is black; the legs and feet light-brown, the eyes brown red. See the preceding Plate, fig. 2. The female is yellow only on the throat; the under part of the body white clouded with rufous on the flanks; the upper ſurface is preciſely as in the male. Vaillant's figure of the female is faulty in the colouring. This ſpecies inhabits the mimoſa-trees on the ſhores of the Great River, about a little iſland which Vaillant calls Hippopotamus Iſland; and feeds on inſects.

99. Motacilla Amboynenſis, the red warbler. This is one of the few birds deſcribed by Vaillant not from the living animal, but from preſerved ſpecimens. The male and female were given him by a gentleman, who informed him that their native place was Amboyna. The male is a beautiful bird, about the ſize of our blue titmouſe, Parus cœruleus. All the upper ſurface, from the forehead to the tail-coverts, is of the pureſt vermilion, except that on the head and neck ſome of the feathers are tipped with black; the throat, front of the neck, and breaſt, are of a fainter red, ſlightly ſhaded with yellow; the flanks, belly, plumage on the thighs, and under tail-coverts, are ſlate-colour. The wings and tail are abſolutely black; the tail is ſhort; the wings reach almoſt to the end of it. Bill, legs, and feet, horn-colour. Total length three inches three lines. See the Plate, fig. 3. The female is not ſo ſtout; thoſe parts which in the male are red, are in her of a light brown or fawn-colour; wings and tail dark brown inclining to black; the reſt as in the male.

100. Motacilla moſchita, the muſk warbler: general plumage lead-colour; cap pale rufous. Inhabits Sardinia; frequently hatches the cuckoo's egg, which is laid in its neſt.

101. Motacilla Pennſylvanica, the Pennſylvanian warbler: length five inches; bill black; upper parts of the body olive green, ſpotted with black; crown of the head yellow; hind part of the head black; beneath the eyes a broad band of the ſame; ſides of the head, and under parts of the body, white; top of the breaſt and ſides deep red; wing-coverts duſky, croſſed with two whitiſh bars; quills and tail duſky; the outer feathers ſpotted within with white; legs black. The female wants the black at the hind head; the back not ſpotted; and the ſides ſcarcely marked with red. Theſe are ſeen in Pennſylvania in ſpring, on their paſſage northward, where they go to breed, and paſs the ſummer. Their food conſiſts of inſects.

102. Motacilla ruficapilla, the rufous-headed warbler: length upwards of four inches: bill brown; crown of the head rufous; upper parts of the neck and body olive green; throat, fore part of the neck, and breaſt, yellow, marked with longitudinal rufous ſpots; belly and vent pale yellow; wing-coverts and quills brown, edged with

olive green; tail as the quills, but the two outer feathers are yellowiſh within; legs grey. Native of Martinico. Is ſaid to be continually in motion, and to have a melodious ſong.

103. Motacilla chryſoptera, the golden-winged warbler: length 4½ inches: bill black; crown of the head yellow, ſides of it white; through the eyes a black ſtreak; upper parts of the body deep aſh-colour; throat and fore part of the neck black; under parts white; on the wing-coverts a beautiful ſpot of yellow; the outer tail-feather has a white ſpot on the inner web; legs black. Found in Pennſylvania in April, going northward to breed; and returns back ſouthward in autumn.

104. Motacilla chryſocephala, the orange-headed warbler: bill black: top and ſides of the head, fore part and ſides of the neck, fine orange; over the eye a broad band; beneath the eye a ſecond, but paler; upper parts of the body and quills reddiſh brown; wing-coverts black and white; breaſt and belly pale yellow; tail black, edged with pale yellow; legs yellow. From Guiana.

105. Motacilla criſtata, the creſted warbler: length four inches: bill duſky brown; upper parts of the body browniſh green; the under greeniſh grey; the feathers on the whole top of the head form a creſt, of a blackiſh brown, edged with white, which the bird can erect at pleaſure; legs yellowiſh brown. Inhabits Guiana throughout the year.

106. Motacilla multicolor, the many-coloured warbler: length five inches: bill brown; the head, throat, and upper parts of the body and wings, are black, except the tips of the larger coverts, which are deep rufous, and form a band on the wing; ſides of the neck and breaſt bright rufous; middle of the breaſt, belly, and vent, white; tail rufous, with the end black; legs brown. Found at Cayenne, but is very rare.

107. Motacilla æquinoctialis, the equinoctial warbler: leſs than the preceding: bill black; upper parts of the plumage greeniſh brown; the under parts yellowiſh white; throat and breaſt pale yellow; quills and tail duſky brown; legs brown. Inhabits Cayenne, where it is met with at all ſeaſons of the year.

108. Motacilla protonotarius, the prothonotary warbler: ſize of the preceding: head, neck, breaſt, and belly, fine jonquil yellow; back the ſame, with a caſt of olive; rump aſh-colour; vent white; quills and tail blackiſh and aſh-coloured; legs black. Inhabits Louiſiana, where it has obtained the name of *figuier protonotaire*.

109. Motacilla ſemi-torquata, the half-collared warbler: length four inches and a half: bill blackiſh above, and whitiſh beneath; top of the head yellowiſh olive; behind the eyes a cinereous ſtripe; wing-coverts brown, bordered with yellow; quills brown, bordered with olive, and tipped with white; under parts of the body pale aſh-colour inclining to yellow on the belly, with a yellowiſh bar, or half-collar, on the lower part of the neck; tail-feathers aſh-coloured; the two middle ones plain; the four others, on each ſide, white within; legs blackiſh. Native of Louiſiana.

110. Motacilla fulva, the fulvous warbler: bill brown, paleſt beneath: head and upper parts fulvous brown; under, as far as the breaſt, yellow; the laſt inclining to brown; the reſt of the under parts fulvous, inclining to yellow at the vent; under wing-coverts fulvous, mixed with brown; quills and tail brown, edged with olive; legs yellowiſh brown. This likewiſe inhabits Louiſiana.

111. Motacilla fuſca, the olive-brown warbler: bill light brown: upper parts of the plumage olive brown; throat, fore part of the neck, and ſides, whitiſh, varied with grey; belly yellowiſh white; under tail-coverts yellow; wings brown; the coverts and ſecondaries bordered with paler brown, the tips whitiſh; tail brown, bordered with grey; the two middle feathers tinged with yellow; the two outer ones ſpotted with white within, near the tip; and the outer one of all bordered with white; legs brown. Native alſo of Louiſiana.

112. Motacilla pinguis, the fat warbler: bill black: upper parts of the body greyiſh olive; on the head a ſpot of yellow; on the body ſome daſhes of black; rump yellow; throat, and fore part of the neck, pale rufous, with a mixture of aſh-colour; reſt of the under parts whitiſh; quills brown, edged with grey without, and whitiſh within; ſecondaries blackiſh, edged and tipped with grey; tail black, edged with grey; the four outer feathers have a white ſpot on the inner webs, near the tip; legs black. Found in Louiſiana.

113. Motacilla cana, the grey-throated warbler: bill black: throat grey; general colour of the plumage cinereous, but the head and upper parts much deeper than the reſt; the quills have whitiſh edges; tail black, with the outer feathers almoſt wholly white; the next the ſame on the end-half; the third only tipped with white. Both theſe laſt birds are called *graſſet* in Louiſiana, on account of their being extremely fat. They frequent the tulip-trees and magnolias, particularly the latter.

114. Motacilla coronata, the golden-crowned warbler: ſize of the pettichaps: bill duſky; plumage above cinereous blue, ſpotted with black; crown of the head golden yellow; through the eyes a black band; fore part of the neck and upper part of the breaſt black, mixed with cinereous blue; ſides of the breaſt yellow, ſpotted with black; the reſt of the under parts white; but the ſides have a few black ſpots; wing-coverts and quills blackiſh, with two white bands; tail the ſame, with the three outer feathers marked with a ſpot of white: legs blackiſh. The female is rufous brown above: wants the black mark through the eyes; and has no black ſpots on the breaſt. Inhabits Pennſylvania, and migrates ſouth in autumn.

115. Motacilla Senegalenſis, the Senegal warbler: length five inches and a quarter: bill brown; general colour of the plumage the ſame; quills rufous, edged with brown; tail black; all but the two middle feathers tipped with white. Native of Senegal.

116. Motacilla leucomela, the black-and-white warbler: length five inches and a half: bill duſky; irides the ſame; forehead, crown, nape, lower part of the breaſt, belly, rump, and greateſt part of the tail, white; the other parts black; two middle tail-feathers black; the others white, with a broad band of black at the end; claws black. The female has the upper parts cinereous brown; head and neck paleſt; beneath inclining to aſh-colour; throat, and fore part of the neck, cinereous grey; above the eye a white ſtreak; tail as in the male. This ſpecies inhabits the craggy cavernous places about Saratow, and other parts of the Volga; where, like the ſand-martin, it makes holes in the banks wherein to place its neſt; theſe holes are horizontal, deep, and the neſt compoſed of dry ſtalks. The young are uſually ten in number. It is a bold bird: comes near the villages, and ſits on the ſtumps of trees, twittering almoſt like a ſwallow; it feeds on worms and beetles, as the remains of the laſt have been found in the ſtomach on diſſection.

117. Motacilla erythrogaſter, the cheſnut-bellied warbler: length ſeven inches: bill black; eyes brown; crown and nape dirty white; round the bill, throat, cheeks, temples, neck, and between the wings, deep black; breaſt, belly, and vent, deep cheſnut; rump and tail the ſame; the middle of the quills, from the third to the tenth, is white, forming a ſpot acroſs them; feathers round the knee, or garter, black; legs and claws black. The female has a paler rump and tail than the male: the tips of the outer feathers, and the whole of the two middle ones, are brown; the reſt of the bird cinereous, deepeſt above, with a mixture of rufous on the belly. This inhabits the gravelly hollows of the Caucaſian torrents the whole ſummer; is migratory, going more ſouth in winter, in ſearch of food; runs on the banks of rivers; is reſtleſs, but not fearful; often moving the tail; and ſits at times on the low ſhrubs. It makes its neſt between the branches of the ſea-buckthorn, of the berries of which it is very fond.

118. Motacilla maura, the moor warbler: ſize of the

whinchat, to which it bears ſome reſemblance: head and neck black; edges of the feathers pale; back, and baſe of the wings, black, the laſt margined with grey; ſides of the neck, and all beneath, white; throat deep ferruginous; wings brown; on the coverts an oblique patch of yellowiſh white; tail black; the rump, and baſe part of the tail, white. The female, and young birds, have the head grey, clouded with brown; back not unlike that of a woodcock; the reſt of the body more obſolete. This ſpecies inhabits Ruſſia, and frequents the birch-trees which are ſcattered in the woods of Ural, and in the fields planted with them between the rivers Tobol and Irtiſch, flying by pairs. Feeds on inſects, and makes its neſt in the holes of trees made by the mice, and other ſmall quadrupeds.

β. There is a variety of this bird with the plumage above rufous brown; beneath rufous white; chin and belly white; over each eye a rufous ſtreak; quills black, with pale edges; the baſe half of the tail white; from thence to the tip black, except the two middle feathers, which are wholly black. This was met with among the ice between Aſia and America.

119. Motacilla ſuperciliofa, the yellow-browed warbler: above greeniſh: beneath pale-coloured; on the crown of the head a pale ſtreak; over the eye a ſtripe of yellow. Native of Ruſſia.

120. Motacilla ferruginea, the ferruginous warbler: above cinereous: beneath whitiſh; throat and neck ferruginous. Inhabits Ruſſia, chiefly about the Tunguſka river.

121. Motacilla cyanura, the blue-tailed warbler: ſize of the redbreaſt: upper parts cinereous yellow, tinged with green; rump bluiſh; under parts, yellowiſh white; ſides of the breaſt, near the wings, orange; tail brown, edged outwardly with pale blue, and, when folded up, appears wholly blue; wings brown; the outer margins of the quills greeniſh yellow. This ſpecies is met with in the woods which grow about the rivulets of the ſouthern parts of the Jeniſei, and from thence throughout the whole of the eaſtern part of Siberia; always at the beginning of winter.

122. Motacilla aurorea, the aurora warbler: ſize of the redſtart: crown of the head, and nape, hoary; forehead whitiſh; throat, and fore part of the neck, black; back and wings the ſame, marked with a triangular ſpot of white; the under parts of the body deep tawny, or aurora-colour; tail the ſame, except the two middle feathers, which are black. Inhabits the neighbourhood of the river Selinga, in Siberia; and frequents the willows.

123. Motacilla ſtriata, the ſtriated warbler: crown black: cheeks white; upper part of the plumage aſh-colour, ſtreaked with black; coverts and primaries duſky; the firſt marked with two white bars; ſecondaries edged with white; tail duſky; at the end of the two outer feathers a white ſpot; throat white, ſtreaked on each ſide with black; breaſt and belly dirty white, ſtreaked downwards with black; legs whitiſh. Found at New York and Newfoundland; at the latter place in the ſummer-ſeaſon.

124. Motacilla incana, the grey-poll warbler: head, ſides of the neck, and upper tail-coverts, fine grey; wing-coverts croſſed with two white bars; primaries and tail duſky, edged with grey; throat orange; chin and breaſt fine yellow; belly whitiſh aſh-colour. Inhabits New York.

125. Motacilla flavifrons, the yellow-fronted warbler: forehead and crown bright yellow: from the bill, paſſing through the eye, a black band, bounded on each ſide with white; chin, throat, and fore part of the neck, black; breaſt and belly white; hind part of the neck, the back, rump, and leſſer wing-coverts, light bluiſh grey; greater coverts, and lower order of the leſſer, bright yellow, forming a large ſpot; the primaries and tail deep aſh-colour; the webs of the outer feathers ſpotted with white. Found in Pennſylvania.

126. Motacilla Blackburnia, the Blackburnian warbler: crown intenſely black, divided by a line of rich yellow; from the corner of the upper mandible another line of the ſame; through the eye a black one, reaching beyond it, bounded beneath by a narrow yellow line; ſides of the neck, throat, and middle of the breaſt, yellow; ſides ſpotted with black; vent and thighs white; ſmaller wing-coverts black; the greater white; primaries duſky; middle tail-feathers duſky; the three outer ones on each ſide white. Inhabits New York.

127. Motacilla mitrata, the mitred warbler: ſize of a goldfinch: bill black; fore part of the head and throat, yellow; hind part of the head black, which colour paſſes on each ſide to the fore part of the neck, forming a collar; the upper parts of the body are olive green; the under yellow; legs brown. Native of Carolina.

β. Pennant's citron flycatcher is a variety of this bird: the forehead and cheeks are of a fine yellow; the chin, and fore part of the neck, velvety black; from thence all the under parts are golden yellow; the upper parts are greeniſh grey. This is found in Louiſiana, and is a beautiful bird.

128. Motacilla cucullata, the hooded warbler: greeniſh, beneath yellow; front and cheeks black; tail wedged. Suppoſed to be another variety of the mitrata.

129. Motacilla Calliope, the chief of the warblers: ſize of the redſtart: plumage above, the colour of the nightingale; beneath, yellowiſh white; throat fine vermilion, bounded on each ſide by a black and white ſtreak, which takes riſe at the bill; between the bill and eye black; over the eye a ſtreak of white; tail rounded, and duſky brown. This bird inhabits the eaſtern parts of Siberia; and was firſt met with about the river Jeniſei, perching moſtly on the tops of the trees. It is an excellent ſinger, chiefly in the middle of the night, and little inferior to the nightingale.

130. Motacilla littorea, the ſhore-warbler: plumage above duſky green; beneath pale ochre; quill and tail-feathers blackiſh. Inhabits the ſhores of the Caſpian Sea; feeds on worms.

131. Motacilla longiroſtris, the long-billed warbler: cinereous, beneath duſky black; bill long. Inhabits mountains near the Caſpian Sea.

132. Motacilla ochroura, the ochred warbler: head cinereous: neck above, and fore part of the back, dark ochre-colour; throat and breaſt ſhining black; belly light yellow ochre. Inhabits the mountains of Perſia.

133. Motacilla obſcura, the obſcure warbler: ſize of the nightingale: upper feathers of the body cinereous at the baſe, bay in the middle, and blackiſh at the tips; beneath cinereous; the quill and tail-feathers have the outer edges bay; bill brown; eyelids nakediſh; crown and neck above browniſh aſh; rump and vent varied with cinereous and white; legs black. Inhabits the alps of Perſia.

134. Motacilla ſunamiſica, the Perſian warbler: general caſt of the plumage reddiſh aſh: chin and throat black; breaſt and belly pale rufous; the feathers tipt with white; vent ſnowy; middle tail-feathers brown, lateral ones tawny; bill and legs black; a white line from the baſe of the bill over the eyes, and reaching as far as the nape; quill-feathers and wing-coverts at the outer edge and tips white. Inhabits the rocks and alps of Perſia.

135. Motacilla murina, the murine warbler: ſize of a ſparrow: head and neck black; body and wings mouſe-coloured; from the bill, and through the eye, paſſes on each ſide a white ſtreak; belly white, except the middle, which is black; tail black; the outer feather rather ſhorteſt, and fringed with white.

136. Motacilla ſpinicauda, the thorn-tailed warbler: length more than ſix inches: bill ſtraight, except at the very tip; baſe of the under mandible white; head, and upper part of the body, reddiſh brown, mottled with yellow on the crown; between the bill and eye, yellow, paſſing in a ſtreak over the eye to the hind head, where it is rufous; the wing-coverts are rufous, mixed with brown, except

the ſhoulder, which is white; the under parts, from chin to vent, are white alſo; the greateſt coverts and quills brown, with pale margins. The tail is of a very ſingular conſtruction: for the end of each feather, for about one-third of its length, is almoſt bare of webs, ending in a point; the four middle feathers are ferruginous, the others reddiſh brown, with the ends white; legs brown. Native of Terra del Fuego.

137. Motacilla Magellanica, the Magellanic warbler: length four inches and a half: bill half an inch; viſage ſomewhat prolonged; irides reddiſh; upper parts of the body yellow brown, waved with black, with a mixture of red, eſpecially on the ſides over the wings; under parts cinereous yellow, croſſed with blackiſh; tail yellowiſh brown, mixed with red, and barred with black lines, and very ſhort, the longeſt feather being only one inch; legs yellow. This likewiſe inhabits Terra del Fuego.

138. Motacilla citrina, the citron warbler: ſize of a wren: bill ſtraight, and black; irides pale blue; plumage above citron yellow ſtreaked with duſky; ſides of the head, beneath the eye, fore part of the neck, and breaſt, white; belly, thighs, vent, and rump, citron yellow; tail ſhort, only half an inch long; colour black, with the tips dull yellow; legs dark brown. Inhabits Duſky Bay, in New Zealand.

139. Motacilla longipes, the long-legged warbler: length four inches and a half: bill black; irides bluiſh aſh-colour; upper parts of the body, wings, and tail, elegant pale green; forehead, ſides of the head, under the eye, and ſides of the neck, aſh-colour; above the eye a ſemicircular white mark; the under parts are very pale aſh-colour; thigh and vent greeniſh; tail ſhort; legs long, and fleſh-coloured; toes and claws ſtout. Inhabits Duſky Bay, New Zealand, and is named there *e teetee tee poinom.*

140. Motacilla aurata, the gilt-headed warbler: prevailing colour yellow; the upper part of the head and rump orange; throat deep blue; wings and tail brown. Bill and legs pale brown; between the bill and eye each ſide a ſmall patch of white. Inhabits India.

141. Motacilla minima, the leaſt warbler: above pale brown, beneath whitiſh; bill and very ſhort tail yellowiſh. Inhabits New Holland; three inches long.

142. Motacilla varia, the variegated warbler: length four inches and a half: bill duſky; top of the head white; ſides of it black, marked with two ſtreaks of white; back, rump, and throat, white, marked with large black ſpots; breaſt and belly white, ſpotted with black; wing-coverts black, croſſed with two white bands; quills blackiſh, edged with grey; tail blackiſh, edged with grey outwardly; legs greeniſh brown. Found in Pennſylvania during the ſummer; coming in April, and departing in autumn. It alſo inhabits Jamaica, St. Domingo, and New York, where it is found among the maples.

143. Motacilla icterocephala, the yellow-headed warbler: length about four inches: bill duſky; top of the head yellow; between the bill and eye a large triangular black ſpot; hind part of the neck, and all the upper parts, black, edged with yellowiſh green; throat and under parts whitiſh; acroſs the wing two yellowiſh bars; quills and tail duſky, edged with olive-green and whitiſh; legs duſky. This inhabits Canada and the northern parts of North America, into which it migrates the beginning of April. It frequents low ſhrubs, and the under branches of the red cedars; and departs in autumn.

144. Motacilla Dominica, the Dominica warbler: length four inches and a half: bill brown; upper parts of the bird aſh-coloured; throat and fore part of the neck pale yellow; from thence to the vent white; between the bill and eye a ſtreak of yellow; beneath the eye a large ſpot of black, and behind it a white ſpot; ſides of the breaſt marked with ſmall black ſpots; wing-coverts brown, croſſed with two white bands; quills and tail cinereous brown, edged with grey; legs brown. Found in Jamaica and Dominica.

145. Motacilla cincta, the belted warbler: length five inches: bill black; plumage of the upper parts deep cinereous blue; on the middle of the crown a ſpot of yellow; over the eye a white ſtreak; acroſs the wing-coverts two bands of white; the under parts white; lower part of the neck and breaſt ſpotted with blackiſh; acroſs the breaſt a yellow cincture or belt, near a quarter of an inch in breadth; quills brown, edged with grey; tail blackiſh, edged with aſh-colour; legs brown. The female has the upper parts wholly brown. Native of Canada.

146. Motacilla tcheric, the white-eyed warbler; called M. Madagaſcarienſis in Gmelin's Linn. but we have already one of that name, which is the 8th ſpecies. The preſent is the ſize of a wren: bill grey brown; round the eyes white; the head, and upper parts, olive green; throat and vent yellow; quills pale brown, margined with olive; two middle tail-feathers olive green; the others brown, edged with olive; legs cinereous. The eyelids are not membranous, as Buffon makes them, but are formed of minute feathers, as Briſſon formerly obſerved, and which is now confirmed by Vaillant. This bird inhabits Madras, the Mauritius, Madagaſcar, and ſeveral diſtricts in the interior part of ſouthern Africa. At Madagaſcar it is called *tcheric;* the Dutch at the Cape, and the Hottentot ſettlers, call it *glaſs-oog*, glaſs-eye, or *wit-oog*, white-eye, which is the name it bears in the Iſle of Bourbon. The female is ſomewhat ſmaller than the male; her back is more of an olive-colour, throat and front of the neck of a duller yellow; the eyebrows are leſs apparent, being not ſo full nor of ſo bright a white. The young are not furniſhed with eyebrows till after the ſecond moult. They go in flocks of ſix or eight, moſtly a ſingle family. They feed on inſects, eſpecially young caterpillars, and the eggs of butterflies, which they get in the trees. They build at the extremity or the low branches of the mimoſa-tree; the neſt is ſhaped exactly like that of our chaffinch; it conſiſts of thin bits of roots interwoven, covered outſide with moſs, and lined with down or hair; it is ſeldom more than two inches in diameter. The eggs are four or five in number; the male and female ſit alternately, and both are much attached to their young; "as I had occaſion to obſerve one day," ſays Vaillant, "when I found a neſt with four young ones which were ſo forward, that they jumped out before I could put my hand upon them. The old ones defended them with ſo much boldneſs and ſo little precaution, that I was able to kill them both with the ramrod of my gun." They are indeed not ſhy at any time: they utter a little ſong or cry, *titititiri, titititiri*, when they are ſeeking among the leaves of the trees for the inſects and eggs on which they feed. The ſpecies is very common in ſouthern Africa, eſpecially about the river called Duyven-ocks, among the Caffres, at Bruntjes-hoogte, and others where is plenty of wood.

147. Motacilla Borbonica, the Bourbon warbler: ſize of the preceding: bill, and under parts, grey brown; beneath, dirty yellowiſh grey; quills and tail brown, edged with grey; legs brown. Inhabits the iſlands of Madagaſcar and Bourbon: at the laſt it is called *Petit Simon.* It makes its neſt in September, and generally lays three blue eggs. The neſt is compoſed of dried plants, lined with hair, and generally placed on trees which ſtand ſingly, as in orchards. They keep in flocks, and feed on inſects and tender fruits.

148. Motacilla Mauritiana, the Mauritius warbler: length three inches three quarters; bill blackiſh; upper parts of the body blue grey; the under white; quills and tail black, edged with white; legs grey. Inhabits Mauritius, or the Iſle of France.

149. Motacilla livida, the lead-coloured warbler: four inches and a half in length: upper parts deep lead-colour; under the ſame, but paler, changing to white at the vent; quills black, edged with white; tail black, except the two outer feathers, which are white; bill and legs pale lead-colour.

150. Motacilla flaveſcens, the citron-bellied warbler: four inches and a quarter in length: upper part of the head and body brown; quills dark brown, edged with

rufous; the under parts of the body pale yellow; ſides of the head almoſt white; tail marked as the quills; bill and legs duſky.

β. M. rufigaſtra, the rufous-bellied warbler: olive-brown, beneath yellowiſh rufous; quill and tail-feathers brown. Inhabits Senegal; three inches and three quarters long. Made by Dr. Turton a diſtinct ſpecies. The tail is ſhorter.

151. Motacilla undata, the undated warbler: length four inches: bill black; upper parts of the head, neck, back, and wing-coverts, black, edged with rufous; rump deep rufous; under parts white; quills brown; tail the ſame, edged with rufous white; legs duſky.

152. Motacilla fuſcata, the duſky warbler: length ſix inches: bill ſlender and duſky; upper parts of the plumage brown; the under grey, with a reddiſh tinge on the ſides; quills and tail darker than the reſt; legs yellow.

153. Motacilla ſubflava, the flaxen warbler; length four inches three quarters: bill duſky; colour of the body moſtly brown, but paler on the rump; tail cuneiform; ſides of the body lightly tinged with red. Native of Senegal.

154. Motacilla aurocapilla, the golden-headed warbler: five inches three quarters long: general caſt of the plumage bright olive; beneath white; crown of the head rich gold-colour; eyebrows black; breaſt ſpotted with black; bill brown, fleſh-colour at the baſe; temples white; legs yellowiſh brown; eggs white, ſpotted with brown. Inhabits North America, and in winter migrates ſoutherly.

155. Motacilla petechia, the red-headed warbler: ſize of the black cap: bill black; crown of the head red; upper parts of the body olive green; the under bright yellow, ſpotted with red on the breaſt and belly; wings and tail duſky, edged with yellow; legs duſky. The female differs only in being paler in colour. Theſe are migratory birds, but ſolitary. They arrive in Pennſylvania in March, but do not build there: they frequent low ſhrubs; ſeldom perch on trees; and feed on inſects.

156. Motacilla albicollis, the white-necked warbler: five inches in length: bill horn-colour; upper parts of the body olive-green; ſides of the head, and all beneath, pale yellow; fore part of the neck and breaſt yellowiſh white, marked with longitudinal reddiſh ſpots; quills and tail brown, edged with greeniſh yellow; the ſide tail-feathers yellowiſh on the inner webs; legs grey brown. The female is greeniſh aſh-colour, inſtead of olive, on the hind part of the neck. Inhabits St. Domingo.

157. Motacilla Ludoviciana, the Louiſianian warbler: ſize bigger than a wren: bill brown; beneath grey; upper parts of the plumage olive-green; fore part of the neck and breaſt fine yellow, ſpotted with red; reſt of the under parts yellowiſh white; acroſs the wing two bands of white; quills blackiſh brown, edged with blue grey; the inner webs white; the outſide tail-feathers are white within at the tips, and the third has a round white ſpot at the ſame place; legs cinereous. The female wants the red ſpots on the breaſt. Found in Louiſiana, and at St. Domingo.

158. Motacilla chloroleuca, the green and white warbler: length four inches and a half: bill horn-colour; head cinereous, mixed with olive; upper parts of the body olive green; the under yellowiſh white; greater wing-coverts and quills brown, edged with yellowiſh green; tail deep olive, marked with yellow; legs grey brown. The female differs only in being paler in colour. Inhabits St. Domingo.

159. Motacilla auricollis, the orange-throated warbler: length five inches: the upper mandible brown; the lower whitiſh; upper parts of the plumage olive green, inclining to aſh-colour on the rump; throat, fore part of the neck, and breaſt, orange; belly pale yellow; vent and thighs almoſt white; the greater wing-coverts aſh-colour; quills brown, edged with aſh-colour; the two middle tail-feathers are of this laſt colour; the others black on the outſide and tips, and white on the inſide; legs grey. The female has the orange on the breaſt leſs lively. Inhabits Canada.

160. Motacilla maculoſa, the black-ſpotted warbler: ſize of the pettichaps: bill brown; top of the head and ſides aſh-colour; hind part of the neck and back olive green, ſpotted with black; throat, breaſt, and rump, fine yellow, with oblong black ſpots on the breaſt; belly and vent white; acroſs the wing-coverts two bars of white; quills deep aſh, edged with white; tail-feathers black, with a white ſpot on the middle of the inner webs; legs brown. Inhabits Pennſylvania.

161. Motacilla fuſceſcens, the brown warbler: length five inches: bill brown; plumage on the upper parts pale brown; beneath, varied with blackiſh and rufous grey, not unlike a lark, except the throat, which is plain dull brown, and through the eyes a ſtreak of the ſame colour; quills and tail pale brown. Native of Jamaica.

162. Motacilla tigrina, the ſpotted warbler: ſize of the preceding: bill duſky; the feathers on the upper parts are brown, with olive green margins; behind each eye a large rufous ſpot; under parts, ſides, and rump, yellowiſh, marked with irregular blackiſh ſpots on the neck and breaſt; the lower part of the belly, thighs, and under tail-coverts, dirty yellowiſh white; acroſs the greater wing-coverts a band of white; quills and tail fringed with olive green; legs brown.

β. There is a variety of this bird, which differs in the plumage being paler: the under parts are whitiſh, and the breaſt is ſpotted with brown; the white band is likewiſe wanting on the wing-coverts. The firſt inhabits Canada, the other St. Domingo; but, as they have both been caught on-board ſhips between theſe places, it is probable that they migrate alternately from one to the other.

163. Motacilla pinus, the pine warbler: olive, beneath yellow; lores black; wings blue with two white bands. Tail ſlightly forked. Female wholly brown. Inhabits Carolina in ſummer; four inches and a half long.

164. Motacilla virens, the green warbler: length near five inches: bill black; plumage on the upper parts olive green; ſides of the head and neck bright yellow; throat, and fore part of the neck, black; upper part of the breaſt yellow; lower part, belly, and vent, white; ſides black and white; leſſer wing-coverts olive; middle and greater ones neareſt the body deep aſh-colour, tipped with white, making two bands acroſs the wing; outer coverts and quills aſh-colour; tail deep aſh-colour; legs brown. Inhabits Pennſylvania, where it comes about the month of April; but ſcarcely ſtops there, being only on its way to the more northward parts: and returns back in September. It feeds on inſects.

165. Motacilla dumetorum, the white-breaſted warbler: general colour of the upper parts of the body cinereous brown; head bluiſh; throat and breaſt white. Inhabits Ruſſia.

166. Motacilla cinnamomea, the cinnamon warbler: plumage of the upper parts moſtly hoary; throat black; breaſt, belly, and rump, crimſon; quills black; the four firſt red at the baſe, forming a red ſpot in that part; tail black; the four middle feathers obliquely rufous on the ſides. Native of the iſland of Ceylon.

167. Motacilla nigriroſtris, the black-jawed warbler: length ſeven inches: bill black, and pale at the baſe; plumage above, olive brown; from the baſe of the bill to the eye, rufous yellow; on each ſide of the jaw is a remarkable black ſtreak; breaſt rufous, daſhed perpendicularly with blackiſh; belly white; the ſides daſhed with duſky black; wing-coverts dark olive brown, with reddiſh white tips; quills darker, with yellowiſh edges; tail-feathers pointed at the ends; outer feather white; the end of the ſecond white; the reſt brown; legs pale brown. In the collection of ſir Joſeph Banks.

168. Motacilla luteſcens, the buff-faced warbler: length ſix inches: bill duſky; forehead and chin duſky buff-colour; on the ears a patch of duſky red; upper parts of

the body and tail-coverts ferruginous brown; under parts reddiſh white, mottled acroſs the breaſt with duſky; legs pale brown. In the collection of ſir Joſeph Banks.

169. Motacilla borealis, the northern warbler: length five inches: bill pale; forehead, throat, and ſides of the head, ferruginous; upper parts of the body green; the under, yellow; both inclining to olive; tail rounded; the tips of all but the two middle feathers nearly white; legs duſky. Native of Kamtſchatka.

170. Motacilla Kamtſchatkenſis, the Kamtſchatka warbler: upper parts brown; beneath paler; middle of the belly white; front, cheeks, and chin, pale ferruginous; bill long and ſlender. Inhabits Kamtſchatka.

171. Motacilla awatcha, the awatcha warbler: crown of the head, and upper part of the neck and body, deep brown; primaries edged with white; lower part of the five outmoſt feathers of the tail deep orange, tips brown; the two middle feathers wholly brown; throat and breaſt white, ſpotted with black; from the upper mandible to each eye an oblique white line; ſides pale ruſt-colour; middle of the belly white. Inhabits Kamtſchatka.

172. Motacilla caneſcens, the Van Diemen warbler: length ſix inches and a half: bill black; forehead marked with white ſtriæ; ſpace over the eyes, and the cheeks, whitiſh; back brown, mixed with white; wings pale brown; moſt of the feathers fulvous on the outer edges, forming a fulvous ſpot on the wings; tail half-way on the baſe pale fulvous, the two outer feathers on each ſide marked with a white ſpot within, at the tips; under parts of the body white; breaſt and vent ſtriped longitudinally with white; legs black. Inhabits Van Diemen's Land.

173. Motacilla æquinoctialis, the equinoctial warbler: brown teſtaceous; beneath white: rump pale; tail-feathers with obſolete bands. Inhabits Nativity Iſland; ſize of a ſparrow.

174. Motacilla nigricollis, the black-necked warbler: bill yellow, the baſe blue; crown and hind part of the neck black; the feathers longiſh, ſo as to form a creſt at pleaſure; ſides of the neck, breaſt, and belly, reddiſh white; back and wing-coverts, light grey; primaries and tail black; legs yellow. Inhabits India.

175. Motacilla plumbea, the plumbeous warbler: ſmall: bill duſky brown; plumage above deep lead-colour, nearly black; beneath pale aſh-colour; quills and tail duſky; legs deep brown.

176. Motacilla Cambayenſis, the Cambay warbler: blackiſh-brown, beneath fine black, top of the belly and vent ruſty-rufous; wing-coverts white. Bill black; tail three inches long; legs brown. Inhabits India; ſix inches long.

177. Motacilla Guzurata, the Guzerat warbler: greeniſh, beneath white; crown cheſnut; quill-feathers and tail brown. Bill and legs pale brown; quill and tail feathers, edged with green. Inhabits India; four inches and a half long.

178. Motacilla Aſiatica, the Aſiatic warbler: brown, beneath yellowiſh; head and neck black; lores and chin white; tail long. Bill blackiſh, with a few ſmall briſtles at the baſe; breaſt with a few white ſpots; tail three inches and a half long, wedged, the outmoſt feathers pale from the middle to the tip. Inhabits Guzerat; ſize of a nightingale.

β. Front, eyebrows, and body beneath, white; lateral tail-feathers half white.

179. Motacilla caprata, the Luzonian warbler: ſize of the ſtonechat: bill duſky; the whole bird is blackiſh brown, except the ſmaller wing-coverts neareſt the body, and the vent, which are white; and in ſome birds the rump is alſo white; legs black brown. The female is brown above; beneath rufous brown; throat whitiſh; rump and upper tail-coverts pale rufous; the under, dirty rufous white; tail brown. Inhabits the Iſle of Luçon, where it is called *maria-capra.*

180. Motacilla phœnicurus, the redſtart: throat black, belly and tail rufous; head and back hoary; front white. This bird is well known to all Europe. In Greek it is called *φοινικȣρος*; in Latin, *phœnicurus*; in Italian, *codiroſſo, coroſſolo, revezol*; in German, likewiſe its names denote the reddiſh colour of its tail; *rot-ſtertz, rot-ſchwentzel, wein-vogel, rot-ſchwantz,* &c. it is alſo called *hauſsroetele, ſummer-roetele,* (houſe or ſummer red-bird.) The Engliſh name, *redſtart,* is evidently borrowed from the German, *rot-ſtartz,* which ſignifies *red-tail.*

The ſong of this bird, though greatly inferior to that of the nightingale, yet partakes of the ſame modulations, and wears an air of tenderneſs and melancholy. Such at leaſt are the emotions which it awakens in us; for, with regard to the bird itſelf, it muſt be the expreſſion of joy and pleaſure, as it is the expreſſion of love, which is alike delicious to every animated being. This is the only analogy that ſubſiſts between the two birds; their habits, their ſize, their plumage, are different, though in French the ſame generic name of *roſſignol* has been uſually applied to both. This bird appears with its relatives in the ſpring, and ſits on towers and the ruins of deſerted buildings, and there it pours forth its notes. It even procures ſolitude in the midſt of cities, where it ſettles on the top of a high wall, in a belfry, on a chimney, &c. always ſeeking the moſt lofty and inacceſſible ſpots: it is alſo found in the heart of the thickeſt foreſts. It flies nimbly; and when it perches it vents a feeble cry, and quivers its tail inceſſantly, not upwards and downwards, but horizontally, from right to left. It prefers the mountainous tracts, and ſeldom viſits the plains. It is much ſmaller than the nightingale, and even ſomething ſmaller than the redbreaſt; its form is more ſlender, and longer; a black horſe-ſhoe or creſcent covers its throat, and the fore-part and ſides of its neck; the ſame black encircles its eyes, and reaches under its bill; a white bar maſks its face; the crown and back of its head, the upper part of the neck and back, are of a gloſſy but deep grey; in ſome ſubjects, probably old ones, this grey is almoſt black; the wing-quills are blackiſh cinereous; their outer webs are of a lighter caſt, and fringed with whitiſh grey; below the black horſe-ſhoe, a fine rufous flame-colour decorates a great part of the breaſt; and, fading ſomewhat on the ſides, it again reſumes its luſtre on all the plumage of the tail, except the two middle feathers, which are brown; the belly is white, and the feet black; the tongue is forked at the end, as in the nightingale. The female differs ſo much from the male, that ſome authors have reckoned it a ſecond ſpecies: it has neither the white face nor the black throat of the latter; both theſe parts are grey mixed with ruſty, and the reſt of the plumage is of a lighter tinge.

Theſe birds breed both in towns and in the country, in hollow trees, holes of walls, or in the crags of rocks; they lay five or ſix blue eggs; the young are hatched in May. During the whole time of incubation, the male warbles from ſome neighbouring eminence, or from the top of a detached building; and his muſic is moſt melodious at day-break. It is ſaid that theſe birds are timorous and ſuſpicious, and that they will abandon their neſt if they be ſeen employed in conſtructing it, and that they will deſert the eggs if they be touched. All this is probable; but what Albin adds is abſurd; that, if the young be handled, the parents will leave them to their fate, or throw them out of their neſt.

The redſtart, though it lives amidſt our dwellings, is extremely averſe to domeſtication. It has neither the familiarity of the redbreaſt, the ſprightlineſs of the petticaps, nor the animation of the nightingale; its habits are ſolitary, its character is ſullen and ſad. If it be caught in the adult ſtate, it will refuſe all ſuſtenance, and pine to death; or, if it ſurvive the loſs of its liberty, an obſtinate ſilence will mark its diſconſolate condition. However, if it be taken from the neſt and raiſed in the cage, it will ſing; and inſtruction, or the imitation of other birds, will improve its ſong, which is heard indiſcriminately at every hour, and even during the night. It is fed with crumbs of bread, and with the ſame paſte as the nightingale; it is even more delicate. When at liberty, it preys on flies, ſpiders, the chryſalids of ants, &c. and, when theſe are wanting, it feeds on ſmall berries, and ſoft fruits. In Italy it pecks the figs; and Olina tells us, that it is ſeen in that country as late as the month of November, though in England it diſappears in September. It departs when the redbreaſt begins to viſit our habitations; and this is the reaſon perhaps that Ariſtotle and Pliny aſſert that the redbreaſt of winter, and the redſtart of ſummer, are the ſame bird. Even in their migrations, the redſtarts ſhow their ſolitary diſpoſition; they never aſſemble in flocks, but arrive and depart ſingly.

β. A variety of the male, differs in having a long line of white only on the forehead, the back more cinereous, and the bottom of the belly not white.

γ. Of the female, differing from the common only in having the breaſt ſpotted with red.

δ. M. tithys, made by Dr. Turton a diſtinct ſpecies: inclines more to aſh-colour; the throat and breaſt black; belly, between the thighs, whitiſh; elſewhere varied with black and white. The female wholly brown. It is called by the Italians, *moretto;* and by the Germans, *hauſroth ſchweiſe*.

181. Motacilla Gibraltarienſis, the Gibraltar redſtart: ſize of the common redſtart: bill dark brown; forehead, ſides of the head, and throat, black; hind head white, paſſing forwards to the eyes; top of the head, neck, back, wing-coverts, breaſt, and upper part of the belly, bluiſh grey, or aſh-colour; lower belly white; quills grey brown, edged with white: rump and tail bright orange-colour; the two middle feathers of the laſt are brown, and all the others tipped with brown, except the outer one, which is wholly orange; legs brown. Found among the rocks of Gibraltar.

182. Motacilla erythraca, the red-tailed warbler: a ſize bigger than the redſtart: bill blackiſh; top of the head, hind part of the neck and back, ſcapulars, and ſmaller wing-coverts, grey; rump and tail rufous red; throat, and from thence to the vent, whitiſh grey, mixed with pale rufous; greater wing-coverts, and quills, grey brown, edged with rufous; tail wholly rufous; legs black. The male differs from the female, chiefly in having a large brown mark on the fore-part of the neck, in the ſhape of a horſe-ſhoe, the concave part uppermoſt: a ſmall brown ſpot between the bill and eye: the two middle tail-feathers brown; the reſt rufous. Theſe inhabit the continent of Europe, and are migratory; arrive in Burgundy and Lorraine in May, and depart in October; frequent the woods, neſting in the low buſhes, near the ground. The neſt is compoſed of moſs without, and wool and feathers within. The eggs, five or ſix in number, are white, mixed with grey. They may be found in the ſkirts of the wood, which they frequent morning and evening, to ſeek the worms, flies, &c. on which they feed. It has no ſong, only a ſingle note, like the word *ſuit*, and wags the tail like the redſtart. At the end of ſummer it is very fat, and delicate to eat.

183. Motacilla Guianenſis, the Guiana warbler: length ſix inches and a half: bill pale; upper parts of the head, neck, and body, grey; the under parts white; wings and tail wholly rufous; legs pale fleſh-colour. Inhabits Guiana.

184. Motacilla atrata, the mourning-warbler: length ſix inches: general colour of the plumage black; top of the head lead-colour; feathers of the back edged with duſky brown; quills duſky; outer edges of the ſecondaries fringed with white; the two middle tail-feathers duſky, the others red.

185. Motacilla guira, the guira warbler: ſize of a goldfinch: bill duſky; round the baſe of it black, extending round the eyes, ears, and throat; over the eye a line of yellow, paſſing down on each ſide of the neck; upper parts of the body, wings, and tail, olive green; under parts fine orange; vent yellow; upper tail-coverts yellow; rump fine orange; tips of the quills brown; legs brown. Native of Braſil.

186. Motacilla ſcalis, the blue warbler: length five inches and three quarters: bill blackiſh; upper parts of the plumage fine blue; throat, fore-neck, breaſt, and ſides, of a fine rufous red; belly and under tail-coverts white; legs black. In ſome birds there is a little mixture of blue on the breaſt. The female is not far different, but the colours are not ſo bright; the blue is mixed with duſky, and the ſecondaries edged with white. This ſpecies is migratory; coming into Carolina, Virginia, the Jerſeys, and New York, very early in the ſpring; ſometimes even when the ſnow is on the ground. Great numbers appear all at once; and feed on the early ephemera in March; they alſo frequent fields where maize and mulleins grow, and perch on the ſtalks, in order to pick off the flies. It is often ſeen on rails, and jumps after the flies within reach, like the flycatcher. Is never ſeen on trees, though ſaid to make the neſt in the holes of them. Flies ſwift; and has a plaintive kind of note. It is found in the Bermuda Iſles.

187. Motacilla Suecica, the blue-throated warbler. This ſeems much related to the redbreaſt, and is the ſame ſize. The colour of the upper parts is nearly the ſame; over the eye is a rufous white ſtreak; the throat and fore-part of the neck of a bright azure blue; beneath this a border of black; and under that the breaſt is red; belly, thighs, and vent, duſky white; tail brown, but the half of all but the two middle feathers is orange red next the vent. This is the deſcription of the male; of which ſome varieties have a beautiful ſilver white ſpot, of the ſize of a ſilver penny, on the middle of the blue on the fore-part of the neck. The female has the ſame colours with the male on the upper parts, but differs beneath. In her the throat is white; acroſs the neck a band of blue, bordered beneath with another of black; the reſt of the under parts duſky white.' Theſe birds are met with in various parts between Sweden and Gibraltar. They do not frequent woods, like the redbreaſt, but haunt places near the water, among reeds and ſedge; frequently making the neſt on the willow-trees, of graſs, &c. Some authors mention that it has an agreeable ſong, and others ſay that it ſings in the night. The young do not acquire their colour on the breaſt till after ſome time, like the redbreaſt; being, like that, only ſpotted with brown upon that part at firſt. It is remarked that the fine blue colour goes off, if this bird be kept in a cage; not retaining it after the firſt moult. They are common at Alſace; and are thought very good food, being at times caught for the uſe of the table.

188. Motacilla garrula, the chattering warbler. This and the two following African ſpecies reſemble, in characters and manners, our blue-throated warbler, juſt deſcribed. Like that, they delight in marſhy places, living among ruſhes and reeds, where they remain the whole year, and bring up their young. The preſent ſpecies has its name from a chattering noiſe which it makes almoſt inceſſantly, of *grigri-gragra*, in very varied tones. The neck is full of dark ſpecks on a white ground, inclining to brown on the under plumage. The feathers of the upper ſurface, including the head, wings, and tail, are of a dull brown, with a ſlight tint or ſhade of olive. Bill, feet, and eyes, light brown. In the ſeaſon of love this bird perches upon the ruſhes, emitting a note ſomething like the babbler, M. curucca. During his ſong, which laſts for ſeveral ſeconds, he flutters his wings without moving from his place; then ſtops on a ſudden, and turns entirely over to join the female, who is generally beneath him; for her no doubt he exhibits all theſe little ſports. Vaillant ſays the connexion often takes place upon the weak leaf of the reed, a moſt inconvenient poſition for an animal leſs vivacious and wanton than a bird. Among theſe reeds alſo the male and female build their neſt, taking care to make it faſt to ſeveral of the ſtalks. The fe-

male lays five or ſix eggs, which are white ſpotted with brown; the male ſits as well as the female. The female is ſomewhat ſmaller than the male; her brown colour is not ſo dark, and her neck is not ſpeckled. Inhabits the marſhes of the Auteniquois, and of the *Verloore-Valey*, or Loſt Lake, in Africa. This pretty bird is delineated, in his favourite haunt, on the annexed Plate V. fig. 1.

189. Motacilla iſabella, the iſabella warbler. This has the ſame manners and the ſame haunts as the preceding, and might eaſily be miſtaken for the female of that ſpecies. It has therefore been aſſociated on the ſame Engraving, at fig. 2. His ſong is alſo nearly the ſame; I mean (ſays Vaillant) his love-ſong when perched upon the reeds and inviting his female; for his warbling is very different, conſiſting of ſome very ſoft flute-notes. Vaillant is the more exact in deſcribing this ſpecies, ſince his obſervations are not founded upon the examining of a ſingle bird or a ſingle pair, but upon the attentive compariſon of more than thirty individuals. This ſpecies is ſomewhat ſmaller than the preceding; the bill not ſo long, and of a much lighter colour. The female reſembles the male, except that ſhe is a trifle leſs. The colours are not ſhining, yet ſomething gayer than the laſt. The upper ſurface is of a delicate light yellow-brown, or iſabella-colour; ſome blackiſh appears on the tips of the wing-quills behind. The throat, neck, breaſt, and all the under ſurface, white ſlightly tinged with rufous, which gives a yellowiſh caſt. The neſt is attached to four or five ruſhes cloſe together, which incloſe it; the eggs, five or ſix in number, are entirely white.

190. Motacilla pavo, the proud warbler. The wings of this ſpecies are ſo ſmall and ſo weak, that it can ſcarcely fly at all; when at reſt, they barely reach the rump; of the ſixteen quills they conſiſt of, the two firſt and three laſt are almoſt nugatory, being ſo ſhort and of ſo delicate a texture. The bird therefore finds it very difficult to ſuſtain itſelf in the air; and it ſeldom riſes much above the reeds and ſedge, in whoſe tufts nature ſeems to have deſigned it ſhould remain; when obliged to fly, which very ſeldom happens, it is with no ſmall difficulty that it heavily reaches a diſtance of fifty or ſixty feet, when it rather drops down through laſſitude than alights like other birds. To make amends, in ſome ſort, for the aukward ſtructure of the wings, nature has given it a very large broad tail: the tail-quills are ten in number, and amply feathered. In the love-ſeaſon, the male ſpreads out his tail, making it fall upon his back in a circle, like the peacock; this is accompanied with a ſoft melodious ſong to invite the female. The colours of this ſpecies, like the two laſt, are not diſtinguiſhed by any brilliancy. The head, neck, mantle, wings, and tail, are of a dark dull brown; the under parts lighter. The upper mandible of the bill is black; the lower yellowiſh; feet, nails, and eyes, browniſh. The female is ſomewhat ſmaller than the male; of a lighter brown; on her throat and neck are ſome browniſh lines on a lighter ground; her tail is not ſo large, that is, the barbs of the feathers are not ſo full and thick. The number of eggs is not leſs than five, and probably of a white colour. They neſtle among reeds in the marſhes about Blettenburg or Lagoa Bay; and are found throughout the whole of the Auteniquois country.

191. Motacilla fulicata, the ſooty warbler: ſize of the ſtonechat, with a longer tail: general colour more or leſs of a ſooty black; the under tail-coverts pale cheſnut; on the wing-coverts is a long white mark; bill and legs brown. Found in the Philippine Iſlands.

192. Motacilla Cayana, the Cayenne warbler: length four inches and three quarters: bill blackiſh; forehead, fore-part of the back, wings, and tail, fine black; reſt of the plumage blue; legs grey.

There are two other varieties of this ſpecies: *β*. differs in having only the throat black, and the head wholly blue. This is the *blue manakin* of Edwards.—*γ*. exactly like the firſt ſpecies in the body, wings, and tail; but the head is of a plain pale blue-colour.—All theſe are found at Guiana.

193. Motacilla cyanocephala, the blue-headed warbler: ſize of the preceding: bill brown; head and upper wing-coverts blue; throat bluiſh-grey; the reſt of the body, with the greater coverts, bright green; quills brown, edged with green; legs grey. Inhabits Cayenne.

194. Motacilla lineata, the lineated warbler: bill black: on the top of the head a longitudinal ſpot of blue; forehead deep bright blue, paſſing over each eye quite to the middle of the back; on the breaſt begins a ſtripe of white, which reaches to the vent, growing broader as it paſſes backwards; the reſt of the under parts blue; legs black. Found at Cayenne with the preceding.

195. Motacilla cyanea, the azure warbler: length five inches and a half: bill black; the feathers of the head are long, and ſtand erect like a full creſt; from the forehead to the crown they are bright azure blue; from thence to the nape black like velvet; through the eyes from the bill runs a line of black; beneath the eye ſprings a tuft of the ſame azure feathers; beneath theſe, and on the chin, it is deeper blue, almoſt black, and like velvet; on the ears is another patch of blue, and acroſs the back part of the head a band of the ſame; the whole giving the head a greater appearance of bulk than is natural; the hind part of the neck, and upper parts of the body and tail, deep blue black; the under pure white; wings duſky; ſhafts of the quills cheſnut; tail two inches and a quarter long; legs duſky brown. Inhabits Van Diemen's Land, the moſt ſouthern part of New Holland.

196. Motacilla velia, the red-bellied warbler: ſize of the pettichaps: bill lead-colour; forehead bluiſh-green; rump green gold; upper parts of the head, neck, and back, fine black, mixed with blue green; throat violet; fore-part of the neck the ſame, mixed with brown; the reſt of the under parts rufous; greater wing-coverts, quills, and tail, black, edged with blue; legs cinereous. Theſe birds are apt to vary in their plumage; but whether occaſioned by age, ſex, or an abſolute variety, is uncertain. It is ſaid to be as fine taſted as the ortolan. Found at Surinam, Guiana, and Cayenne.

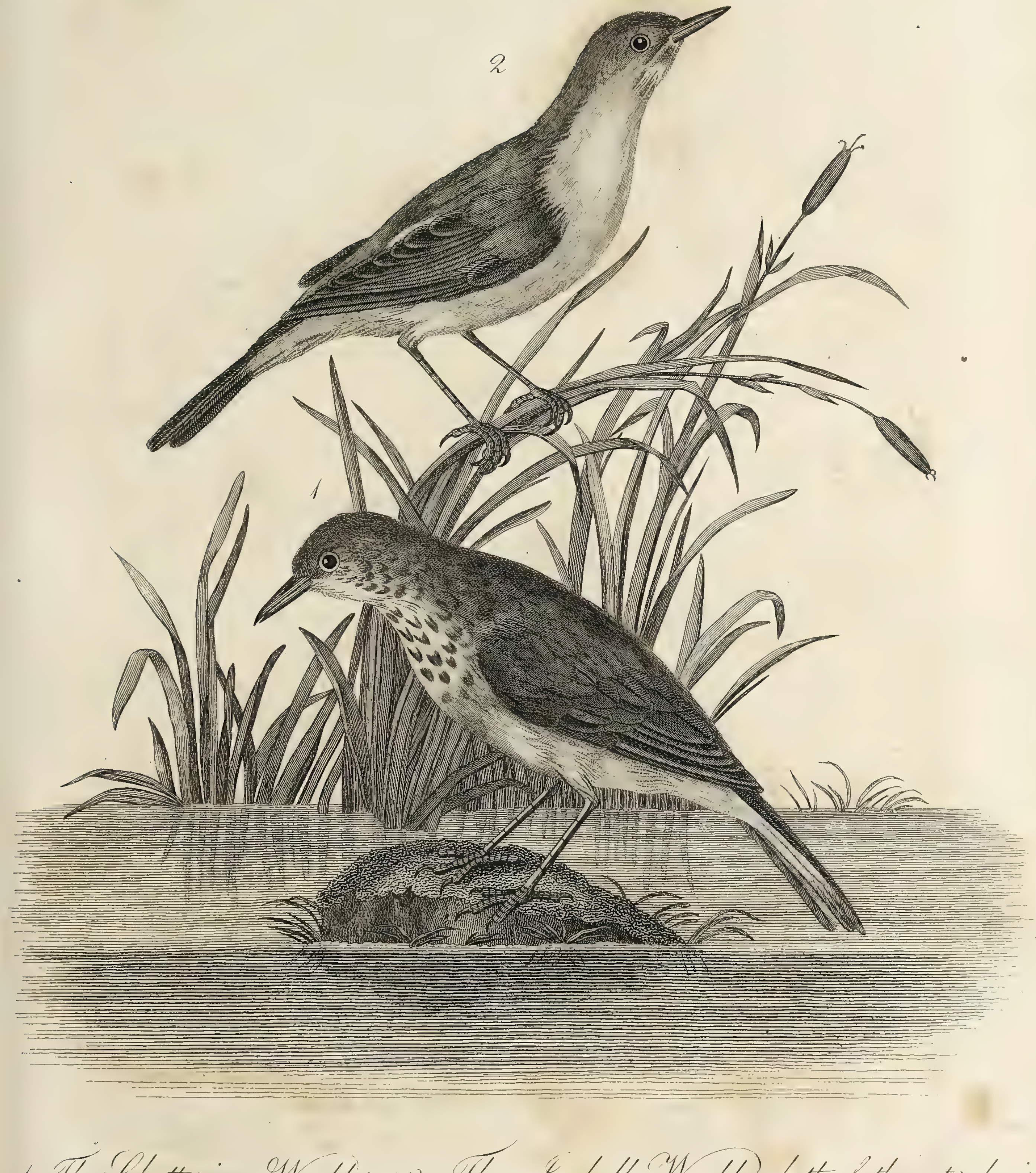
197. Motacilla Canadenſis, the Canada warbler: length four inches and a half: bill black; the upper parts deep cinereous blue, but the ſides of the head, the throat, and fore part of the neck, are black; ſides ſpotted with the ſame; belly and under parts whitiſh; quills duſky black, with a white ſpot; tail cinereous blue; legs brown. Native of Canada. One of theſe was taken at ſea, in a calm, eight or ten leagues from St. Domingo; and another was ſent to Mr. Edwards from Pennſylvania; at which place they arrive in April, make their neſts, and depart ſouthward in autumn.

198. Motacilla cærulea, the cærulean warbler. Size of the preceding: bill black; head and upper parts of the body blue grey; eyelids white; from the bill to the hind head paſſes a ſtripe of black; under parts white; wings cinereous brown; the quills edged with whitiſh within; tail long; the eight middle feathers cinereous blue, and the outer one of theſe white at the tip; the two outmoſt on each ſide wholly white; legs black. The female has not the black ſtreak over the eyes; and the eight middle tail-feathers are cinereous brown; the reſt as in the male. Theſe are inhabitants of Pennſylvania, where they arrive early in ſpring, and return in autumn. The neſt is of a ſingular conſtruction: compoſed of fine downy matter, with the outſide of moſs and liver-wort, lined with horſehair. The form of it is cylindrical, placed between the forks of the branches of a tree, and open on the top.

β. There is a variety of this bird found in Cayenne, with the head, and ſix middle tail-feathers, wholly black.

199. Motacilla cyana, the turquois warbler: all the upper parts of the plumage fine turquois blue; beneath ſnowy; from the bill to the wings a black ſtreak. Inhabits Dauria.

209. Motacilla ſibilla, the whiſtling warbler: very ſimilar



1. The Chattering Warbler: 2. The Isabella Warbler, both of the natural size.

Engraved for the Encyclopaedia Londinensis, 1817.

lar to the ſtonechat, but a trifle bigger: the head, neck, and upper parts of the body, are black; but the feathers of the back, and wing-coverts, have tawny margins; it has the white ſpot on the wings, like the laſt, but wants that of the rump; the tail-feathers are all black; the under parts are white, which goes backwards on each ſide at the lower part of the neck, like a half collar; breaſt rufous. Found at Madagaſcar, where it is called *ſitert*, and is ſaid to ſing well.

201. Motacilla ſperata, the Cape warbler: above greeniſh brown, beneath and rump rufous grey; two middle tail-feathers blackiſh, lateral ones obliquely half tawny-brown. Inhabits the Cape of Good Hope: ſix inches long. There is a variety, which has the chin white, and breaſt rufous.

202. Motacilla rubecula, the redbreaſt, or robin. This well-known intruder needs no deſcription. It is ſufficient to ſay, that the upper parts are of a greeniſh aſh-colour; the forehead, throat, neck, and breaſt, rufous orange; belly and vent whitiſh; bill, legs, and ſides of the body, duſky. It is a conſtant inhabitant of theſe kingdoms, as well as the whole European continent from Sweden to Italy. It is in great abundance in Burgundy and Lorraine, where numbers are taken for the table, and thought excellent. It is remarkable that a bird which remains in North Britain all the year round ſhould migrate from France during the winter months. Such, however, is the caſe: in France the redbreaſt frequents the hedges and dwelling-houſes, for a ſhort time, in autumn and ſpring; but regularly, in the dead of winter, when the hard froſt commences, diſappears. In his ſpring viſit he makes but a ſhort ſtay, haſtening, as he then is, to enter the foreſt, that he may there, amidſt the ſpreading leaves, enjoy ſolitude and love. The neſt is compoſed of dried leaves, mixed with hair and moſs, and lined with feathers. The eggs are of a duſky white, marked with irregular reddiſh ſpots; and are from five to ſeven in number. It builds not far from the ground, if in a buſh; though it often fixes on an out-houſe, hole in the wall, or retired part of ſome old building. The young, when full feathered, may be taken for a different bird, being ſpotted all over. The firſt rudiments of the red break forth on the breaſt about the end of Auguſt; but it is quite the end of September before they come to their full colour.

The redbreaſt ſeems to have been a favourite of nature; ſhe has beſtowed upon him ſeveral qualities, one of which would be ſufficient to recommend him to the attention of man. The prettineſs of his ſhape, the beauty of his plumage, the quickneſs of his motions, his familiarity with us in winter, and above all, the melody and ſweetneſs of his voice, always claim our admiration, and have inſured him that ſecurity he enjoys among us. In the brumal ſeaſon, impelled by the potent ſtimulus of hunger, he frequents our barns, our gardens, our houſes, and often alights, on a ſudden, on the ruſtic floor; there, with his broad eye inceſſantly open, and looking aſkew upon the company, he picks up eagerly the crumbs of bread that fall from the table, and then flies off to the neighbouring buſh, where, by his warbling ſtrains, he expreſſes his gratitude for the liberty he has been allowed. The elegant Poet of the Seaſons gives us a moſt exact and animated deſcription of this bird in the following lines:

Half afraid, he firſt
Againſt the window beats: then, briſk, alights
On the warm hearth; then, hopping on the floor
Eyes all the ſmiling family aſkance,
And pecks, and ſtarts, and wonders where he is,
'Till, more familiar grown, the table-crumbs
Attract his ſlender feet. *Winter.*

Its familiarity has cauſed a petty name to be given it in ſeveral countries. The people about Bornholm in Sweden call it *Tommi-liden;* in Norway, *Peter ronſmad;* the Germans, *Thomas gierdet;* and we, the *Robin redbreaſt.*

An old Latin proverb tells us, that two robin redbreaſts do not feed on the ſame tree. We cannot vouch for the truth of this; but it is certain, that the redbreaſt, notwithſtanding its apparent familiarity, is a ſolitary bird, and that he does not live in much harmony and friendſhip with thoſe of his kind. During the ſeaſon of neſtling and incubation, the male makes the grove reſound with his ſoft and melodious lays. His warbling is ſoothing and tender, animated occaſionally with notes of a louder tone, and ſometimes, too, graced with thoſe touching and engaging accents, that ſeem to expreſs the ardour of his love. In the ſweet ſociety of his female, he ſeems to be wholly abſorbed: at the interference of other company, he becomes fretful and enraged; for no ſtranger is permitted to intermeddle with his joy; even thoſe of his own ſpecies he purſues with rage, till he baniſhes them from the diſtrict he has choſen for himſelf. His love exhibits a ſtrange mixture of jealouſy and attachment. There is no bird more active, none ſatisfied with a ſmaller portion of reſt, than this bird: he is the firſt that appears in the woods at the break of day, and the laſt that retires thither in the evening to enjoy repoſe.

There are two varieties. β. Chin white; wing-coverts varied with white, black, and rufous; quill and tail-feathers black, edged with rufous. γ. Entirely white. The rubecula ſpecies is ſpread over the whole of Europe, from Norway and Sweden to the Mediterranean.

203. Motacilla troglodytes, the wren: grey; eye-brows white; wings waved with black and cinereous. Inhabits Europe and Aſia. The Greeks gave this bird the name of *troglodytes*, from a fancied reſemblance between its manners and thoſe of a race of men who were ſaid to inhabit dens and caves in the earth; and another ſpecies of wren is called *trochilus*, from τϱοχος, a top, which comes from τϱεχω, to run or whirl. The Romans adopted theſe names *trochilus* and *troglodites;* in Italian, *reattino, re di ſiepe*, hedge-king; in German, *ſchnee-koënig, winter-koënig, raun-koënig, thurn-koënig, mueſe-koënig, zaun ſchlopflin*, i. e. the ſnow, winter, hedge, thorn, king; and hedge-ſlipper; in Swediſh, *tumling;* in different parts of France, *berichon, roi-bertaud, ratillon, ratereau*, or *petit rat, fourre-buiſſon*, and *roide de froidure.*

This is one of the ſmalleſt of the Engliſh birds: in length only about three inches and a half. The bill is duſky brown; irides hazel; head, neck, and back, reddiſh brown; the back, as well as the wing-coverts and tail, croſſed with obſcure blackiſh lines; cheeks marked with dirty white mixed with rufous; over each eye a pale reddiſh-white ſtreak. The under parts, as far as the breaſt, of this laſt colour; the reſt more inclined to brown, croſſed with brown lines; quills barred alternately with reddiſh and black; legs pale brown. In referring to the colour of this little bird, Buffon calls it the plumage of the woodcock in miniature.

The neſt of the wren is of a curious conſtruction, in ſhape almoſt oval, and has only one very ſmall entrance; it is chiefly compoſed of moſs, lined within with feathers. In this the female lays from ten to ſixteen, or even eighteen, eggs, which are almoſt white, with reddiſh markings at the large end. She builds twice in the year, in April and June. The neſt is frequently conſtructed in ſome corner of an outhouſe, ſtack of wood, hole in a wall, or in the thatch, if near habitations; but, in the woods, often in a buſh near the ground, ſtump of a tree, in a bank, or on the ground itſelf. This inoffenſive bird is found throughout Europe. In England, it defies our ſevereſt winters; but in the colder regions it is leſs common. To the north it is found both in Sweden and Ruſſia; our laſt circumnavigators met with it alſo at Oonalaſhka. Its fartheſt extent ſouth is Aleppo in Aſia. Its ſong is much eſteemed by connoiſſeurs, being, though ſhort, a pleaſing warble, and is much louder than could be expected from the ſize of the bird; it continues throughout the year. This little warbler will ſing unconcerned even during the fall of ſnow; and ſo it does alſo very late in the evening, though not after dark, like the nightingale. It generally carries the tail erect.

As a devourer of pernicious inſects, the wren is one of the moſt uſeful birds. This little bird ſeems peculiarly fond of the ſociety of man; and it muſt be confeſſed that it is often protected by his intereſted care. It has long been a cuſtom, in many parts of the country, to fix a ſmall box at the end of a long pole, in gardens, about houſes, &c. as a place for it to build in. In theſe boxes they build and hatch their young. When the young are hatched, the parent birds feed them with a variety of different inſects, particularly ſuch as are injurious in gardens. An intelligent gentleman was at the trouble to obſerve the number of times a pair of theſe birds came from their box, and returned with inſects for their young. He found that they did this from forty to ſixty times in an hour; and, in one particular hour, the birds carried food to their young ſeventy-one times. In this buſineſs they were engaged the greater part of the day; ſay twelve hours. Taking the medium, therefore, of fifty times in an hour, it appeared that a ſingle pair of theſe birds took from the cabbage, ſalad, beans, peaſe, and other vegetables in the garden, at leaſt, ſix hundred inſects in the courſe of one day. This calculation proceeds upon the ſuppoſition, that the two birds took only a ſingle inſect each time. But it is highly probable they often took ſeveral at a time.

There are two varieties of the wren, which are conſidered by Dr. Turton as diſtinct ſpecies.

β. M. Platenſis: ſame ſize with the European wren, but a trifle longer; the colours ſeem more diſtinct, and the under parts paler; it wants alſo the ſtreak over the eye. This is found in the neighbourhood of the river Plata in South America.

γ. M. Ludoviſiana: much larger than the others, being five inches long: it differs from the common wren in having the cheeks mottled with duſky and whitiſh; the under parts are pale rufous yellow, paleſt on the throat and ſides of the body. This inhabits Louiſiana, and other parts of North America, and is ſaid to ſing very pleaſingly.

204. Motacilla fulva, the dark-brown wren: length four inches and a half: bill yellowiſh brown; general colour of the plumage dark brown; paleſt on the belly, and marked on the back, wings, and tail, with duſky bars; legs yellow brown. Fermin ſays that it ſings very agreeably, inſomuch that it is called the nightingale at Surinam, where it inhabits.

205. Motacilla calendula, the ruby-crowned wren: length four inches: bill duſky; on the crown of the head is a ſpot of a ruby red, not bordered with black, as in the following; the upper parts are olive, but have a tinge of brown; paleſt on the rump; the under parts are yellowiſh white, inclining moſt to yellow on the breaſt; acroſs the wings two yellowiſh bands; quills and tail as in the laſt ſpecies; legs brown. The female has no red ſpot on the head. This inhabits North America, where it feeds on the inſects which frequent the ſpruce-firs, and runs up the trees in the manner of a titmouſe.

Buffon mentions a bird which was ſent to him from Louiſiana, and he thinks it a variety of this: it differs chiefly in having the hind part of the head environed with a crown of crimſon. Mention is alſo made by Kolbe of a red-headed wren at the Cape of Good Hope. This, he ſays, is bigger than the blue titmouſe; and has the wings black, and the legs reddiſh.

206. Motacilla regulus, the gold-creſted wren. This is the leaſt bird in England, if not in Europe: its length only little more than three inches; its weight ſeventy-ſix grains. The bill is very ſlender, and black; irides hazel; on the crown the feathers are golden orange-colour, bounded on each ſide by black; the plumage on the upper parts is yellowiſh golden green, paleſt on the rump; under parts rufous white, with a greeniſh tinge on the ſides; wing-coverts duſky, croſſed with two white bands; quills and tail duſky, edged with pale green, and ſome of the inner feathers have blackiſh edges; legs yellowiſh. The female has the colours paler, and the crown of the head yellow inſtead of orange. This delicate ſpecies inhabits England, where it abides throughout our winters; and it is found throughout Europe, as well as in the three other quarters of the globe, with little variation. It is mentioned as a Ruſſian, Swediſh, and Norway, bird: it is found in France, Auſtria, and Italy; alſo at the Cape of Good Hope, and no doubt in the parts between: it is alſo an inhabitant of the north part of America, Pennſylvania, and New York; and ſpecimens have been brought from Cayenne. It is ſeen as far north as Shetland, but there it diſappears before winter. It is ſaid to do ſo in the more northern countries, but in all to bear the cold to admiration. It ſeems to frequent oak-trees in preference to others. Latham has more than once ſeen a brood of theſe in a large oak in the middle of a lawn, the whole little family of which, as ſoon as able, were in perpetual motion, and gave great pleaſure to many who viewed them. The number of young were from ſix to eight. The neſt of one of theſe has alſo been found in a garden, on a fir-tree; it was compoſed of moſs, the opening on one ſide; in ſhape roundiſh; it was lined with a downy ſubſtance, mixed with ſmall filaments. It ſings melodiouſly, but weaker than the common wren.

β. M. elata. This variety is even ſmaller than the preceding: and differs in the bill, which is much ſhorter and ſmaller; the yellow is not in the middle of the crown, but acroſs the back part of the head, or rather the back part of the creſt, which is of a jonquil yellow; the upper parts of the body greeniſh; the head inclined to brown; wings and tail duſky green; acroſs the firſt, two pale bars; the ſecondaries edged, and the tail, except the two middle feathers, tipped with the ſame; the fore part of the neck pale aſh-colour; breaſt and belly greeniſh; towards the vent, and the ſides, pale yellow; legs duſky. This inhabits Cayenne, where it only appears in winter, and frequents low trees and ſhrubs in the ſavannas. Turton has made it a diſtinct ſpecies.

207. Motacilla trochilus, the yellow wren: a ſize larger than the common wren; length four inches and three quarters: upper parts pale olive-green; under pale yellow, and a ſtreak of the laſt over the eyes; wings and tail brown, edged with yellowiſh green; legs yellowiſh. The female is paler, and inclines to white at the vent; but both males and females vary much in colour. This little bird is common with us in England, as well as in many other parts of Europe, where it chiefly frequents the places where willows grow; it is migratory, and comes early. It makes the neſt in holes at the roots of trees, in hollows of dry banks, and ſuch-like places; it is not unlike that of the common wren; formed of moſs, with a lining of wool, hair, or feathers. The eggs are duſky white, marked with reddiſh ſpots, and five in number. Its note is trifling, which it utters when running up and down the branches of trees in ſearch of inſects, on which it feeds; but it is ſaid that during incubation the male has a ſong, far from unpleaſing, and is ſoft though weak.

β. M. acredula, the Scotch wren: differs in being rather inclined to brown than green on the upper parts, and yellow on the under. This is found in Jamaica, Carolina, and other parts of America. Sloane obſerves, that at the firſt place it feeds on cimices, ſmall beetles, and ſuch-like. Moſt plentiful about the town of St. Jago de la Vega.

γ. M. ſylvicola, the wood-wren: above olive green; throat and cheeks yellow; through the eye a yellow line; belly and vent fine ſilvery; tail-feathers brown, and, except the firſt, green on the outer webs, and white on the inner. This is now conſidered as a diſtinct ſpecies, and is given as ſuch twice over in Dr. Turton's tranſlation of Gmelin's

Linn. under the names of M. ſylvatica and M. ſylvicola. It was deſcribed in the Linnæan Tranſactions, vol. ii. by Mr. Thomas Lamb, A. L. S. having been firſt noticed by him in Whitenights Park, near Reading, in May 1792; and afterwards in the Iſle of Wight and other parts of Hampſhire. It was then conſidered as a new ſpecies in England, and indeed as a non-deſcript; but it is now aſcertained to be a bird very common in various parts of Europe, and to be the Aſilus major of Briſſon, the Regulus non criſtatus major of Willughby, and the largeſt yellow wren of White, Hiſt. Selb. p. 55. Theſe ſynonymes have been aſcertained by G. Montague, eſq. F. L. S. who has given a more particular deſcription of the bird in the ivth vol. of Linn. Tranſ. He firſt met with it at the latter end of April, in the year 1790, on an oak-tree, at the verge of a wood in the pariſh of Eaſton Grey in the county of Wilts. “ It is an active reſtleſs bird, and, at the time I ſhot it, was exceſſively buſy in purſuing ſome ſpecies of winged inſect, which ſeems to be its principal food. Upon near inſpection it might readily have been miſtaken for the *trochilus*, had I not been attentive to its note and actions. As this elegant little ſpecies of warbler ſeems to have eſcaped the notice, or at leaſt the hiſtoric attention, of ornithologiſts, probably from confounding it with the yellow wren, it was my intention to preſent it to the Linnæan Society as ſoon as opportunity offered the diſcovery of its neſt and eggs, in order that it might be added to the liſt of Britiſh birds. In a tour through South Wales the following ſpring, I found this ſpecies not unfrequent in the oak-woods of Carmarthenſhire. The firſt I ſaw that ſeaſon was on the 29th of April; and, in a week after, a great many more arrived, which, from their inceſſant chirping and actions, I took to be all males. About the middle of May I plainly diſcovered ſome females were arrived, and on the 30th of that month I had the good fortune to find two neſts, by watching the birds with ſome of the materials in their bills, and ſoon after took them with ſix eggs each; and, in order to clear the matter beyond doubt, I caught one of the females on the neſt, and ſhot the male, who approached very near, at the ſame time. It may not be improper to remark, that I found theſe birds in greateſt plenty in coppice-woods of oak of about eighteen or twenty years' growth: their flight is ſhort, ſlow, and vibrating, as they move from ſpray to ſpray, ſeldom varying their ſituation above twenty yards from the firſt choſen ſpot till the young take wing, when they quit the lower branches, and take to the higheſt trees, ſearching for inſects amongſt the upper foliage. At this time they are not ſo vociferous, and have entirely left off that conſtant vibration of their wings, which ſeems peculiar to the courting and incubating ſeaſon. It is not to be ſuppoſed that this ſpecies is a new or accidental viſitant to theſe parts, but that its near reſemblance in ſize and colour to the yellow wren has probably occaſioned it to be miſtaken for that bird. But whoever will bring them together will at once obſerve, that the plumage of this is much more vivid; and, as a ſpecial characteriſtic mark, the belly and under tail-coverts are invariably of a pure white, which in the yellow wren are tinged, and the latter part daſhed with yellow. There is no diſtinction in the plumage of the ſexes of either ſpecies: this ſhould not therefore be miſtaken for the male of the other, which doubtleſs has often been the caſe. Beſides, were every other mark of diſtinction wanting, the note, manners, and habits, of this widely differ: this only inhabits woods in the breeding ſeaſon: its cry, for it cannot be called a ſong, bears not the leaſt reſemblance to any other ſpecies: the firſt part ſeems to expreſs the word *twee* drawn out to ſome length, and repeated five or ſix times ſucceſſively, terminating in notes ſomething of the ſame tone, but delivered in a hurried manner, ſhaking its wings at the ſame time. This ſpecies weighs about two drams forty grains; the length five inches and a quarter: the bill is duſky; irides hazel: the upper part of the head, back, ſcapulars, and upper coverts of the tail, are of a lively yellow green: over the eye is a bright brimſtone-coloured ſtroke; the cheeks and throat yellow; the upper part of the breaſt, white tinged with yellow; the lower part, belly, and under tail-coverts, pure white: the quill-feathers are duſky, edged on their exterior webs with yellow green; the tail very little forked, coloured like the wing-feathers, except the two outmoſt, which want the yellow margin: the legs are of a yellowiſh brown. The female caught on the neſt weighed three drams. This bird is a migratory ſpecies, and like moſt, if not all, our ſummer migrants, the males precede the other ſex in their vernal flight a week or ten days. It leaves us about the middle of September. The neſt is formed on the ground, beneath the ſhade of trees or buſhes, conſtructed of dry graſs, with a few dead leaves and a very little moſs externally, and lined with finer graſs and a few long hairs. Its ſhape is oval, with the entrance near the top, like thoſe of the yellow wren and ſmaller pettichaps; but materially differs from them in the internal part of its ſtructure, as thoſe birds invariably line their neſts with feathers. The eggs weigh from eighteen to twenty-two grains; their colour white, ſprinkled all over with ruſt-colour ſpots: in ſome thoſe markings are confluent. Theſe obſervations were intended to be preſented to the Linnæan Society immediately after the diſcovery of the neſt and eggs; but, by ſome unaccountable means, my notes were miſlaid. This delay has given me an opportunity for farther enquiry; and I have now aſcertained that this bird is alſo found in Germany, where it is likewiſe a migratory ſpecies, as we are informed by Dr. Beckſtein in the 27th volume of Naturforſcher, p. 38. To my friend Mr. Latham I am indebted for the tranſlation of that part of the work for my inſpection; where I find under the denomination *der laubvögelchen*, little leaf-bird, an excellent deſcription of this bird and its manners; though the author does not ſeem acquainted with its neſt and eggs. He adds (Motacilla ſibilatrix) *ſuperciliis luteis, ſupra vireſcens, ſubtus flaveſcens.* This author particularly remarks the whiteneſs of the under tail-coverts, the ſtrong characteriſtic mark of diſtinction. After what has been ſaid of this hitherto little-known beautiful ſpecies of warbler, little can be added to elucidate its hiſtory: to my former remarks I only ſay, that, ſince my intimate acquaintance with the bird, I have met with it in plenty in all the ſouthern counties and wooded parts I have been in, eſpecially where oak or beech abound.” In the Leverian Muſeum it was ticketed “green wren,” N° 271.

δ. Size of the yellow wren; but differs in having the plumage very pale ferruginous; head and upper parts greeniſh brown; and the fore part of the neck and breaſt fulvous. This flew on-board a ſhip in the Mediterranean, near the Spaniſh ſhore.

208. Motacilla arundinacea, the reed-wren: ſize of the preceding; weight ſeven pennyweights nine grains: bill half an inch; the under mandible fleſh-colour; irides olive brown; eyelaſhes dirty white; from the bill to the eye a broad ſtreak of tawny white; general colour of the plumage greeniſh olive brown; quills and tail brown, with paler edges; chin white; the reſt of the under part tawny white; baſe of all the feathers black; legs light olive; male and female much alike. The neſt is compoſed externally of dry ſtalks of graſs, lined moſt commonly with the flowery tufts of the common reed; but ſometimes with ſmall graſſes, and a few black horſe-hairs to cover them. This neſt is uſually ſuſpended, or hung like a hammock, between three or four ſtalks of reeds, below the panicles of flowers, in ſuch a manner that the ſtalks run through the ſides of the neſts at nearly equal diſtances; or, to ſpeak more properly, the neſt is tied on to the reeds with dead graſs, and ſometimes (as being more eligible when it can be had) even with *thread and packthread*, emulating the work of a ſempſtreſs, as was

the caſe of the neſt exhibited in the drawing communicated by the Rev. John Lightfoot (the obſerver of the ſpecies) to the Royal Society, and by them engraved in the Phil. Tranſ. vol. lxxv. for 1785. The bird, however, though generally, does not always confine her building to the ſupport of reeds; ſometimes ſhe fixes it on to the branches of the water-dock; and, in one inſtance only (that here delineated), it was found faſtened to the trifurcated branch of a ſyringa-buſh, or Philadelphus, growing in a garden-hedge by the river-ſide. Eggs generally four in number, whitiſh, ſpotted with olive. This bird frequents the river Coln in Buckinghamſhire, and no doubt other rivers and watery places where reeds grow. It is a ſhy bird, and not often taken, though the neſt is frequently met with. It may eaſily be miſtaken for the ſedge-bird, M. ſalicaria; but is certainly a different ſpecies; the circumſtance of its having the baſe of the bill much larger than in the ſedge-bird, were there no other characteriſtic, muſt alone determine the difference between them.

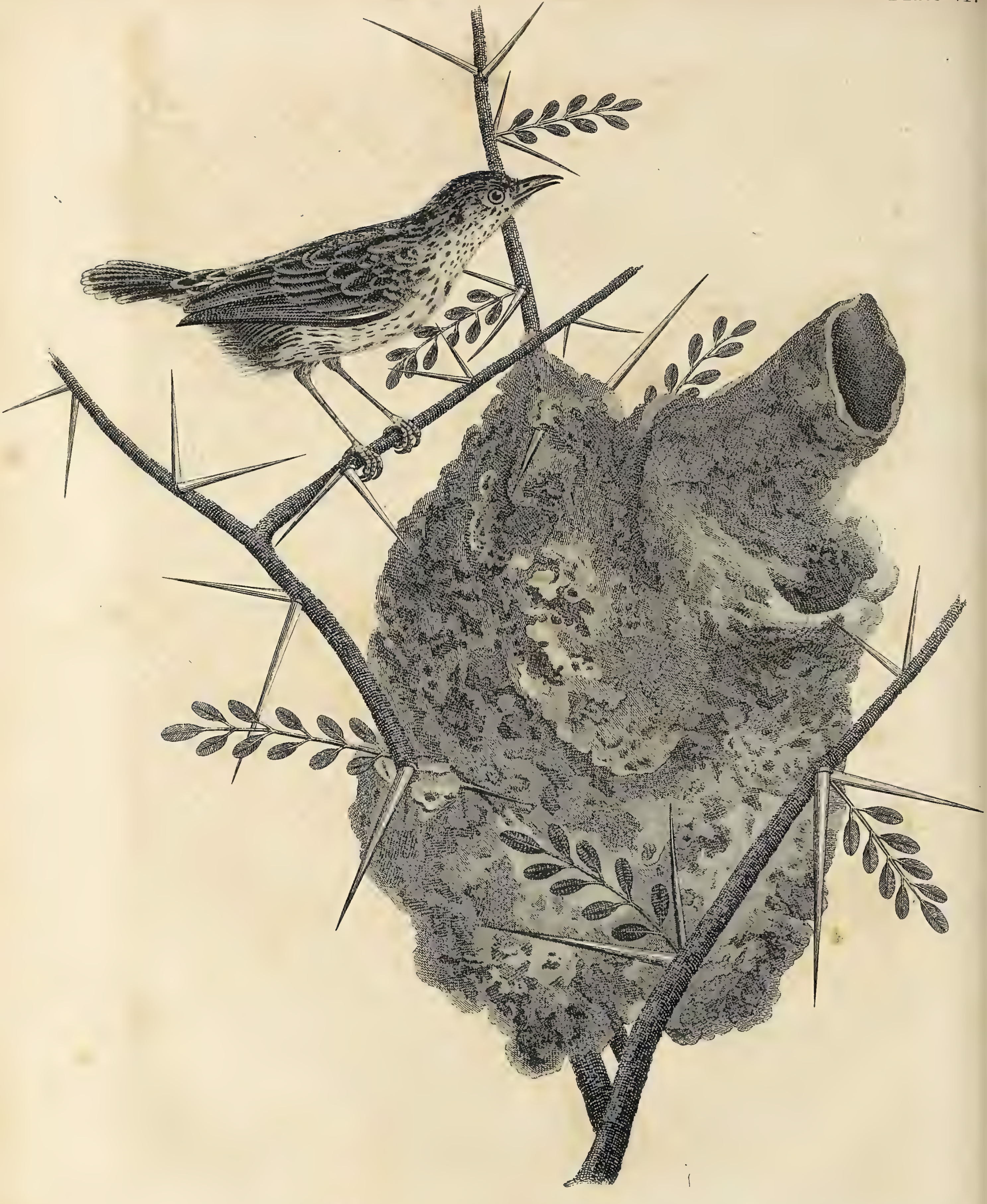
209. Matacilla fimbriata, the gauze-tailed warbler. This ſmall ſpecies, which is about the ſize of a wren, inhabits the iſland of Java; at leaſt it was ſent from that place to M. Temminck of Amſterdam, and from him to Monſ. Vaillant. The moſt remarkable thing in this ſpecies is the manner in which the tail-quills are barbed; the feathers are ſo thinly ſcattered along the quills, as to have the appearance at firſt ſight of their having been ſtripped; but upon examination they are ſo regular, that there is no doubt but the "fringe or gauze tail" is the ſpecific character. The preſent ſpecimen had but three feathers in the tail; but, on lifting up the coverts, the cells or ſockets of ſeven more appeared, which muſt either have been pulled out or dropped in moulting. The tail was certainly very much tapered; for, of the three feathers that remained, two, which were the middle ones, were equal in length, the other was ſhorter. This individual is ſuppoſed to be a male; extreme length, from the tip of bill to that of the tail ſix inches and a half. The bill is blackiſh, legs and feet brown. The head is of a rufous brown, which continues down the ſides of the neck, and all the under parts of the body. The throat and front of the neck are grey blue, ſhining and glittering like pearl, or oriental agate. The back of the neck is very dark brown mingled with lighter tints; the ſcapulars and wings are of a dirty brown edged with rufous. The tail is longer than the body; the quills are almoſt black for half their length; the remainder and the barbs are of a red brown; the tail is ſo tranſparent, from the feathers being ſo thinly ſown, that when laid upon paper you may read through it as through a piece of the fineſt gauze. The colour of the eye is not known; this being a ſtuffed ſpecimen, not a living animal.

210. Motacilla pinc-pinc, the pinc-pinc. This is in ſize and manners very like the wren; like that, it is in continual motion, buſily hopping from branch to branch among buſhes and ſhrubs; like that alſo, it carries its tail erect, and continues warbling while in ſearch of food among heath and ſmaller plants, where it loves to forage and conceal itſelf. Beſides its ſimilarity to the wren, it riſes perpendicularly like the lark to a conſiderable height from the ground or from ſome buſh; flapping its wings and tail very ſtrongly in its aſcent, and riſing by ſhort leaps, uttering its note of *pinc-pinc, pinc-pinc, pinc-pinc*, the whole time. The children at the Cape call it the pinc-pinc from its note. If, when it gets to a certain height in the air, there ſhould be any wind, the little bird is preſently carried out of ſight; when it is calm, the bird, having reached the greateſt height his ſtrength will permit, deſcends in a diagonal line, but does not cloſe his wings in darting to the ground like the lark. The male and female are rarely ſeen aſunder; the male only, it ſhould be obſerved, has the power of taking high flights; the female ſometimes makes an effort, but ſeldom ſucceeds in riſing more than eight or ten feet from the ground; nor does either endeavour to ſoar, except in the pairing ſeaſon.

The neſt is admirably conſtructed. The foundation is laid, as ſtrongly as poſſible, among the ſpines of a thorny buſh, or at the extremity of a branch of the mimoſa-tree. This neſt is commonly very large, but ſome bigger than others, that is, as to the outer dimenſions, for within they are nearly all of the ſame capacity, three or four inches in diameter, though the outward circumference is often more than a foot. It is made of the wool of plants only, and is either of a ſnowy whitneſs, or browniſh, according to the quality of the down furniſhed by the ſhrubs in each particular diſtrict. The neſt is of a very irregular ſhape outſide, according to the direction of the branches or twigs; and to theſe it is ſo ſtrongly faſtened, that it is impoſſible to take it away without leaving much of it adhering, for it uſually embraces the whole circumference of the branch. If it appears miſ-ſhapen outſide, the inſide makes amends for it; nor can we avoid being ſurpriſed that ſo ſmall an animal, with no other inſtruments than its bill, wings, and tail, could have beated and preſſed its materials into a texture as cloſe and ſmooth as good linen cloth. At the upper part of the neſt is the entrance-hole like a chimney; and, what is very curious, at the baſe of this tube, or corridor, on the outſide, there is a landing-place, like a very little neſt fixed againſt the larger one. It is generally underſtood at the Cape, that this little neſt is intended as a lodgment for the male, that he may watch while the female is hatching, who, being at the bottom of the neſt with her eggs, cannot ſee any danger from without. Sonnerat has deſcribed the neſt very well, but has given a very incorrect figure of it, which is the more ſtrange, as he actually brought ſeveral of them with him to Europe; he has aſcribed it to the Cape titmouſe alſo, inſtead of the bird it really belongs to; and in this error he has been followed by Buffon, and by all his numerous copyiſts of courſe. The titmouſe does indeed ſometimes take poſſeſſion of this neſt; and hence the miſtake. Vaillant however aſſerts, that the intention aſcribed to this ſupplementary neſt is nothing but a popular error; for the male, he ſays, ſits as well as the female, and one never remains on the watch while the other is on the eggs; of this he is certain, having watched the birds for whole mornings together, and ſeen at leaſt an hundred ſuch neſts. This little receſs, therefore, is nothing more than a landing-place or rooſt, whence the bird may conveniently get into the hole and drop into the neſt; which otherwiſe would be attained with difficulty, and he could hardly hit that little aperture when on the wing; and the neſt is ſo ſoft outſide, that, ſhould he often perch upon it, it would be liable to damage, whereas this rooſting-place is made as ſolid and firm as the inſide of the neſt; and ſince, to give it this ſolidity, the bird has no other mode than to beat with his wings, and preſs it by turning his body over and over, it naturally acquires a ſpherical form, like a little neſt; and this has led to the idea, by no means unnatural, that it was intended as a centry-box for the male. But this is not the caſe; for, when the mouth of the neſt is ſo ſituated as to be eaſily attained from a branch or twig, then this cell does not exiſt at all. Some of theſe neſts have two or three ſuch landing-places; and in ſome they are not ſhaped at all like a little neſt. In general theſe birds, on returning to their neſt, firſt perch on ſome neighbouring twig, then upon the edge of this little cell, and thence head-foremoſt through the hole into the neſt.

Theſe birds are not ſhy, ſo that you may come very near them; and they will go into their neſt while one is looking on, eſpecially in the wilder cantons, where the children never hunt them. Yet, ſays Vaillant, I never could take them in the neſt, not even in the night; becauſe the neſt, though generally in ſight, is ſo well fixed amidſt the thickets, that it is not poſſible to get at it without making too much noiſe; for it is never placed upon an

inſulated



The Pinc-Pinc, and its Nest.

Engraved for the Encyclopaedia Londinensis, 1817.

inſulated ſhrub, but always in a thick buſh difficult of acceſs. The laying is from five to eight eggs, uſually ſix, more or leſs ſpeckled with brown according to the age of the female, that is, leſs ſo at the firſt laying than at the ſecond. It ſhould alſo be obſerved, that the firſt neſt is never ſo large nor ſo well made as the following ones; an obſervation which applies to birds in general. So ſoft and commodious a neſt as that of the pinc-pinc excites envy in other birds; and, he is often driven out of his houſe, after ſeeing his little family deſtroyed, or his female's eggs broken to pieces; ſometimes the ſame pair has ſeveral neſts deſtroyed one after another in the ſame ſeaſon. The enemies of the pinc-pinc are, among birds, the titmouſe and the barbet; of quadrupeds, the mouſe; of inſects, the waſp and the ant. Even reptiles will glide into the neſt, eat the young or the eggs, and take up their lodging in the ſame place. So formidable and ſo numerous are the enemies of this little creature! The titmice, or the barbets, when they ſeize upon a neſt of this kind, have nothing to do but to enlarge the orifice, which they perform without much difficulty, becauſe it is compactly formed, very thin, and will ſtretch a good deal. Mice will bring forth their young, and lay up their winter-proviſion, in one of theſe neſts. Reptiles will conceal themſelves alſo therein; but chiefly a kind of green ſerpent found on trees and buſhes, whoſe bite is harmleſs. The waſps and ants, when they take poſſeſſion, conſtruct cells in the interior, where they depoſit their larvæ; the ants are of the winged kind.

The male pinc-pinc is three inches eight lines in extreme length. His colours are not brilliant: the plumage of the upper ſurface is dark brown edged with a lighter tint; the under parts rufous white, ſpeckled with brown; the tail, which is very ſhort, is light brown on the outer barbs, blackiſh within, but tipped with white; it is ſo tapered as to form a ſemicircle when ſpread out; the rump and lower-belly are reddiſh; bill and eyes brown, legs and feet dull yellow. Upon the whole, the plumage bears ſome reſemblance to that of the lark, eſpecially the female, whoſe colours are flatter; the male perhaps may remind us rather of the colour of the common grey partridge. We have given a delineation of the male, of the natural ſize, and a reduced figure of the neſt, on Plate VI.

The pinc-pinc ſits fifteen days, and is one of thoſe to whom the cuckoo confides her egg, which however muſt be dropped or puſhed in, for no cuckoo could enter the orifice of on of theſe neſts, not even the gilded cuckoo, called by Vaillan *didric*, which is one of the ſmalleſt of the African ſpecies; and he obſerved that the neſts wherein was found the cuckoo's eggs, were not at all damaged, as if the entrance had been forced; it was not till the cuckoo began to grow pretty large that the neſt loſt its ſhape. But indeed Vaillant aſcertained, after long watching and minute attention, that a cuckoo does not enter a neſt to lay her egg, but lays it on the ground or in any more convenient place, and then carries it in her mouth, and drops or puſhes it into the neſt ſhe has ſelected for it. (Oiſeaux d'Afrique, tom v. p. 47.) In the preſent caſe, it ſeems very extraordinary that a little bird which often abandons her own eggs when they have been handled, ſhould condeſcend to hatch the egg of another bird, who, having deſtroyed all her's, leaves her one much larger; for, although in general the cuckoo lays an egg ſmaller in proportion to her ſize than other birds, it is equally certain, that there muſt be a conſiderable difference in ſize between the eggs of any cuckoo and that of a bird ſo ſmall as the pinc-pinc, which we have deſcribed to be no bigger than a wren. Beſides, a large egg muſt be more inconvenient to the little bird to ſit upon than ſeveral ſmall ones; ſo that ſhe certainly muſt be conſcious, ſays Vaillant, that ſhe is not hatching her own. And how can we conceive, continues he, that the young cuckoo, who at fifteen days old muſt be big enough to ſwallow both father and mother, does not ſcare them away. All this muſt be regulated by the ſpecial direction of Providence.

211. Motacilla apus, the flower-pecker. This is probably the ſmalleſt bird in Africa; it is leſs even than the M. regulus. The bill is extremely weak, as ſtraight as a needle, without any bend or ſwell, and ſcarcely any greater breadth at the baſe; its mouth therefore is proportionably ſmall; and it can feed only on very ſmall inſects, which it ſeeks for among the flowers or bloſſoms of trees, picking and digging into the petals, to get at the minute ſcarabæi which lie in the calyces of ſuch flowers. Seeing theſe birds conſtantly darting their bills into the flowers of prickly ſhrubs, it might be ſuppoſed that they draw their nouriſhment from the juices they contain; but, upon diſſection, we find that is impoſſible; for their tongue, which is hardly viſible, is not hollowed out like a trunk, nor reticulated, nor capable of being darted into the bottom of the calyces of flowers, as in thoſe birds which pierce them and extract their juices. Nor has any thing been found in their ſtomachs but the remains of very ſmall inſects, mixed with ſome ſmall grains of ſand and bits of flowers; of two-and-thirty which Vaillant killed, he never found in their gizzards the leaſt appearance of grain or ſeed; it is certain therefore that they live only on inſects, and thoſe of the ſmalleſt kind, which they pick out from flowers and leaves. This ſpecies is not much extended; Vaillant obſerved them only in one diſtrict, about a place he calls Heere Logement, and thence to Elephant-river and a little farther. Like the preceding, they go in little flocks of ſix or eight: they are very nimble, and continually in motion from flower to flower, which, added to their diminutive ſize, makes it very difficult to ſhoot them. Their note is *zizizi, zizizi*, ſo weak as hardly to be heard did not the whole flock ſound it together. The colours are not remarkable. The throat is whitiſh; the reſt of the under part of the body faint yellow; the wings and tail are light brown, the reſt of the upper ſurface ſlate-colour; the eyes are brown, legs and feet browniſh. The male is diſtinguiſhed by a little tuft of feathers on the upper mandible, directly over the noſtrils; they are partly white, partly black, raiſed, and directed forwards. This is entirely wanting in the female; her colours are alſo duller. The neſting, &c. are not known.

212. Motacilla curvata, the curved-bill fig-eater. This ſpecies is plentiful about the Elephant-river, where it is called *krome-bec*, which in Dutch ſignifies a curved bill, As the bill of the Motacilla genus is in general ſtraight, this bird might be miſtaken for a colibri, or for a creeper, but it has not the tongue of the firſt, nor the feet and tail of the laſt. Its tongue reſembles the preceding ſpecies, therefore we need not repeat what we have juſt ſaid. It ſeeks its food in the ſame manner; and its colours moreover ſufficiently diſtinguiſh it from the creepers. Its hue is ſo ſimple and monotonous, that it would hardly be diſcerned among the branches of mimoſa where it commonly reſides, but for its extreme vivacity and little ſong. The male is commonly ſeen accompanied by his female, who reſembles him ſo much, that they can hardly be diſtinguiſhed but upon diſſection: the bill of the female is ſomewhat ſhorter, yet this part in the young males is as ſhort. Theſe birds conceal their neſts with great care; Vaillant could never procure one, though he offered a premium to his Hottentots for that purpoſe. The upper ſurface of the body, head, neck, wings, and tail, are grey-brown, almoſt cinereous; the under parts faint red, darker under the belly and tail; bill light brown, eyes hazel, legs and feet reddiſh. Extreme length, four inches and one line. Theſe birds are found on the banks of the Green River, and of the Great or Orange River, but chiefly about the Elephant-river; and on the mimoſa ſhrubs they are continually reiterating their cry of *tic-tic-tic, tic-tic-trie.*

213. Motacilla æſtiva, the yellow-poll: length four inches and a half: olive-green; head and all the under parts fine yellow, marked on the neck, breaſt, and ſides, with longitudical reddiſh ſpots; the upper parts and edges of the quills, olive-green; quills brown; the tail marked as the quills, but the two middle feathers dark brown; legs black. This bird is found in America, and is migratory; it is ſeen in Canada during the ſummer only; but its chief reſidence is in Guiana, and parts adjacent, where it performs the duties of incubation. Its note is ſaid to be very agreeable.

β. There is a variety, in which the body is brown above, inſtead of olive-green. Inhabits Canada.

214. Motacilla Carolinenſis, the Carolina yellow-poll: olive-green, beneath yellowiſh: quill and tail-feathers brown, the lateral ones edged with yellow. Inhabits Hudſon's Bay: ſize of the preceding, and probably only a variety.

215. Motacilla ſutoria, the tailor-bird. This is a very minute ſpecies, being only three inches in length; weight not more than ninety grains; the colour wholly of a light yellow. This inhabits moſt parts of India; and is remarkable for nothing ſo much as the neſt, which is conſtructed in a very curious manner, being compoſed of two leaves; the one dead, which it fixes at the end of ſome branch, to the ſide of a living one, by ſewing both together in the manner of a pouch or purſe, and open at the top; it lines the inſide with fine down; thus the brood is ſecure from depredation of ſnakes and monkeys, to which they might otherwiſe fall a prey. The eggs are white.

216. Motacilla Caffra, the Caffrarian warbler: ſize of the wagtail: head and back olive; over the eyes a white ſtreak; between the bill and eye black; throat and rump ferruginous; breaſt and belly whitiſh; quills brown; tail ferruginous; ends of the feathers brown. Inhabits the Cape of Good Hope, and Caffraria.

217. Motacilla gularis, the thick-necked warbler: above ferruginous: beneath white; chin, wings, and tail, black. Found in South America.

218. Motacilla flavicauda, the yellow-tailed warbler: above olive; beneath white; crown and rump cinereous; area of the wings and lateral tail-feathers yellow, tipped with brown; the middle ones entirely brown. Inhabits America, and migrates.

219. Motacilla tſchecantſchia, the tſchecantſchia warbler: above blackiſh; beneath ferruginous; head dark brown; nape whitiſh; collar, and oblong ſpot on the wings, white; back black. Native of Siberia.

220. Motacilla melanopa, the black-chinned warbler; above bluiſh aſh, beneath yellow: chin and throat black; eyebrows and three lateral tail-feathers on each ſide white; the outmoſt black on the exterior edge; a white line from the gape through the neck; tail even. Inhabits Dauria.

221. Motacilla Hudſonica, the Hudſon's-Bay warbler. A large ſpecies: above ruſty-brown, beneath whitiſh; neck beneath with duſky ſtripes; outmoſt tail-feather white, ſecond white edged within with black, third white on the diſk. Bill and legs yellowiſh-brown; body above brown, the feathers edged with ferruginous; chin and throat pale ferruginous; tail blackiſh, three inches long. Inhabits Hudſon's Bay: ſix inches long.

MOT'ACISM, ſ. in grammar, a vowel following the letter *m*. *Aſh*.

MOTA'LA, a town of Sweden, in Eaſt Gothland: twenty-one miles north-weſt of Linkioping.

MOTA'LA, a river of Sweden, in Eaſt Gothland, which runs from the Wetter Lake to the Baltic twenty-two miles eaſt of Nordkioping.

MOTAMOC'ULO, a town on the weſt coaſt of Madagaſcar: eighteen miles ſouth-eaſt of Cape St. André.

MOTA'TION, ſ. The act of moving.

MOTAZ'ALITES. See MOATAZALITES, vol. xv. p. 599.

MOTCHANG', a town of Corea: eighteen miles ſouth-weſt of Yang-tchen.

MOTCHIA'MA, an iſland of Africa, in the kingdom of Angola, formed by the river Coanza; about four or five miles long, and one broad; producing variety of roots and herbs, and breeding plenty of cattle. On this iſland were formerly ſettled five or ſix Portugueſe families, who carried on a conſiderable trade in ſlaves.

MOTE, a town of the county of Tyrol: nine miles ſouth of Tyrol.

MOTE, ſ. [moꞇ, Sax. *atomus*, Lat.] A ſmall particle of matter; any thing proverbially little.—The little *motes* in the ſun do ever ſtir, though there be no wind. *Bacon's Nat. Hiſt.*

You found his *mote*, the king your *mote* did ſee;
But I a beam do find in each of three. *Shakeſpeare.*

MOTE, an obſolete form of the verb *muſt* and *may*; [*moet*, Dut.] Muſt:

In ſtede of weping and praieres,
Men *mote* give ſilver to the poore freres. *Chaucer.*

However loth he were his way to ſlake,
Yet *mote* he algates now abide. *Spenſer.*

Might:

Moſt ugly ſhapes,
Such as dame Nature ſelf *mote* fear to ſee. *Spenſer.*

Within the poſtern ſtood Argantes ſtout
To reſcue her, if ill *mote* her betide. *Fairfax.*

MOTE, ſ. [moꞇ, ȝemoꞇ, Sax. *mot*, Icel. *mote*, Su. Goth.] A meeting; an aſſembly: uſed in compoſition, as *burgmote*, *folkmote*, &c.

MOTE, or MOTA, was alſo uſed for a fortreſs or caſtle; as *mota de Windſor*; and ſometimes for the large ditch encompaſſing the caſtle, or manſion. See MOAT.

MO'TE-BELL, ſ. The bell which was uſed by the Engliſh Saxons to call people together to the court. *Leg. Ed. Confeſſ.* c. 35.

MOTECAZE', a town of Hindooſtan, in Guzerat: forty-eight miles ſouth of Janagur.

MOT'ER, ſ. See MOTOR.

MOTERA'NA, a town of Naples, in the province of Otranto: ſix miles ſouth-weſt of Lecce.

MO'TET, ſ. [Fr. from *mottetto*, Ital.] A kind of ſacred air; a hymn.—Commending this ſong's delicate air, that *motet's* dainty air. *Brewer's Lingua.*—Dr. Aldrich has adapted the muſic of two of their *motets* to Engliſh words. *Maſon on Church Muſick.*

Motet formerly ſignified a ſtudied compoſition, enriched with all the beauties of the art; ſuch were the motets of Baſſani, at the end of the 17th and beginning of the 18th century. At preſent the name of motet is given to every ſacred compoſition ſet to Latin words; ſuch as hymns, pſalms, or any ſmall portion of Scripture in the Romiſh church. As *mot*, in French, implies a phraſe, or ſhort ſentence, ſo *motet* implies a verſe or ſhort period taken from the ſacred writings, as the text of what we ſhould call an anthem; and, as the verſe or ſentence is uſually ſhort, the too-frequent repetition of the words is ſometimes objected to in the conſtruction of motets.

MOTH, ſ. [Sax. from *matha*, Goth. a worm or maggot.] A ſmall inſect or worm, which eats clothes and hangings; and afterwards becomes winged. See the article PHALÆNA.—All the yarn Penelope ſpun in Ulyſſes's abſence, did but fill Ithaca full of *moths*. *Shakeſpeare's Coriolanus.*—Every ſoldier in the wars ſhould do as every ſick man in his bed, waſh every *moth* out of his conſcience. *Shakeſp.*

Let *moths* through pages eat their way,
Your wars, your loves, your praiſes be forgot,
And make of all an univerſal blot. *Dryden.*

To MOTH-EAT, *v. a.* To prey upon, as a moth preys upon a garment.—Ruin and neglect have ſo *moth-eaten* her, [the town of Fettipore,] as at this day ſhe lies proſtrate,

trate, and is become the object of contempt and pity. *Sir T. Herbert's Travels.*

MOTH'-EATEN, *adj.* Eaten of moths.—He as a rotten thing conſumeth, as a garment that is *moth-eaten. Job* xiii. 28.

MOTH MUL'LEIN, *ſ.* in botany. See BLATTERIA and VERBASCUM.

MOTH'-WORT, *ſ.* A plant.

MO'THE LE VAYE'R. See LAMOTHE, vol. xii. p. 112.

MOTHE MONT RAVEL', a town of France, in the department of the Dordogne: eighteen miles ſouth-weſt of Mucidan.

MOTHE ST. HERA'YE, a town of France, in the department of the Two Sevres: four miles ſouth-eaſt of St. Maixent, and thirteen weſt of Niort.

MOTH'EN, *adj.* Full of moths.—We rake not up olde, mouldie, and *mothen*, parchmentes, to ſeeke our progenitours' names. *Fulke againſt Allen*, 1580.

MOTH'ER, *ſ.* [moꝺoꞃ, Sax. *moder*, Icel. Su. Goth. and Dan. *moeder*, Dut. *mader*, Per. *mater*, Lat. μητηρ, ματηρ, Gr.] A woman that has borne a child, correlative to ſon or daughter.—Thus Eve is called our common *mother*; Cybele, among the ancients, was the *Mother* of the Gods. *Chambers.*

I had not ſo much of the man in me,
But all my *mother* came into mine eyes,
And gave me up to tears. *Shakeſpeare's Hen. V.*

That which has produced any thing.—Alas, poor country? It cannot be called our *mother*, but our grave. *Shakeſpeare.*—That which has preceded in time: as a *mother*-church to chapels.—That which requires reverence and obedience.—The good of *mother*-church, as well as that of civil ſociety, renders a judicial practice neceſſary. *Ayliffe's Parergon.*—Hyſterical paſſion; ſo called, as being imagined peculiar to women; or rather as proceeding from an affection of the uterus, *mother* being an old word for the uterus, or womb.—Melancthon will have it [melancholy] as common to men, as the *mother* to women, upon ſome grievous trouble, paſſion, diſlike, or diſcontent. *Burton's Anat. of Mel.* p. 177.—This ſtopping of the ſtomach might be the *mother*; foraſmuch as many were troubled with *mother*-fits, although few returned to have died of them. *Graunt's Bills of Mortality.*—A familiar term of addreſs to an old woman; or to a women dedicated to religious auſterities:

I will about it ſtraight;
No longer ſtaying, but to give the *mother*
Notice of my affair. *Shakeſpeare's Meaſ. for Meaſ.*

[*Moeder*, Dut. from *modder*, mud.] A thick ſubſtance concreting it liquors; the lees or ſcum concreted.—If the body be liquid, and not apt to putrefy totally, it will caſt up a *mother*, as the *mothers* of diſtilled waters. *Bacon.*

Potted fowl, and fiſh come in ſo faſt,
That ere the firſt is out the ſecond ſtinks,
And mouldy *mother* gathers on the brinks. *Dryden.*

[More properly *modder*; *modde*, Teut.] A young girl. See MAUTHER and MODDER, vol. xv.

A fling for a *mother*, a bow for a boy,
A whip for a carter. *Tuſſer's Huſbandry.*

Queen MOTHER, ſignifies the ſame with what we otherwiſe call *queen dowager*. We meet with empreſſes on medals and inſcriptions, with the title of Mother of the Camp, Mother of the Senate, Mother of the Country; *Mater Caſtrorum, Mater Senatus, Mater Patriæ*, &c.

MOTH'ER, *adj.* Had at the birth; native.—Boccace lived in the ſame age with Chaucer, had the ſame genius, and followed the ſame ſtudies: both writ novels, and each of them cultivated his *mother* tongue. *Dryden.*

At length divine Cecilia came,
Inventreſs of the vocal frame,
Enlarg'd the former narrow bounds,
And added length to ſolemn ſounds,
With nature's *mother* wit, and arts unknown before. *Dryd.*

To MOTH'ER, *v. n.* To gather concretion—They oint their naked limbs with *mother'd* oil. *Dryden.*

To MOTH'ER, *v. a.* To adopt as a ſon or daughter.—The queen, to have put lady Elizabeth beſide the crown, would have *mothered* another body's child. *Howell's Hiſt. of Eng.*

MOTHER BAN'K, a bank in the channel, between the Iſle of Wight and the coaſt of Hampſhire, with from three to eight fathom water. Lat. 50. 41. N. lon. 1. W.

MOTHER CAREY'S CHIC'KENS, a name given by the Engliſh ſailors to birds which they ſuppoſe to be the forerunners of a ſtorm. See PROCELLARIA gigantea.

MOTHER AND DAU'GHTERS, three remarkable hills, on the coaſt of New Britain, in the Pacific Ocean, ſituated to the weſt of Cape Palliſer.

MOTHER AND DAU'GHTERS, ſmall iſlands near the coaſt of Surinam. Lat. 5. N. lon. 52. W.

MOTHER OF GOD', an attribute commonly given to the bleſſed Virgin. It had its origin from the Greeks, who firſt called her Θεοτοκος; in imitation of whom ſome Latins began to call her *Deipara, Dei genitrix.* The council of Epheſus firſt gave a ſanction to the appellation; but the fifth of Conſtantinople decreed, that the Virgin ſhould always be thus called. This gave riſe to terrible diſputes: Anaſtaſius, a preſbyter of Neſtorius, patriarch of Conſtantinople, firſt aſſerted, in a ſermon, that the Virgin was by no means to be called Θεοτοκος; upon which words, a great tumult ariſing, Neſtorius took his preſbyter's part, and taught the ſame doctrine.

MOTH'ER KILL, a river of the ſtate of Delaware, which runs into the Delaware Bay in lat. 39. 5. N. lon. 75. 30. W.

MOTH'ER-IN-LAW, *ſ.* The mother of a huſband or wife.—I am come to ſet at variance the daughter in law againſt the *mother in law. Matth.* x. 35.

MOTHER MA'ID, the Virgin Mary:

Thou ſhalt ſee the bleſſed *mother-maid*
Exalted more for being good
Than for her intereſt of motherhood. *Donne.*

MOTHER OF PEAR'L, a kind of coarſe pearl; the ſhell in which pearls are generated.—They were of onyx, ſometimes of *mother of pearl. Hakewill.*

His mortal blade
In ivory ſheath, ycarv'd with curious ſlights,
Whoſe hilt was burniſh'd gold, and handle ſtrong
Of *mother-pearl.* *Spenſer's Fairy Queen.*

MOTHER OF THY'ME, *ſ.* [See THYMUS.] A plant. It hath trailing branches, which are not ſo woody and hard as thoſe of thyme, but in every reſpect is the ſame. *Miller.*

MOTHER-TON'GUE, an original language, from which others are formed. Of mother-tongues, Scaliger reckons ten in Europe; viz. the Greek, Latin, Teutonic or German, Sclavonic, Epirotic, Scythian or European Tartar, Hungarian, Cantabrian, Iriſh, and Britiſh. See the article LANGUAGE, vol. xii.

MOTHER-WATER, in chemiſtry, a name given to the ſolution of cryſtalline ſalt, after no more cryſtals will form in it without more of the water being evaporated. It will be eaſy to conceive, that, when the cryſtallization of a ſalt has gone on till the attraction of the water for the ſalt is equal to the attraction by which the cryſtals are formed, the proceſs muſt ſtop. The affinity of cryſtallization may be increaſed, and more cryſtals may be formed, either by evaporating an additional quantity of water, or by expoſing the mother-water to a lower temperature.

MOTH'ER-WORT, *ſ.* In botany. See CARDIACA and LEONURUS.

MOTH'ERBY, (Dr. George), an eminent Engliſh phyſician, author of the New Medical Dictionary, folio. He was born in the year 1731, and died in 1793.

MOTH'ERHOOD, *ſ.* The office or character of a mother:

Thou ſhalt ſee the bleſſed mother-maid
Exalted more for being good
Than for her intereſt of *motherhood*. *Donne.*

MOTH'ERING, *adj.* To go a *mothering*, is to viſit parents on Midlent Sunday; a cuſtom derived, as Cowel informs us, from perſons, in the times of popery, viſiting their *mother-church* on that day, and making their offerings at the high altar. The cuſtom is yet retained in ſome places, and is alſo known by the name of *midlenting*.

I'll to thee a ſimnell bring,
'Gainſt thou go'ſt a *mothering*;
So that, when ſhe bleſſeth thee,
Half that bleſſing thou'lt give me. *Herrick's Heſperides.*

MOTH'ERING SUN'DAY. Midlent Sunday.

MOTH'ERLESS, *adj.* Deſtitute of a mother; orphan of a mother.—I might ſhew you my children, whom the rigour of your juſtice would make complete orphans, being already *motherleſs*. *Waller's Sp. to the H. of Commons.*

MOTH'ERLINESS, *ſ.* The ſtate of being motherly; ſuitableneſs to a mother.

MOTH'ERLY, *adj.* Belonging to a mother; ſuitable to a mother.—They can owe no leſs than child-like obedience to her that hath more than *motherly* power. *Hooker.*—When I ſee the *motherly* airs of my little daughters when playing with their puppets, I cannot but flatter myſelf that their huſbands and children will be happy in the poſſeſſion of ſuch wives and mothers. *Addiſon's Spect.*

Within her breaſt though calm, her breaſt though pure,
Motherly cares and fears got head, and rais'd
Some troubled thoughts. *Milton's P. R.*

MOTH'ERLY, *adv.* In manner of a mother:

Th' air doth not *motherly* ſit on the earth,
To hatch her ſeaſons, and give all things birth. *Donne.*

MOTH'ERY, *adj.* Concreted; full of concretions; dreggy; feculent: uſed of liquors.

MOTH'Y, *adj.* Full of moths.—His horſe hipp'd with an old *mothy* ſaddle, the ſtirrups of no kindred. *Shakeſpeare's Taming of the Shrew.*

MO'TI, a town of Perſia, in the province of Segeſtan: ſixty miles north of Zareng.

MO'TI, a town of the iſland of Sardinia: twenty-ſeven miles eaſt-ſouth-eaſt of Saſſari. Lat. 40. 42. N. lon. 9. 20. E.

MOTI'ERS, a town of Swiſſerland, in the principality of Neufchâtel, the ſeat of a court of juſtice: thirteen miles ſouth-weſt of Neufchâtel.

MOTIKLE'I, a gulf of Ruſſia, in the ſea of Ochotſkoi, between cape Duginſkoi and the continent; about forty miles long, and from twelve to ſixteen broad. Lat. 59. 20. to 59. 36. N. lon. 147. 34. to 149. 14. E.

MO'TIN, a town of Mexico, in the province of Mechoacan, ſituated at the foot of a mountain: fifty miles eaſt-ſouth-eaſt of Colima.

MO'TION, *ſ.* [Fr. from *motio*, Lat.] The act of changing place: oppoſed to *reſt*:

Immediate are the acts of God, more ſwift
Than time or *motion*. *Milton.*

Animal life and action.—Devoid of ſenſe and *motion*. *Milt.*

The ſoul
O'er miniſterial members does preſide,
To all their various provinces divide,
Each member move, and every *motion* guide. *Blackmore.*

Manner of moving the body; port; gait:

Speaking or mute, all comelineſs and grace
Attend thee, and each word, each *motion*, form. *Milton.*

Change of poſture; action.—By quick inſtinctive *motion* up I ſprung. *Milton.*

Encourag'd thus, ſhe brought her younglings nigh,
Watching the *motions* of her patron's eye. *Dryden.*

Military march, or remove:

See the guards,
By me encamp'd on yonder hill, expect
Their *motion*. *Milton.*

Agitation; inteſtine action:

My womb
Prodigious *motion* felt, and rueful throes. *Milton.*

Ceaſe, ceaſe, thou foaming ocean,
For what's thy troubled *motion*
To that within my breaſt? *Gay.*

Direction; tendency.—In our proper *motion* we aſcend. *Milton.*—Impulſe communicated.—Whether that *motion*, vitality, and operation, were by incubation, or how elſe, the manner is only known to God. *Raleigh.*

Love wakes the ſleepy vigour of the ſoul,
And bruſhing o'er adds motion to the pool. *Dryden.*

Tendency of the mind; thought impreſſed.—Let a good man obey every good *motion* riſing in his heart, knowing that every ſuch *motion* proceeds from God. *South.*—Propoſal made.—Your father and my uncle have made *motions*; if it be my luck, ſo; if not, happy man be his dole. *Shakeſpeare.*—Yes, I agree, and thank you for your *motion*. *Shakeſpeare.*—[In old language.] A puppet-ſhow.—He compaſſed a *motion* of the Prodigal Son, and married a tinker's wife, within a mile where my land and living lies. *Shakeſpeare.*—I would dance at may-poles, and make ſyllabubs; as a country-gentlewoman, keep a good houſe, and come up to town to ſee *motions*. *B. Jonſon's Cynthia's Revels.*—A puppet; an inſignificant perſon:

If he be that *motion* that you tell me of,
And make no more noiſe, I ſhall entertain him. *Rule a Wife.*

MOTION, in law, an occaſional application to a court of law or equity, by the parties or their counſel, in order to obtain ſome *rule* or *order* of court, which becomes neceſſary in the progreſs of a cauſe. 3 *Comm.* 304.

A motion is either for a *rule abſolute* in the firſt inſtance, which is ſometimes moved for in open court; and ſometimes merely drawn up on a motion-paper ſigned by counſel, and delivered to the clerk of the rules; or it is only a *rule to ſhew cauſe*, or, as it is commonly called, *a rule niſi*, i. e. *unleſs* cauſe be ſhewn to the contrary, which is afterwards moved to be made abſolute.

Motions are of a *civil* or *criminal* nature. Of the latter kind is the motion for an *attachment*, which may be moved for on account of contemptuous words ſpoken of the court, or its proceſs; for a reſcue, or diſobedience to a ſubpœna, or other proceſs; againſt a ſheriff, for not returning the writ, or bringing in the body; againſt an attorney, for not performing his undertaking, or otherwiſe miſbehaving himſelf; againſt other perſons for non-payment of coſts, on the maſter's allocatur; for the non-payment of money generally, or not performing an award, &c. An attachment for miſbehaviour is commonly preceded by a motion for a rule to anſwer the matters of the affidavit; and the party, being taken on the attachment, either remains in cuſtody or puts in bail before a judge, (for he is not bailable before the ſheriff,) to anſwer interrogatories to be exhibited againſt him.

Motions of a *civil* nature are made on behalf of the plaintiff or of the defendant. On behalf of the *plaintiff*, they are either, 1. For ſomething to be done in the common and ordinary courſe of the ſuit, as to increaſe iſſues, for a *concilium*, or judgment on demurrer, ſpecial verdict, or writ of error; for leave to enter up judgment on an old warrant of attorney, or *nunc pro tunc*, to enter up judgment and take out execution after an award, where a verdict has been taken for the plaintiff's ſecurity, or after a verdict for the plaintiff againſt one of ſeveral underwriters, where the reſt have agreed to be bound by it; or to take out execution pending a writ of error; to amend the pleadings or other proceedings in the courſe of a ſuit; or to ſet aſide a judgment of *non pros, or of nonſuit;* or a verdict, or inquiſition. Or, 2. They are for ſomething to be done out of the common and ordinary courſe of the ſuit; as for the defendant to abide by his plea, to refer it to the maſter to aſſeſs the damages, without a writ of inquiry; for the execution of a writ of inquiry before a judge; or to have a good jury upon the execution of ſuch writ; for a trial at bar, or in an adjoining county.

On behalf of the *defendant*, motions are, to quaſh the writ, juſtify bail, reverſe an outlawry; or, after ſeveral rules for time to declare, that the plaintiff declare peremptorily; to ſet aſide an interlocutory judgment for irregularity, as being ſigned contrary to good faith; or upon an affidavit of merits, to ſet aſide or ſtay proceedings in actions upon bail-bonds or in other actions, if irregular or unfounded; and, if the defendant is a priſoner, to diſcharge him out of cuſtody upon common bail; or, if the proceedings are regular, to ſtay them upon terms; to compound penal actions, change the venue; conſolidate actions, or ſtrike out ſuperfluous counts; for time to plead or reply, &c. under ſpecial circumſtances, to plead ſeveral matters, or pay money into court, &c. The defendant alſo, as well as the plaintiff, may move for a *concilium*, or judgment, on a demurrer, ſpecial verdict, or writ of error; to amend; for a trial at bar, or in an adjoining county; for a view or ſpecial jury, to have witneſſes examined on interrogatories, &c. &c.

A motion is in general accompanied with an affidavit, and ſometimes preceded by a notice. The affidavit ſhould be properly intitled, and contain a full ſtatement of all the circumſtances neceſſary to ſupport the application: and the rather, as it is a rule not to receive any ſupplementary affidavit on ſhowing cauſe. On the day appointed for that purpoſe, the counſel for the party called upon by the rule, may ſhow cauſe againſt it, either upon or without an affidavit, as circumſtances require. On ſhowing cauſe againſt the rule, the court either make it abſolute, or diſcharge it, and that either with or without the coſts of the application; or ſuch coſts are directed to abide the event of the ſuit; according to the diſcretion of the court under all the circumſtances of the caſe.

In B. R. one ought not to move the court for a rule for a thing to be done, which by the common rules of practice may be done without moving the court; nor ſhall the court be moved for doing what is againſt the practice of the court: one ought not to move for ſeveral things in one motion; and, where a motion hath been denied, the ſame matter may not be moved again by another counſel, without acquainting the court thereof, and having their leave for the ſame. If any thing be moved to the court upon a record, the record is to be in court, or the court will make no rule upon ſuch motion. *Jacob's Law Dict.*

MO'TION, *ſ.* That part of philoſophy which conſiders bodies as acting on each other.

The doctrine and laws of motion make the ſubject of mechanics, or ſtatics. One of the ancient philoſophers, when he was aſked to give a deſcription of motion, is ſaid to have walked acroſs the room, and to have replied, "You ſee it; but what it is I cannot tell you."

Motion, then, is agreed to be the tranſlation of a body from place to place; but authors differ much when they come to explain in what this tranſlation conſiſts. And hence their diviſions of motion become exceedingly precarious. Ariſtotle, and the Peripatetics, divide all motion into *natural* and *violent:* the firſt is that which has its principle, or moving force, within the moving body: ſuch is that of a ſtone falling towards the centre of the earth. The ſecond is that whoſe principle is without, and againſt which the moving body makes a reſiſtance: ſuch is that of a ſtone thrown upwards.

The moderns generally divide motion into *abſolute* and *relative.* *Abſolute* motion is the change of abſolute place, in any moving body; whoſe celerity, therefore, will be meaſured by the quantity of abſolute ſpace which the moveable body runs through. *Relative* motion is a mutation of the relative or vulgar place of the moving body; and has its celerity eſtimated by the quantity of relative ſpace run through.

Others divide motion into *proper*, and *improper*, or *foreign*. *Proper* motion is a removal out of one proper place into another, which thus becomes proper, as being poſſeſſed by this body alone, in excluſion of all others. Such is the motion of a wheel in a clock. *Improper*, *extraneous*, *foreign*, or *common*, motion, is the paſſage of a body out of one common place into another common place: ſuch is that of a clock when moving in a ſhip, &c.

The reaſon of all this diverſity ſeems to ariſe from not attending to the different meanings of the words, but compriſing all in one definition and diviſion; which they ſhould rather have diſtinguiſhed into ſeveral parts. Some, *e. gr.* in their definitions of motion, conſider the moving body, not as it regards the adjacent bodies, but as it regards immovable and infinite ſpace. Others, again, conſider the moving body, not as it regards infinite ſpace, but as it regards other bodies very remote. And others, laſtly, conſider the moving body, not as it regards remote bodies, but that ſurface only to which it is contiguous.

But, theſe various meanings being once ſettled, the diſpute is terminated. For, as every thing that moves may be conſidered in theſe three ſeveral manners, there hence ariſe three ſeveral kinds of motions; of theſe, That which regards the parts of infinite immovable ſpace, without conſideration of the circumambient bodies, may be called *abſolutely and truly-proper motion.* That which regards circumambient bodies very remote, which may themſelves poſſibly be removed, we call *relatively-common motion.* The laſt, which regards the ſurfaces of the next contiguous bodies, inaſmuch as it may want all both abſolute and common motion, we call *relatively-proper motion.*

The Carteſians maintain, that the Creator at the beginning impreſſed a certain quantity of motion on bodies; and that under ſuch laws, as that no part of it ſhould be loſt, but the ſame portion of motion ſhould be conſtantly preſerved in matter: and hence they conclude, that, if any moving body ſtrike on any other body, the former loſes no more of its motion than it communicates to the latter. This principle ſir Iſaac Newton overturns in the following words: "From the various compoſitions of two motions, it is manifeſt there is not always the ſame quantity of motion in the world; for, if two balls, joined together by a ſlender wire, revolve with an uniform motion about their common centre of gravity, and at the ſame time that centre be carried uniformly in a right line drawn in the plane of their circular motion, the ſum of the motions of the two balls as often as they are in a right line, drawn from their common centre of gravity, will be greater than the ſum of their motions when they are in a line perpendicular to that other. Whence it appears, that motion may be both generated and loſt. But, by reaſon of the tenacity of fluid bodies, and the friction of their parts, with the weakneſs of the elaſtic power in ſolid bodies, nature ſeems to incline much rather to the deſtruction than the production of motion; and, in reality, motion becomes continually leſs and leſs. For bodies which are either ſo perfectly hard, or ſo ſoft, as to have no elaſtic power, will not rebound from each other: their impenetrability will only ſtop their motion. And, if two ſuch bodies, equal to each other, be carried with equal, but oppoſite, motions, ſo as to meet in a void ſpace, by the laws of motion they muſt ſtop in the very place of concourſe, loſe all their motion, and be at reſt for ever; unleſs they have an elaſtic power to give them a new motion. If they have elaſticity enough to enable them to rebound with $\frac{1}{4}$, or $\frac{1}{2}$, or $\frac{3}{4}$, of the force wherewith they meet, they will loſe $\frac{3}{4}$, or $\frac{1}{2}$, or $\frac{1}{4}$, of their motion. And this is confirmed by experiments: for, if two equal pendulums be let fall from equal heights, ſo as to ſtrike full on each other; if thoſe pendulums be of lead, or ſoft clay, they will loſe all, or almoſt all, their motion; and, if they be of any elaſtic matter, they will only retain ſo much motion as they receive from their elaſtic power." If it be aſked, how it happens, that motion, being thus continually loſt, ſhould be continually renewed again; the ſame author adds, that it is renewed from ſome active principles, "ſuch as the cauſe of gravity, whereby the planets and comets preſerve their motions in their orbits, and all bodies acquire a great degree of motion in falling; and the cauſe of fermentation, whereby the heart and blood of animals preſerve a perpetual warmth and motion; the inner parts of the earth are kept continually warmed; many bodies burn and ſhine; and the ſun himſelf burns and ſhines, and with his light warms and chears all things:" (as alſo from the cauſe of elaſticity, by which bodies reſtore themſelves into their former figures,) "for we find but little motion in the world, except what plainly flows, either from theſe active principles, or from the command of the willer." The preſervation of the ſame quantity of motion in the univerſe, was a principle laid down univerſally by Des Cartes; but has been found falſe, and holds true only in the ſame direction, which is thus expreſſed by ſir Iſaac Newton: "the quantity of motion, which is collected by taking the ſum of the motions directed towards the ſame parts, and the difference of thoſe that are directed to contrary parts, ſuffer no change from the action of bodies among themſelves." Princip. lib. i.

Motion, we have obſerved, is the ſubject of mechanics; and mechanics is the baſis of all natural philoſophy, which hence becomes denominated *mechanical.* In effect, all the phenomena of nature, all the changes that happen in the ſyſtem of bodies, are owing to motion; and are directed according to its laws. Hence, the modern philoſophers have applied themſelves with peculiar ardour to conſider the doctrine of motion; to inveſtigate the properties, laws, &c. of it; by obſervation, experiment, and the uſe of geometry. And to this we owe the great advantages of the modern philoſophy above that of the ancients, who were extremely regardleſs of motion, notwithſtanding that they ſeemed ſo ſenſible of its importance, that they defined nature by the firſt principle of motion, and reſt of the ſubſtance in which it is.

Among all the ancients there is nothing extant on motion, excepting ſome things in Archimedes's books "De Æquiponderantibus." To Galileo a great part of the doctrine of motion is owing; he firſt diſcovered the general laws of motion, and particularly of the deſcent of heavy bodies, both at liberty and on inclined planes; the laws of the motion of projectiles; the vibrations of pendulums, and ſtretched chords, with the theory of reſiſtances, &c. which were things of which the ancients had little notion. His diſciple Torricelli poliſhed and improved the diſcoveries of his maſter; and added to them divers experiments concerning the force of percuſſion, and the equilibrium of fluids. Mr. Huygens improved very conſiderably on the doctrine of the pendulum; and both he and Borelli on the force of percuſſion. Laſtly, Newton, Leibnitz, Varignon, Mariotte, &c. have brought the doctrine of motion ſtill much nearer to perfection. The general laws of motion were firſt brought into a ſyſtem, and analytically demonſtrated together, by Dr. Wallis, ſir Chriſtopher Wren, and Mr. Huygens, all much about the ſame time: the firſt in bodies not elaſtic, and the two laſt in elaſtic bodies. Laſtly, the whole doctrine of motion, including all the diſcoveries both of the ancients and moderns on that head, was given by Dr. Wallis in his "Mechanica, ſive de Motu," publiſhed in 1670. See the article Mechanics, vol. xiv. p. 626 & ſeq.

The *Laws of Motion*, and the deductions from them, as expounded to us by thoſe high authorities, have been given under our article Mechanics, vol. xiv. p. 626 & ſeq. But we have lately met with a curious eſſay in the Monthly Magazine, (by ſir Richard Phillips,) which makes ſome bold attacks upon the Newtonian theory of the influence of gravitation, or attraction, upon motion; which we ſhall lay before our readers without giving any opinion upon the ſubject ourſelves, as otherwiſe we muſt enter into a diſcuſſion far exceeding our limits.

The writer ſets out with obſerving, very properly, that it is the proper object and end of philoſophy to inveſtigate the mechaniſm of *cauſes*, and the means by which they produce natural phenomena. For this purpoſe, obſervers regiſter facts, and philoſophers infer the cauſes from the phenomena by a logical proceſs of induction.

"The deſign of the preſent eſſay is to determine the cauſes of all thoſe phenomena, on which philoſophical obſervers have hitherto conferred the name of gravitation or attraction, and which is vulgarly deſignated by the name of *weight.*—Owing to what cauſe or cauſes does a body fall to the earth? Why does a projectile return to the earth? Theſe are the queſtions which it is here propoſed to anſwer.

The Newtonians, and all the modern ſchools of philoſophy, have been unable to ſolve theſe problems; or, finding themſelves unable, they have been unwilling to diſcuſs them, or even tolerate their diſcuſſion: while the theologians have been deſirous of referring this power to the proximate agency of the Deity. It is, however, the duty of genuine philoſophers to perſevere in ſpite of difficulties and obſcurities; and of wiſe theologians, to exalt their notions of the Deity by contemplating the ſublime and ſimple mechaniſm of ſecondary cauſes.

In the preſent caſe, the phenomena conſiſt in the apparent influence of one body upon another, though they are not in contact, and though no viſible mechanical agency appears to exiſt between them; and in their approach to each other by certain laws of accelerated motion, as a reſult of apparently continued and reiterated forces.

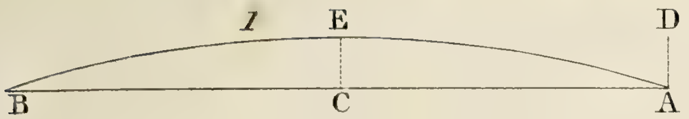
What, however, are the circumſtances in which the bodies ſo acting upon each other are placed, as in the caſe of a ſtone projected from, or falling to, the earth? The earth is a globe of heterogeneous materials, moving round the ſun in every year, at ſuch diſtance, that its mean rate of motion, in round numbers, is 100,000 feet in a ſecond of time; and the ſtone moves with the earth in the ſame orbit, partaking conjointly with it of the ſame mean motion of 100,000 feet in every ſecond. Nor will any one doubt that, at the time the earth and atmoſphere are performing this orbicular motion, they are alſo performing a rotary motion in every twenty-four hours, which rotary motion carries bodies on the earth's ſurface through a ſpace, at the equator, of 1250 feet in a ſecond, or one-eightieth of the orbicular motion. The whole earth, then, with all bodies upon the earth, and the atmoſphere, are ſubject to theſe combined motions and forces; and, in this paſſive ſtate, the queſtions are, By what law or laws the heterogeneous particulars are kept together; and how, if the poſitions are diſturbed, thoſe poſitions are reſtored?

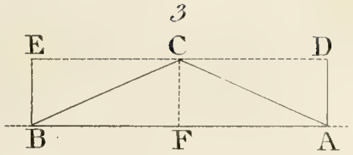
Suppoſe A, fig. 1, of the annexed Engraving, to be a place on the earth's ſurface, from which, by muſcular or exploſive force, a ſtone is projected towards D, at 16 feet and an inch above A. Suppoſe that a ſecond of time elapſes while the ſtone is aſcending from A to D; then it is evident that the point A will in that ſecond be carried forward, by the orbicular motion of the earth, 100,000 feet, or to C; that is to ſay, the point A will move 100,000 feet while the ball is aſcending 16 feet and an inch; conſequently the ball will, in truth, not aſcend in ſpace from A to D, but will be carried in an oblique line from A to E, moving upwards as it proceeds. The two forces—that which carries it from A to C, and that which carries it towards D,—are as 100,000 to 16$\frac{1}{12}$, or as 6000 to 1 nearly.

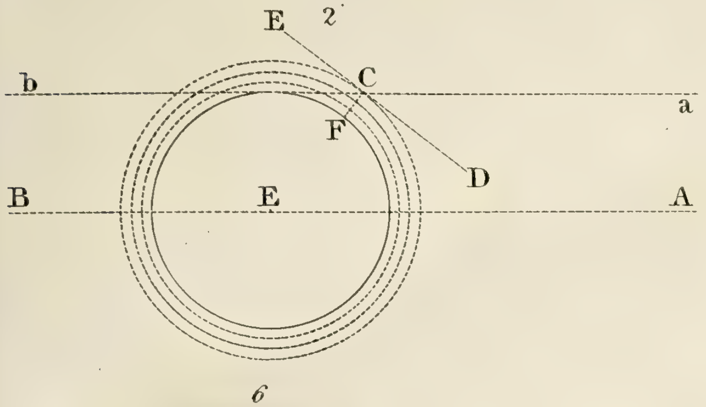
The ſtone having arrived at E, it is then known, by the phenomenon, to fall to the earth in a ſecond of time; yet it does not fall through E C, but, while falling, is carried,

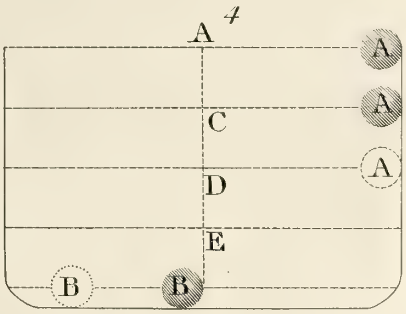
by

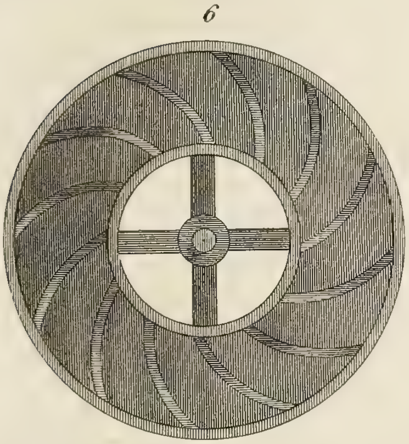
MOTION AND MUCOR.

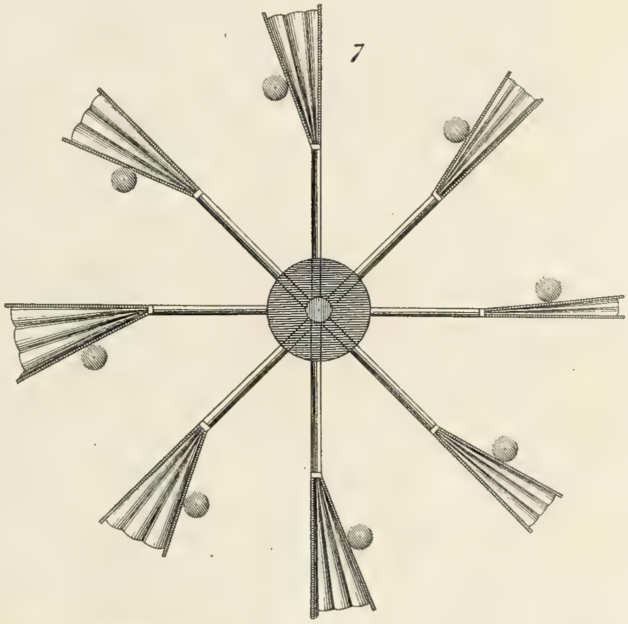


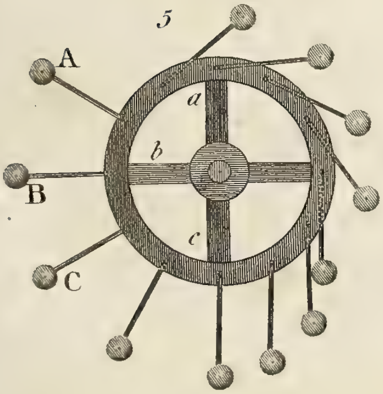


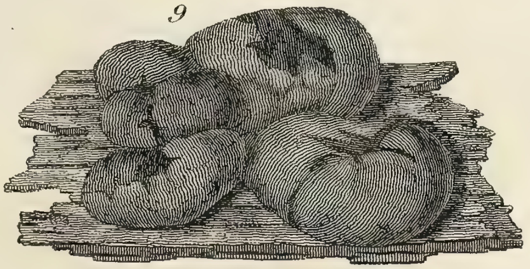


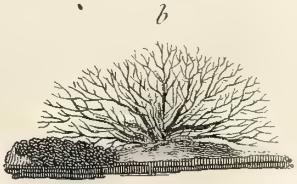


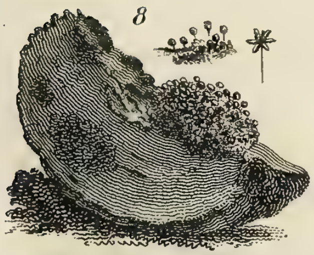












1, 2, 3. New Theory of Motion. 4, to 7. Perpetual Motion.
8. Mucor mucedo. 9. Mucor atrum.

J. Pass.

Engraved for the Encyclopædia Londinensis, 1817.

by the orbicular motion, through 100,000 feet to B, in the diagonal E B. Such a diagonal courſe as A E is therefore, in point of fact, generated by every projectile, while it is riſing to any given height in the atmoſphere; but, as the ſpectator is carried with the projectile, he merely meaſures its novel and peculiar motions, and is incapable of obſerving the orbicular motion, of which he partakes in common with the projectile. The projectile is not, however, the leſs ſubject to the force of the orbicular motion, becauſe it is not perceived or felt by a ſpectator at reſt; but, as a body put into motion by *novel forces,* acting in *oppoſing directions,* its novel ſtate of oppoſing motion is liable to be affected by all oppoſing forces, ſimultaneouſly exiſting in nature; and, when its novel force is exhauſted or deſtroyed at E, it becomes the patient of the great natural forces, which, in moving the earth and atmoſphere from A to B, move it likewiſe, as part of the ſyſtem.

The projectile having however aſcended to E, a difficulty ariſes in regard to the origin of the force which deflects it from the ſummit at E towards B. Why does it not move for ever in the parallel D E? What is the original force that turns it aſide? Is that force required to be equal to the weight of the body; or what proportion of that force, and how is it generated?

It appears by the fact, that the whole force which was neceſſary to cauſe it to fall through the $16\frac{1}{12}$ feet, is but a 6000th part of the orbicular momentum; conſequently the deflection of 16 feet forms but an angle of 20 ſeconds at A and at B. The naſcent deflection, however, at E, would be but an infiniteſimal of the ſaid 20 ſeconds; conſequently, any indefinitely-ſmall deflective force, ariſing from new combinations of the forces, might be ſufficient to return a body to the earth. What then is the actual deflective force which turns a projectile downward, and prevents it from moving for ever in the place in the atmoſphere in which it has been left by the extinction of that projectile force, which carried it from the ſurface into ſo novel a ſituation in the atmoſphere?

Let us examine all the circumſtances in which the body has been placed:

1. It was moving with the earth in its orbit with all other bodies upon the earth, and therefore poſſeſſed a momentum in that direction, which, with regard to other bodies, was as their quantities of matter.

2. It was deflected aſide by ſome novel muſcular or exploſive force, and thrown towards D.

3. But, while it was moving towards D, or 16 feet and an inch, it was carried 6000 times as far, or 100,000 feet, at right angles; and therefore performed a diagonal.

4. At C it loſes its force in the direction at D, and is deflected towards the earth, at B.

Let us now examine what other circumſtances have attended its aſcent:

1. Its paſſage has been made in a reſiſting medium, which tended, as is known, conſtantly to deſtroy the force with which it was projected from A towards D.

2. During its aſcent, the point A, and every point of the diagonal A E, were alſo performing a rotary circular motion round the centre of the earth.

3. The point A would therefore be deflected downward, during its paſſage towards C, from A below C; ſo that D would alſo be deflected below E, and the entire line A E would be deflected, or turned downward, below A C.

4. The rotary motion would therefore have the effect of deflecting the body below the diagonal A E, at every increment of its aſcent.

5. The conſtant reſiſtance of the atmoſphere would, in like manner, deflect it.

6. The body would, therefore, be ſubject, during its aſcent, to the action of four forces: *a*, the orbicular force; *b*, the projectile force; *c*, the rotary force; *d*, the reſiſting force.

7. At the apex, the projectile and reſiſting forces having deſtroyed each other, the body is then ſurrendered to the joint action of the orbicular force and the rotary force.

8. And we have ſeen that it is the effect of the rotary force to deflect it from the right line of the orbicular force towards the earth.

Conſequently, it is the rotation of the earth and atmoſphere, acting ſimultaneouſly with the annual motion, which produces the deflection of bodies from the right line of their orbicular motion; but the circular rotation has another important effect on the maſſes of various denſity which compoſe the earth, and which, as ſubject to a common force, would have different orbicular velocities, but for the effect of their common rotary motion in circles of different radii.

It ſeems extraordinary that, although the two-fold motion of the earth has ſo long been known and admitted, no mechanical effects ſhould have been conſidered as ariſing among its parts from the operation of thoſe motions; and that one motion ſhould have been conſidered as having no other end than the alternation of ſeaſons, and the other none but the changes of day and night. It is true that theſe are *ſome* of the ends reſulting from the two-fold motion; but general cauſes have many effects, and theſe are rather conſequential than proximate. The proximate effect of motion is force, the proximate effect of force is the communication of motion, force, and momentum; and in this inſtance the motions of the earth produce in the parts motion, force, and momenta; which, diverted, deflected, or turned aſide, by any foreign muſcular, mechanical, or exploſive, force, produces the phenomena of reſiſtance and weight.

To the rotary motion of the earth is, therefore, to be referred that uniformity in the velocity of bodies of various denſity which enables the whole to keep an equal and uniform pace in the orbit of the earth. It is this rotary motion which reduces to order, what otherwiſe would be chaos. Hence it is that all fluids are impelled into a level ſurface; hence too, doubtleſs, it has been, that maſſes of the ſame denſity have formed themſelves into ſtrata while in a ſtate of ſolution; hence ariſe all the phenomena which reſult from any diſturbance in the order of denſity; and hence it is, that, when a heavy body is thrown into lighter fluids—as air or water, the general law is proved by phenomena exactly proportioned to the relations of denſity.

We know, from the diurnal phenomena, that the earth and atmoſphere have ſuch a common rotary motion; and we know, from their common orbicular force, that the whole have unequal momenta. It is, however, a neceſſary mechanical effect of a common rotary motion, producing, of courſe, equal momenta in maſſes of various denſity, that they range themſelves, or ſeek to range themſelves, in concentric circles, or radii of rotation, inverſely as their reſpective denſities. The lighter bodies will be projected from the centre towards the circumference, and the heavy ones will be forced towards the centre by their mutual colliſions. Such will be the law, governing all the maſſes that are free, to move one among another, as the fluid parts and the moving or moveable parts. It is a law growing out of the conditions; and the conditions are thoſe which exiſt in nature. If a projectile, therefore, have a ſpecific denſity equal to the air or fluid into which it has riſen, it will be carried round the earth in the concentric circle of that ſtratum, becauſe the momenta are there equal; but, if it be lighter than the air, it will then be reflected by the denſer ſtrata, till its own momentum and the momenta of the ſurrounding air be equal; while, on the other hand, if it be heavier than the circumambient air or fluid, then the air or fluid will riſe over it and deflect it to the earth, with a force which will be nearly in the ratio of their denſities.

Galileo was the firſt geometrician who analyzed the phenomena of falling bodies, and determined the law of their motions. He was followed in this theory by Newton, and his doctrines are juſtly reſpected to this day. That great man conſidered, however, that bodies thrown perpendicularly upward, merely deſcribe in riſing and falling the ſame ſtraight line. He was one of the moſt powerful advocates of the two-fold motions of the earth; yet he never conſidered bodies, acted upon by a temporary and relative projectile force, as ſtill ſubject to the abſolute two-fold motions of the earth and atmoſphere. Hence he conſidered the force which returned the body to the earth as equal in ſmall diſtances to the weight of the body, and as acting in right lines from the centre of the earth. In this notion he was borne out by the belief in all kinds of ſympathies and emanations which characterized his age, as well as that of Newton; and to theſe ſuperſtitions may, doubtleſs, be referred the doctrine of an emanating gravity. It appears, however, that, as a body ſubject to the novel force of an upright projectile, does not, in truth, deſcribe a perpendicular line, but two ſides of an exceedingly obtuſe triangle; no force is requiſite to deflect it to the earth but the exceedingly ſmall one, which creates the naſcent deflection. Hence, as the angle of deflection required to carry a body through the firſt inch is not the 2000th part of a degree, the deflective force need not be more than the 120,000th part of the permanent momentum of the body created by the orbicular force; and conſequently no difficulty ariſes in referring the ſmall deflective force to the combinations of the great motions of our planet.

Suppoſe E, fig. 2, to be the earth; A B a portion of its orbit; F a place on the earth's ſurface; C a ſtratum of the atmoſphere which a projectile has reached; *a b* a parallel of the orbit, and D E a tangent of the atmoſphere. Then it is evident that, whether the earth is turning from D towards E, or from E towards D, a deflection, from the orbicular motion to the rotary, would take place, meaſured by ſuch an angle as D C *a*, or *b* C E; in either caſe creating a direction of force oppoſed to that in the orbit, and producing a reſiſtance in the next ſuperior atmoſphere, and creating a deflection downward fully equal to the known phenomena, which requires for the firſt deflection but an infinitely ſmall portion of an angle of 20 ſeconds.

It is alſo evident that the common rotary motion of the earth and atmoſphere would confer a greater velocity on the circle C than the circle F, and ſo in every circle from C to F, the ſpaces deſcribed being as the ſquares of the radii, or as the ſquares of the diſtances from E. To confer, however, an equal momentum on the maſs, it is neceſſary that the denſities from C to E ſhould be inverſely as the velocity, or inverſely as the ſpaces, or inverſely as the ſquares of the radii.

Moreover, as by the phenomena the momenta in every concentric ſtratum or circle of rotation are known to be equal, ſo any maſs of equal denſity would in different circles, or at different diſtances, be carried or impelled in the vortex by the circumambient media, or incumbent bodies, through ſpaces, which would be to each other, *inverſely as the ſquares of the diſtance from the centre, and directly as the reſiſtance of the medium in which they move.*

Conſequently, the colliſion of the bodies or maſſes of different denſities, in the terreſtrial ſyſtem, will force or urge the heavy bodies towards the centre, and of courſe, alſo, the light ones towards the circumference—circumſtances which we know accord with the phenomena of all fluid bodies, and of all fixed bodies, when deprived of competent ſupport, and of all bodies moved out of their ſtation by muſcular or exploſive force, and left without ſupport.

The following illuſtrations and obſervations may tend to make theſe principles perfectly clear, and to remove all doubts:

1. The projectile at its apex, when deprived of the projectile force, is ſtill immerſed within the atmoſphere, and is carried, or urged, by the atmoſphere, in the direction of the circular rotation of the atmoſphere.

2. That circular rotation then produces, or ſolicits to produce, (with a force proportioned to the relative denſities of the atmoſphere and projectile,) a deflection of the ſaid projectile from the right line of the orbicular motion, into the direction of the circular motion at the place of contact.

3. If the denſity of the projectile were equal to the denſity of the atmoſphere, then the projectile would float in the atmoſphere, and be carried round the earth in the circular vortex of the earth, like the atmoſphere itſelf.

4. If it were denſer than the atmoſphere, then the rotary momentum of the lighter atmoſphere being leſs than the rotary momentum of the projectile, reſiſtance would be generated equal to the difference of their rotary momenta; and a deflection of the denſer body, by the lighter atmoſphere, into a ſmaller circle of rotation, would take place till it reached a competent baſis on the earth.

5. If the projectile were lighter than the atmoſphere, then the momentum of the circumjacent atmoſphere would be greater than that of the projectile, and the projectile would, in conſequence, be forced upwards into a larger rotary circuit, till its rotary momentum equalled that of the circumjacent atmoſphere.

6. In media of uniform denſity, as in water, the projectile, if heavier, ſinks to the bottom; if lighter, floats on the top, equalizing its momentum by preſenting a portion of its maſs within the air; or, if of the ſame weight, floats indifferently within the fluid.

7. As the deflective force is continually operating during the fall, and as every uniformly-continued force generates a conſtantly-accelerated motion, ſo as bodies fall by the action of a continued deflective force, they are neceſſarily accelerated during their fall, till they reſt on the fixed parts of the earth. But, as is found by experiment, the increaſed reſiſtance of the air, ariſing from the increaſed motion, will occaſion a balance of the two forces, and an equable motion during part of the fall.

8. Combining the time of falling, the ſpaces as determined by Galileo, and by alleged experiments, with the actual baſes, generated by the orbicular motion, the following will be the elements of bodies falling in times between four ſeconds and the tenth of a ſecond:

Seconds.	*Feet.*	*Baſe.*
4	256	400,000
3	144	300,000
2	64	200,000
1	16	100,000
·5	4	50,000
·25	1	25,000
·1	$\frac{1}{12}$	10,000

9. As every ſucceſſive circle, from the centre to the utmoſt bounds of the atmoſphere, in performing the diurnal rotation, contains bodies of ſuch denſity, that the denſity multiplied by the motion is equal; ſo no body of undue denſity would remain in a circle of rotation which created in it too great or too ſmall a relative momentum, provided, as in fluids, the parts were free to move one among another; and, if they were not free to move, as in fixed organizations, then they would exhibit the phenomena of preſſure, or would appear, in regard to other bodies, to ſolicit to aſcend or deſcend, as the caſe might be. Probably to this conflict of light and heavy bodies, to the generation of light bodies in undue poſitions, and to the varied action of fixed and fluid matter, may be referred moſt of the phenomena of terreſtrial organizations; and, as the whole grows out of the two-fold motion of the earth, ſo we thus refer the origin of all things, and phenomena to the agency of motion.

It follows, therefore, that the velocity of all the parts and dependencies of the earth being alike, the momentum of every part is directly as its quantity of matter; conſequently, *momentum is weight;* and the velocity of 100,000 feet per ſecond in the direction of the tangents of the orbit being ſo much greater than the ordinary, or even extraordinary, forces applied to move bodies in any novel direction, the phenomenon called by the name of gravitation *is a neceſſary reſult of a preponderating coincident motion in another direction,* all contrary or foreign motions being ultimately deſtroyed by the reſiſting medium of the atmoſphere and the deflective circular motion.

The weight of bodies, then, acts on the ſame principle as their momentum in the orbit of the earth, becauſe every force which exhibits the phenomena of weight affects the paramount orbicular force; and, *this active principle is, therefore, merely a phenomenon reſulting from the orbicular momentum, regulated by the rotary motion,* which rotary motion cauſes all bodies to perform circuits inverſely as their quantities of matter, and which circuits are proportioned to the diſtance from the centre.

The phenomena of weight and gravitation, and of falling bodies, may therefore be conſidered as a reſult of the compoſition of forces produced by the annual and diurnal motions of the earth and its adjuncts. Of courſe, all the motions and laws of projectiles are ſubordinate to theſe, and are included within them.

On a ſmall ſcale, the principle may be illuſtrated by experiments of analogous phenomena, in which it will appear that any lateral motion of bodies produces the ſame reſults as the earth itſelf; and that, as a conſequence of every ſuch lateral motion, the projectiles from ſuch bodies reſpect, in falling, the bodies whence they are projected, though no ſuſpicion or allegation of attraction can, in ſuch caſes, be adduced.

Thus, as it is well known, a ball projected from a ſhip in motion falls at the place whence it roſe, though, during its aſcent and deſcent, the ſhip proceeded many yards. The ball, though detached from the ſhip, reſpected the ſhip, during its flight and fall, exactly as though it had been attracted by the ſhip. It cannot, however, be contended that ſuch phenomena are reſults of the ſhip's attraction. The effect ariſes merely from the ſhip's lateral motion, having been acquired by the ball previouſly to its projection; the caſe being exactly the ſame as that of a ball projected above the earth, to which it falls again, on the very principle on which it fell on the ſhip, not by the attraction either of the ſhip or the earth, but becauſe the earth's lateral motion, like the lateral motion of the ſhip, had been acquired by the ball.

So, alſo, when a man, during feats of horſemanſhip, throws up oranges in his courſe, he readily catches them again, though during their flight he advanced many yards, becauſe his lateral motion had previouſly been given to the oranges; and in conſequence, in falling again, they reſpected him juſt as though, according to pre-exiſting notions about the earth, he had attracted them.

In like manner, if a ball be dropped from the top of the maſt of a ſhip, which at the time was moving at any given rate, the ball will fall perpendicularly at the foot of the maſt, exactly as though the ſhip had been ſtanding ſtill; and will thus appear to be influenced by the ſhip, and not by the earth, exactly as a ball let to fall from a tower falls to the earth, and appears to reſpect the earth. In both caſes, the phenomena are regular and neceſſary conſequences of the compoſition of motion, and there is no unſeen or occult power, called attraction, concerned in one caſe more than in the other.

Illuſtration.—If a ball be projected from A, fig. 3. perpendicularly towards D, and A be ſuppoſed to be on the deck of a ſhip, which is moving at any given rate, from the part A towards the part B; then the ball, inſtead of aſcending to the point of ſpace at D, will, without material error, move in the diagonal A C, by the compound forces which, in the ſame time, would have carried it to D or F; and in deſcending it will fall to the deck at B, to which the point A, in the interim, has advanced. It has in truth performed, inſtead of an apparent perpendicular, the two ſides of the triangle, or the curve A C B; and, inſtead of falling at the point of ſpace A, whence it was projected, it has advanced with the ſhip, and fallen at the point of ſpace B, to which A has advanced; and in falling has reſpected the ſhip, and not the point of ſpace, or the earth at A. It was not however attracted by the ſhip, but merely impelled in the diagonal by the motion of the ſhip, in which it previouſly participated.

Theſe caſes fully illuſtrate the principle for which I contend; but, of courſe, the relations and powers of the ſhip, and man moving on the moving earth, are included within the more extenſive relations and powers operating in nature, in the prodigious forces generated by the annual and diurnal motions of our planet. The caſe of a body thrown upwards from a ſhip in motion, merely ſhows that, in falling, it obeys a law growing out of the motion of the ſhip; in like manner as bodies projected from the earth, or falling towards it, obey a ſimilar law of motion growing out of ſimilar motions of the earth. The law in both caſes is a *mere reſult of the compoſition of motion,* and not an effect of any occult or myſterious power.

Theſe examples, and others that might be adduced, ſerve, however, to prove the exact analogy of the powers, the phenomena, and the reſults. No experiments in phyſical philoſophy ſeem to afford more concluſive analogical proofs of doctrines relative to any natural operations, which are too vaſt to be viewed by man on their great ſcale.

The recognition of the principles of this paper may be expected to lead to more preciſion in the doctrines of projectiles. Many incomprehenſible irregularities in Dr. Hutton's and Mr. Robins's experiments on gunnery may be found to ariſe from the contrariety, oppoſition, or neutrality, of the direction of the rotary motion, in relation to that of the orbicular motion. It will likewiſe be found that periodical fluctuations in the weight and deflections of the atmoſphere and other fluids, may be traced to periodical variations in the relative directions of the mechanical forces, as in the tides, monſoons, trade-winds, &c.

To extend theſe principles to the ſolution of the phenomena of nature, and to deduce from them all the reſults of which they are ſuſceptible, would be, in regard at leaſt to nomenclature, to remodel the Principia of Newton, and to arrange a new ſyſtem of phyſics. Nevertheleſs, I feel it proper to ſtate, that theſe demonſtrations of the true and neceſſary cauſes of the phenomena hitherto aſcribed to an unknown power, called by the name of gravitation, merely fill ſome important connecting terms in the ſeries of mechanical cauſes aſcertained by modern philoſophy; while they diſturb none of the known relations of bodies, as determined by experiment and obſervation, or by the geometrical and analytical inveſtigations of Galileo, Kepler, Deſcartes, Newton, Euler, La Grange, Herſchel, or La Place.

A ſummary of theſe doctrines may, perhaps, without material error or omiſſion, be expreſſed in the following paragraphs:

1. That bodies moved in the annual orbit of any planet acquire a momentum in the direction of the increments of that orbit ſuperior to the influence of any other permanent force which is communicated to them.

2. That all variations in the direction of this orbicular motion are effected by deflections of that paramount motion, either by the rotary diurnal motion, or by ſome muſcular, mechanical, or chemical, force.

3. That the reſiſtance which bodies exhibit in being lifted, or thrown, or in any way turned, into any new direction, is the meaſure of their weight, which is as their quantity of matter, becauſe it ariſes from a velocity common to the terreſtrial ſyſtem in the direction of the orbit.

4. That the phenomena of falling bodies are produced by the deflection of the circular rotary motion from the comparatively ſtraight line of the orbicular motion.

5. That every body, which has had any new direction of force given to it, is nevertheleſs ſubject to the perma-

nent influence of the pre-exiſting orbicular and rotary forces in the lines of their direction, and the reſulting line of motion is the effect of all the operative forces.

6. That the phenomena of the aſcent and deſcent of bodies is alſo influenced by the reſiſtance of the medium through which its novel direction of motion has forced it to proceed.

7. The force with which the deflection by the rotary motion is produced, is as the denſity of the body deflected to the denſity of the medium in which it moves, and in the inverſe ratio of the ſquares of the diſtance from the centre.

8. That it is the neceſſary tendency of the rotary motion to give an equal momentum to the heterogeneous maſſes compoſing a planet and its atmoſphere, while the whole are moving with an equal velocity in the orbit.

9. That all phenomena of motion viſible to beings who partake of the common motions of a planetary ſyſtem, are either the relative motions of diſtant orbs, or the diſturbance of the great common motions by new directions of motion produced by ſome muſcular, mechanical, exploſive, or chemical, force.

10. That theſe temporary and novel directions of force and motion are ſpeedily extinguiſhed by the great permanent forces moving in other directions, all traceable to the phenomena, and producing compoſitions of motion which reſult from the known laws of dynamics.

11. That of courſe ſimilar motions produce ſimilar phenomena in all planetary bodies.

12. *That, therefore, the phenomena hitherto aſcribed to an occult power called gravitation, is a ſimple reſult of known motions.*"

In a ſubſequent Number, the author has undertaken to reply to certain "objections," which, he ſays, "have been ſtarted by various perſons, in converſation, and through the public preſs."

I. It has been doubted whether bodies would fall in the exhauſted receiver of an air-pump upon this hypotheſis.—"To this it may be replied, that the exhauſted receiver, the contained vacuum, and the bodies let fall before and at the inſtant of fall, are all of them as much the patients of the orbicular and rotary motions, as though no ſuch exhauſtion had taken place. The orbicular motion was carrying forward the whole, and the rotary motion was endeavouring to deflect every part of the ſuſtained maſs from the right line of the orbicular motion. The difference ariſing from the abſence of the air is the ſame, whatever might be the ſource of the power which cauſed the bodies to fall; that is, a feather would fall in the ſame time as a guinea, ſimply becauſe the atmoſphere oppoſed no reſiſtance, whether the centripetal force was produced by governing motions or by attraction."

II. It is objected that a projectile would continue to aſcend for ever, unleſs the force of attraction drew it towards the earth.—"To this I reply, that the deflective force of the rotary motion is equivalent, in the retardation of a projectile, to the ſuppoſed attraction; and that, in combination with the reſiſtance of the atmoſphere, that deflective force produces all the phenomena of projectiles, the orbicular force being common to both hypotheſes."

III. It has been objected that, if a body were let fall in the atmoſphere, it would either go off in a tangent into ſpace, or would move for ever in that place, but for the earth's attraction.—"In regard to the aſſertion, that it might move off in a tangent, it need only be conſidered, that no force has been given it in the direction of ſuch tangent, and that bodies do not move in any required direction without ſome force exerted in that direction. And, that it will not move for ever in an unſupported ſpot in the atmoſphere, ariſes from the influence of the deflecting rotary motion, of which it partook when placed there, in which it continues, and which it alſo derives from the ſurrounding medium."

IV. It is contended that the Galilean laws of falling bodies cannot be accounted for, except on the principle of a continually-acting attraction.—"To this I reply, that the great terreſtrial motions are, in like manner, continually acting; and that from like cauſes they muſt produce like phenomena whenever any body is placed in circumſtances to become the ſenſible patient of their activity."

V. It is urged, that local affections of mountains, or other maſſes, can reſult only from the attractive influence of thoſe maſſes; and the experiments of Maſkelyne and Hutton, of Bouguer, of Zach, and of Cavendiſh, are adduced as proofs.—"A mighty hoſt, if their acumen and their accuracy bore on the queſtion. But, as I refer all phenomena to a *centre of motion*, and the Newtonians refer them to a *centre of attraction*; and as both centres are generated by the actual diſpoſitions of all the maſſes of the aggregate; ſo both centres are varied in poſition by unequal arrangements of the maſſes; and the motions on the ſurface referable to ſuch centres are varied accordingly, and in equal degrees, upon both hypotheſes.

"If the earth were an equal and homogeneous ſphere, then all the phenomena of falling or ſuſpended bodies would have reference to the mathematical centre of the maſs, and the plumb-line would always hang perpendicularly to the viſible horizon; but, if a mountain, or any unequal maſs, be placed on the ſurface, then on one hypotheſis the centre of the motion, or on the other the centre of the attraction, will be raiſed above the mathematical centre, in a certain proportion, towards that mountain, creating a new phyſical centre; and all the deflections of the rotary motion on this theory, or all the attractions on the Newtonian theory, will be made with reference to that new centre. The maximum of variation will take place neareſt to the projecting maſs; and, if the maſs were ſuddenly created, or brought near a ſuſpended plummet, it would turn it aſide, in a given proportion of the bulk of the maſs to the bulk of the earth; and, as in Mr. Cavendiſh's experiment, it might perhaps be poſſible to meaſure the impulſe. But, in every poſſible caſe of ſuch inequalities, the ſame phenomena muſt and would reſult from thus varying the centre of the aggregate; whether the phenomena were aſcribed, as now, to the efficient and operative motions of the earth, or, as heretofore, to the principle called by the name of attraction.

"I have taken it for granted that theſe experiments and calculations are correct, becauſe the true reſults muſt be included in the laws of motion, as well as thoſe of gravitation; but I remark, with profound deference to the learned calculators, that the Schehallien reſult aſſumes two-thirds of the circumference for the earth's attraction as a quantity *admitted*; and, in Mr. Cavendiſh's leaden-balls experiment, the earth's attraction is *aſſumed* to be repreſented by its diameter—that is, in both caſes, a quantity unknown, and growing out of the hypotheſis of gravity, is taken for granted to prove that very gravity. If the known bulk, force, and denſity, of the mountain and the balls were, by exact analogy, to be compared with the known bulk of the earth, to determine its force and denſity, then the reſults will be totally different, and the irrelevancy of the experiments would be manifeſt."

VI. It is urged, that, as attraction is admitted to produce certain phenomena in electricity, galvaniſm, chemiſtry, magnetiſm, and optics, ſo the attraction of gravitation is but an analogous power, and might, in like manner, be admitted.—"This argument to ſay the leaſt of it, is a very indirect one, and includes a large appeal to faith. I ſay again, with little danger of refutation, that the terms attraction and gravitation were chimeras of the middle ages, growing out of the ſchools of aſtrology and magic; and, in the writings of the illuſtrious Newton, are akin to the ghoſts of the equally-illuſtrious Shakeſpeare, or to the ſympathies which filled the heads of all philoſophers in thoſe days. They may be uſed like characters in an algebraic equation; but it is incorrect to ſubſtitute them for real quantities, or efficient cauſes, or to ſet them up in oppoſition to the operative powers of nature, when theſe are found to be ſufficient to explain phenomena. Nothing, in truth, has tended more to retard the progreſs of ſcience than thus ſtopping at the phenomena of attraction, and then impiouſly treating this ſecondary cauſe as the proximate effect of omnipotent agency, though it is found to act mechanically and ſubordinately, according to certain laws of diſtance."

VII. It is objected that this illuſtration of the cauſe of terreſtrial gravitation tends to overturn the Newtonian philoſophy, which is built on the immutable baſes of geometry.—"To this I reply, that, as the great Newton did not affect to explain this cauſe, but merely admitted this name of the effect, ſo any hypotheſis which ſeeks to account for it can have no neceſſary oppoſition to his ſyſtem. At the ſame time there is a latent though popular error, in confounding phyſics and geometry: for all phyſical effects reſult from competent proximate cauſes, often *varying*; and all geometrical laws reſult from relations, always *fixed*. But, if our excellent philoſopher ſo well accounted for the phenomena of the ſolar ſyſtem by geometry, founded on the baſis of an occult principle, with how much more ſatisfaction would he have done it on a mechanical baſis? The author of this hypotheſis has calculated, however, on no change but in nomenclature."

VIII. It is aſſerted, that, as gravitation is a fiat of Omnipotence, ſo to attempt to account for it is beyond the due bounds of philoſophical inquiry.—"Without intending any perſonal diſreſpect to thoſe who have uſed this argument, it may be aſſerted, that ſuch has been the prejudice of ignorance, from the age in which man firſt uſed a ſpade to augment the natural productions of the earth, to the days of Galileo, and even to our time, when Jenner diſcovered the means of extirpating a fatal diſeaſe. Shall we more nearly approach the Cauſe of Cauſes in determining the mechaniſm by which a planet is held together, or by which a ſyſtem moves, than by inveſtigating the circulation of the blood, or by the chemical analyſis of any ſubſtance in Nature? The cauſes of motion would ſtill remain behind, and, were a future age to diſcover theſe, the prime mover of all things, the ſublime and incomprehenſible Creator and Preſerver, would ſtill be at an infinite diſtance from the finite powers of man!"

IX. It is aſſerted that the law of gravitation is not proved to be the law of motion.—"To prove the affirmative of this propoſition was, however, the entire buſineſs of the Principia of Newton, and has been the employment of all mathematicians from his time to our own. If the laws of motion are not the laws of gravitation, then have philoſophers been dreaming during the laſt hundred years. I merely identify what they have proved; and, as mathematicians have, by the hypotheſis of gravitation, proved the laws of motion, I now deſire to diſcard the unknown or aſſumed quantity, and to reſtore the known motions of nature in its place—for the purpoſe of explaining the *modus operandi* by which the phenomena are produced.

"It is imagined (ſee Philoſophical Magazine for Auguſt) that I had forgotten the relations of radii and circles; I was not, however, alluding to circles, but to the ſurfaces of concentric ſpheres, which were the objects of diſcuſſion, and which are to each other as the *ſquares* of their radii. The *ſpaces* generated on *ſpherical ſurfaces* being to each other as the ſquares of their radii, it follows that the *quantities* of motion generated in each ſtratum, and the *forces* generating thoſe motions, are in the ſame ratio. On this point there is nothing to add or to alter. If the concentric ſtrata were in denſity reciprocally as the ſquares of their diſtances, and undiſturbed, there would be no phenomena; but it is the diſturbance of that which has been in a ſtate of equilibrium (either by diſtance from the centre, or by the reſiſtance of friction), which occaſions the ſenſible phenomena of weight, or of falling bodies. I do not, however, conſider that theſe obſervations conclude the ſubject: for I admit, that all the circumſtances which exiſt among the parts of a ſphere, moving in an orbit, the momenta of whoſe maſſes in the concentric ſtrata are equalized by a rotary motion; as well as the effects ariſing from the centre of denſity not being the mathematical centre; and alſo from accidental diſturbances in the equilibrium of particular bodies; merit the careful analyſis of philoſophical mathematicians. At the ſame time, although the mathematical laws muſt neceſſarily be the ſame, it is not indifferent, in human inquiries, whether phyſical phenomena are aſcribed generally to gravitation, of which nothing is affected to be known, or to motion, of which we may not know the primary origin. We know, at any rate, more of motion than we know of gravitation. Beſides the laws common to both, we know that motion is an accident of bodies which gives them momenta, and cauſes them to change their ſituations in ſpace; and we know that ſome motions are general, antecedent, or primary, and that others are local, conſequent, or ſubordinate. In the problem before us, we are therefore enabled to ſhow that known effects are conſequences of ſeveral known motions, thereby attaining a degree of analyſis, which could never be effected, if we referred the ſame phenomena to the general name of gravitation."

Concluſion.—Theſe, I believe, are the chief objections which have been imagined and promulgated in oppoſition to a theory which ſubſtitutes the *known motions* of nature as operative cauſes of certain phyſical phenomena, in place of an *aſſumed principle* called *gravitation*, by which, falſe analogies have been introduced into philoſophy, and effects aſcribed to a cauſe neither proximate nor in contact. It may be difficult to analyſe, in like manner, the motions which produce all the celeſtial phenomena, or trace the ſources of particular motions; and it may be impoſſible for man to aſcertain any other origin of motion than the ſublime Cauſe or Cauſes; but we advance another ſtep in human knowledge when we diſcover that the two-fold motions of a planet are competent to the conſolidation and unity of its maſs, and are efficient cauſes, by means of which, bodies removed out of their equilibrium are reſtored to the maſs. *Monthly Mag.* July and Sept. 1817.

MOTION, *perpetual*, in mechanics, a motion which is ſupplied and renewed from itſelf without the intervention of any external cauſe; or it is an uninterrupted communication of the ſame degree of motion from one part of matter to another, in a circle, or other curve returning into itſelf, ſo that the ſame momentum ſtill returns undiminiſhed upon the firſt mover.

This celebrated problem of a perpetual motion conſiſts in the inventing of a machine, which has the principle of its motion within itſelf. M. de la Hire has demonſtrated the impoſſibility of any ſuch machine, and finds that it amounts to this, viz. to find a body which is both heavier and lighter at the ſame time; or to find a body which is heavier than itſelf.

To find a perpetual motion, or to conſtruct an engine, &c. which ſhall have ſuch a motion, is a famous problem that has employed the mathematicians of two thouſand years; though none, perhaps, have proſecuted it with attention and earneſtneſs equal to thoſe of the preſent age. Infinite are the ſchemes, deſigns, plans, engines, wheels, &c. to which this longed-for perpetual motion has given birth: it were as endleſs as impertinent to give a detail of them all. In effect, there ſeems but little in nature to countenance all this aſſiduity and expectation; among all the laws of matter and motion, we know of none yet, which ſeem to furniſh any principle or foundation for ſuch an effect.

Action and re-action are allowed to be ever equal; and a body which gives any quantity of motion to another, always loſes juſt ſo much of its own; but, under the preſent ſtate of things, the reſiſtance of the air, the friction of the parts of machines, &c. do neceſſarily retard every motion. To keep the motion conſtant, therefore, either, firſt, there muſt be a ſupply from ſome foreign cauſe; which in a perpetual motion is excluded. Or, ſecondly, all reſiſtance from the friction of the parts of matter muſt be removed; which neceſſarily implies a change in the nature of things. For, by the ſecond law of nature, the changes made in the motions of bodies are always proportional to the impreſſed moving force, and are produced in the ſame direction with it; no motion then can be communicated to any engine, greater than that of the firſt force impreſſed. But, on our earth, all motion is performed in a reſiſting medium, and muſt, therefore, of neceſſity be retarded; conſequently, a conſiderable quantity of its motion will be ſpent on the medium. Nor is there any engine or machine in which all friction can be avoided; there being in nature no ſuch thing as exact ſmoothneſs, or perfect congruity; the manner of the coheſion of the parts of bodies, the ſmall proportion the ſolid matter bears to the vacuities between them, and the nature of thoſe conſtituent particles not admitting it. This friction, therefore, will alſo in time ſenſibly diminiſh the impreſſed, or communicated, force; ſo that a perpetual motion can never follow, unleſs the communicated force be ſo much greater than the generating force, as to recompenſe the diminution made therein by all theſe cauſes: but *nil dat quod non habet*; and the generating force cannot communicate a greater degree of motion than it hath itſelf. Or, thirdly or laſtly, there muſt be ſome method of gaining a force equivalent to what is loſt, by the artful diſpoſition and combination of mechanic powers; to which laſt point, then, all endeavours are to be directed; but how, or by what means ſuch force ſhould be gained, is ſtill a myſtery! The multiplication of powers or forces, it is certain, avails nought; for what is gained in power is ſtill loſt in time, ſo that the quantity of motion ſtill remains the ſame. This is an inviolable law of nature; by which nothing is left to art, but the choice of the ſeveral combinations that may produce the ſame effect.

Although it is allowed, that, by the reſolution of force, there is a gain or increaſe of the abſolute quantity of force, as the two forces in the ſides of the parallelogram taken together exceed the force in the diagonal which is reſolved into them, yet you cannot proceed reſolving motion *in infinitum* by any machine whatſoever; but thoſe you have reſolved muſt be again compounded, in order to make a continual movement, and the gain obtained by the reſolution will be loſt again by the compoſition. In like manner, if you ſuppoſe two bodies to be perfectly elaſtic, and that the ſmaller body ſtrikes the other at reſt, there will be an increaſe of the abſolute quantity of force, becauſe the ſtriking body will be reflected; but, if you ſuppoſe them both to turn round any centre, after the ſtroke, ſo as to meet again, this increaſe of force will be loſt, and their motion will be reduced to its firſt quantity. Such a gain, therefore, of force, as muſt be afterwards loſt in the actions of the bodies, can never produce a perpetual movement. There are various ways, beſides theſe, by which abſolute force may be gained; but, ſince there is always an equal gain in oppoſite directions, and no increaſe obtained in the ſame direction, in the circle of actions neceſſary to make a perpetual movement, this gain muſt be preſently loſt, and will not ſerve for the neceſſary expenſe of force employed in overcoming friction, and the reſiſtance of the medium. We may obſerve, therefore, that, though it could be ſhown, that in an infinite number of bodies, or in an infinite machine, there could be a gain of force for ever, and a motion continued to infinity, it does not follow that a perpetual movement can be made. That which was propoſed by M. Leibnitz, in Auguſt 1690, in the Leipſic Acts, as a conſequence of the common eſtimation of the forces of bodies in motion, is of this kind, and for this and other reaſons ought to be rejected.

The poſſibility of a perpetual motion has been urged from the following ſpecious argument. Let the height A B, fig. 4, be divided into four equal parts A C, C D, D E, E B: ſuppoſe the body A to acquire, by the deſcent A C, a velocity, as 1; and this motion, by any contrivance, to be tranſmitted to an equal body B: then let the body A, by an equal deſcent C D, acquire another degree of motion, as 1, to be tranſmitted likewiſe to the ſame body B, which in this manner is ſuppoſed to acquire a motion, as 2, that is ſufficient to carry it upwards from B to A; and, becauſe there yet remain the motions which A acquires by the deſcents D E and E B, that may be ſufficient to keep an engine in motion, while B and A aſcend and deſcend by turns, it is hence concluded, that a ſufficient gain of force may be obtained in this manner, ſo as to produce a perpetual movement. But it ſhould be conſidered, that two equal ſucceſſive impulſes, acting upon the ſame body, will not produce a motion in it double of that which would be generated by the firſt impulſe; becauſe the ſecond impulſe has neceſſarily a leſs effect upon the body, which is already in motion, than the firſt impulſe which acted upon it while at reſt. In like manner, if there is a third and fourth impulſe, the third will have leſs effect than the ſecond, and the fourth leſs than the third. Hence it appears, that a motion as 2, in the preceding caſe, cannot be produced in B, by the two ſucceſſive impulſes tranſmitted from A, each of which is as 1. *Maclaurin's View, &c.* book ii. c. 3.

The perpetual motion has indeed been the quickſand of mechanicians, as the quadrature of the circle, the triſection of an angle, &c. have been that of geometricians; and, as thoſe who pretend to have diſcovered the ſolution of the latter problems are, in general, perſons ſcarcely acquainted with the principles of geometry, thoſe who ſearch for, or imagine they have found, the perpetual motion, are always men to whom the moſt certain and invariable truths in mechanics are unknown.

It may be demonſtrated indeed, to all thoſe capable of reaſoning in a ſound manner on thoſe ſciences, that a perpetual motion is impoſſible; for, to be poſſible, it is neceſſary that the effect ſhould become alternately the cauſe, and the cauſe the effect. It would be neceſſary, for example, that a weight, raiſed to a certain height by another weight, ſhould in its turn raiſe the ſecond weight to the height from which it deſcended. But, according to the laws of motion, all that a deſcending weight could do, in the moſt perfect machine which the mind can conceive, is to raiſe another in the ſame time to a height reciprocally proportional to its maſs. But it is impoſſible to conſtruct a machine in which there ſhall be neither friction nor the reſiſtance of ſome medium to be overcome; conſequently, at each alternation of aſcent and deſcent, ſome quantity of motion, however ſmall, will always be loſt; each time therefore, the weight to be raiſed will aſcend to a leſs height; and the motion will gradually ſlacken, and at length ceaſe entirely.

A moving principle has been ſought for, but without ſucceſs, in the magnet, in the gravity of the atmoſphere, and in the elaſticity of bodies. If a magnet be diſpoſed in ſuch a manner as to facilitate the aſcenſion of a weight, it will afterwards oppoſe its deſcent. Springs, after being unbent, require to be bent by a new force equal to that which they exerciſed; and the gravity of the atmoſphere, after forcing one ſide of the machine to the loweſt point, muſt be itſelf raiſed again, like any other weight, in order to continue its action.

We ſhall however give an account of ſome attempts that have been made to obtain a perpetual motion, becauſe they may ſerve to amuſe the reader, as well as to ſhow how much ſome perſons have ſuffered themſelves to be deceived on this ſubject.

Fig. 5. repreſents a large wheel, the circumference of which is furniſhed, at equal diſtances, with levers, each bearing at its extremity a weight, and movable on a hinge, ſo that in one direction they can reſt upon the circumference, while on the oppoſite ſide, being carried away by the weight at the extremity, they are obliged to arrange themſelves in the direction of the radius continued. This being ſuppoſed, it is evident that, when the whee turns in the direction *abc*, the weights A, B, and C, will recede from the centre; conſequently, as they act with more force, they will carry the wheel towards that ſide; and, as a new lever will be thrown out in proportion as the wheel revolves, it thence follows, ſay they, that the wheel will continue to move in the ſame direction. But, notwithſtanding the ſpecious appearance of this reaſoning, experience has proved that the machine will not go; and it may indeed be demonſtrated that there is a certain poſition, in which the centre of gravity of all theſe weights is in the vertical plane paſſing through the point of ſuſpenſion, and that therefore it muſt ſtop.

The caſe is the ſame with the following machine, which it would appear ought to move alſo inceſſantly. In a cylindric drum, in perfect equilibrium on its axis, are formed channels as ſeen in fig. 6. which contain balls of lead, or a certain quantity of quickſilver. In conſequence of this diſpoſition, the balls or quickſilver muſt, on the one ſide, aſcend by approaching the centre; and on the other muſt roll towards the circumference. The machine then ought to turn inceſſantly towards that ſide.

A third machine of this kind is repreſented fig. 7. It conſiſts of a kind of wheel formed of ſix or eight arms, proceeding from a centre, where the axis of motion is placed. Each of theſe arms is furniſhed with a receptacle in the form of a pair of bellows; but thoſe on the oppoſite arms ſtand in contrary directions, as ſeen in the figure. The movable top of each receptacle has affixed to it a weight, which ſhuts it in one ſituation and opens it in the other. In the laſt place, the bellows of the oppoſite arms have a communication by means of a canal, and one of them is filled with quickſilver. Theſe things being ſuppoſed, it is viſible, that the bellows on the one ſide muſt open, and thoſe on the other muſt ſhut; conſequently the mercury will paſs from the latter into the former, while the contrary will be the caſe on the oppoſite ſide. It might be difficult to point out the deficiency of this reaſoning; but thoſe acquainted with the true principles of mechanics will not heſitate to bet a hundred to one that the machine, when conſtructed, will not anſwer the intended purpoſe.

The deſcription of a pretended perpetual motion, in which bellows, to be alternately filled with and emptied of quickſilver, were employed, may be ſeen in the Journal des Sçavans for 1685. It was refuted by Bernoulli, and ſome others, and it gave riſe to a long diſpute. The beſt method, which the inventor could have employed to defend his invention, would have been to conſtruct it, and ſhow it in motion; but this was never done.

Almoſt every one has heard of *Orfyreus's wheel*, a machine ſo called from its inventor, which he aſſerted to be a perpetual motion. This machine, according to the account given of it by Graveſande, in his Œuvres Philoſophiques, (publiſhed by Allemand, Amſt. 1774,) conſiſted externally of a large circular wheel, or rather drum, 12 feet in diameter, and 14 inches deep; it was very light, being formed of an aſſemblage of deals, having the intervals between them covered with waxed cloth, to conceal the interior parts of it. The two extremities of an iron axis, on which it turned, reſted on two ſupports. On giving a ſlight impulſe to the wheel, in either direction, its motion was gradually accelerated; ſo that after two or three revolutions it acquired ſo great a velocity as to make 25 or 26 turns in a minute. This rapid motion it actually preſerved during the ſpace of two months, in a chamber of the landgrave of Heſſe, the door of which was kept locked, and ſealed with the landgrave's own ſeal. At the end of that time the door was unlocked, and the machine was found in motion. Graveſande, who had been an eye-witneſs to theſe circumſtances, examined all the external parts of it, and was convinced that there could not be any communication between it and any neighbouring room. Orfyreus however was ſo incenſed, or pretended to be ſo, that he broke the machine in pieces, and wrote on the wall, that it was the impertinent curioſity of profeſſor Graveſande which made him take this ſtep. The prince of Heſſe, who had ſeen the interior parts of this wheel, but ſworn to ſecreſy, being aſked by Graveſande, whether, after it had been in motion for ſome time, there was any change obſervable in it, and whether it contained any thing that indicated fraud or deception, anſwered both queſtions in the negative, and declared that the machine was of a very ſimple conſtruction. This, however, affords no proof in favour of a perpetual motion; for, as clocks can be made to go a year without being wound up, Orfyreus's wheel might eaſily go two months, and even more. It was aſſerted, in one of the journals of that day, that an Engliſhman had offered 80,000 crowns for this machine; but that Orfyreus refuſed to ſell it at that price. In this (ſays Montucla) he certainly acted wrong, as there is reaſon to think that he obtained by his invention neither money, nor even the honour of having diſcovered the perpetual motion.

The Academy of Painting, at Paris, poſſeſſed a clock, which had no need of being wound up, and which might be conſidered as a perpetual motion, though it was not ſo. But this requires ſome explanation. The ingenious author of this clock employed the variations in the ſtate of the atmoſphere, for winding up his moving weight: various artifices might be deviſed for this purpoſe; but this is no more a perpetual motion, than if the flux and reflux of the ſea were employed to keep the machine continually going; for this principle of motion is exterior to the machine, and forms no part of it.

The newſpapers of the preſent month inform us, that the perpetual motion, ſo long ſought for in vain, appears capable of being effected through the medium of *galvaniſm!* "A French phyſician has in his cabinet two galvanic piles, ſixteen inches high, which alternately attract a pretty heavy beam; and the continual oſcillation of the beam gives motion to a pendulum, which has never ſtopped for the laſt three years. The phyſician is at preſent labouring to give to this movement an iſochroniſm which may render it more uſeful." Morn. Chron. Aug. 21, 1817.

But enough has been ſaid on this chimera of mechanics. We ſincerely hope that none of our readers will ever loſe themſelves in the ridiculous and unfortunate labyrinth of ſuch a reſearch. To conclude; it is falſe that any reward has been promiſed by the European powers to the perſon who ſhall diſcover the perpetual motion; and the caſe is the ſame in regard to the quadrature of the circle. It is this idea, no doubt, that excites ſo many to attempt the ſolution of theſe problems; and it is proper they ſhould be undeceived. *Montucla's Recreations in Mathematics*, tranſlated by Dr. Hutton; vol. ii.

Animal MOTION, that which is performed by ſentient beings at the command of the mind or will.

Though all the motions of animals, whether voluntary or involuntary, are performed by means of the muſcles and nerves, yet neither theſe nor the ſubtile fluid which reſides in them are to be accounted the ultimate ſources of animal motion. They depend entirely upon the *mind*, for thoſe motions which are properly to be accounted *animal*. All the involuntary motions, ſuch as thoſe of the blood, the heart, muſcles, organs ſubſervient to reſpiration and digeſtion, &c. are to be claſſed with thoſe of vegetables; for, though no vegetables have them in ſuch perfection as animals, there are yet traces of them to be found evidently among vegetables, and that ſo remarkably, that ſome have imagined the animal and vegetable kingdoms to approach each other ſo nearly that they could ſcarce be diſtinguiſhed by a philoſophic eye.

Though the motions of animals, however, depend on the action of the mind or of the will, external objects ſeem originally to have the command of the mind itſelf; for, unleſs an animal perceive ſomething, it will not be inclined to act. By means of the ideas once received, indeed, and retained in the memory, it acquires a ſelf-moving power, independent of any object preſent at the time, which is not the caſe with vegetables; for, however they may act from a preſent impulſe, their motions never appear to be derived from any ſource which may not be accounted ſtrictly mechanical.

Though all animals are endowed with a power of voluntary motion, yet there is a very great variety in the degrees of that power; to determine which, no certain rules can be aſſigned; neither can we, from the ſituation and manner of life in animals, derive any probable reaſon why the motion of one ſhould differ ſo very much from that of another. This difference does not ariſe from their ſize, their ferocity, their timidity, nor any other property that we can imagine. The elephant, though the ſtrongeſt land-animal, is by no means the ſloweſt in its motions; the horſe is much ſwifter than the bull, though there is not much difference in their ſize; a greyhound is much ſwifter than a cat, though the former be much larger, and though both live in the ſame manner, viz. by hunting. Among inſects, the ſame unaccountable diverſity is obſervable. The louſe and flea are both vermine, are both nearly of the ſame ſize, and both feed on the bodies of animals; yet there is no compariſon between the ſwiftneſs of their motions; while the bug, which is much larger than either, ſeems to have a kind of medium ſwiftneſs between both. This very remarkable circumſtance ſeems not even to depend on the range which animals are obliged to take in order to procure food for themſelves: the motion of a ſnail is ſlower than that of an earth-worm; while that of many caterpillars is much quicker than either; though we can ſcarcely determine which of the three has the greateſt or the leaſt extenſive range for its food.

Of all animals the ſhell-fiſh move the ſloweſt, inſomuch that ſome have ſuppoſed them to be entirely deſtitute of loco-motive powers; and muſcles particularly are denied to have any faculty of this kind. Every one knows that theſe animals can open and ſhut their ſhells at pleaſure; and it cannot eſcape obſervation, that in every muſcle there is a fleſhy protuberance of a much redder colour than the reſt. This has been thought to be a tongue or proboſcis, by which the animal takes in its food; but is in reality the inſtrument of its motion from place to place. This protuberance is divided into two lobes, which perform the office of feet. When the river-muſcle is inclined to remove from its ſtation, it opens its ſhell, thruſts out this protuberance, and digs a furrow in the ſand; and into this furrow, by the action of the ſame protuberance, the ſhell is made to fall in a vertical poſition. It is recovered out of this into the former horizontal one, by puſhing back the ſand with the ſame tentacula, lengthening the furrow, and thus the animal continues its journey by a continual turning topſy-turvy. Marine muſcles perform their motions in the ſame manner, and by ſimilar inſtruments. In general they are firmly attached to rocks or ſmall ſtones by threads about two inches long, which are ſpun from a glutinous ſubſtance in the protuberances already mentioned. Other animals which inhabit bivalved ſhells, perform their motions by a kind of leg or foot; which, however, they can alter into almoſt any figure they pleaſe. By means of this leg they can not only ſink into the mud, or riſe out of it at pleaſure, but can even leap from the place where they are; and this can be done by the limpet, which people are apt to imagine one of the moſt ſluggiſh animals in nature. When this creature is about to make a ſpring, it ſets its ſhell on edge, as if to diminiſh friction; then, ſtretching out the leg as far as poſſible, it makes it embrace a portion of the ſhell, and by a ſudden movement, ſimilar to that of a ſpring let looſe, it ſtrikes the earth with its leg, and actually leaps to a conſiderable diſtance.

The Solen, razor or ſheath fiſh, is ſaid to be incapable of moving forward horizontally on the ſurface; but it digs a hole ſometimes two feet deep in the ſand, in which it can aſcend or deſcend at pleaſure. The leg, by which it performs all its movements, is fleſhy, cylindrical, and pretty long; and the animal can at pleaſure make it aſſume the form of a ball. When lying on the ſurface of the ſand, and about to ſink into it, the leg is extended from the inferior end of the ſhell, and makes the extremity of it take on the form of a ſhovel, ſharp on each ſide, and terminating in a point. With this inſtrument the animal makes a hole in the ſand; after which it advances the leg ſtill farther into it, makes it aſſume the form of a hook, and with this, as a fulcrum, it obliges the ſhell to deſcend into the hole. This operation is continued until the whole ſhell is covered; and, when the animal wiſhes to regain the ſurface, it makes the extremity of the leg to aſſume the form of a ball, and makes an effort to extend it. The ball, however, prevents any farther deſcent, and the re-action of the muſcular effort raiſes up the whole ſhell, which operation is continued until it reaches the ſurface; and it is ſurpriſing with what facility theſe motions are accompliſhed by an animal ſeemingly ſo little qualified to move at all. See the article SOLEN.

All other ſhell-fiſh, even thoſe apparently the moſt ſluggiſh and deſtitute of any apparatus for motion, are found to be furniſhed with ſuch inſtruments as enable them to perform all thoſe movements for which they have any occaſion. Thus the ſcallop, a well-known animal inhabiting a bivalved ſhell, can both ſwim upon the ſurface of water and move upon land. When it happens to be deſerted by the tide, it opens its ſhell to the full extent, and, ſhutting it again with a ſudden jerk, the re-action of the ground gives ſuch an impulſe to the whole, that it ſometimes ſprings five or ſix inches from the ground; and by a continued repetition of this action, it gradually tumbles forward until it regains the water. Its method of ſailing is ſtill more curious. Having attained the ſurface of the water by means unknown to us, it opens the ſhell, and puts one half above water, the other with the body of the animal in it remaining below. Great numbers of them are thus frequently ſeen ſailing in company with their ſhells ſticking up above water when the weather is fine, and the wind acting upon them as ſails; but on the leaſt alarm they inſtantly ſhut their ſhells, and all ſink to the bottom together.

The oyſter has generally been ſuppoſed one of the moſt ſluggiſh animals in nature, and totally incapable of voluntary motion; but, from the reſearches of the abbé Dicquemarre, this opinion ſeems to be erroneous. The oyſter, like many other bivalved ſhell-fiſh, has a power of ſquirting water out from its body; and this property may eaſily be obſerved by putting ſome of them into a plate with as much ſea-water as will cover them. The water is ejected with ſo much force, as not only to repel the approach of ordinary enemies, but to move the whole animal backwards or ſidewiſe, in a direction contrary to that in which the water was ejected. It has been alſo ſuppoſed, that oyſters are deſtitute of ſenſation; but M. Dicquemarre has ſhown, that they not only poſſeſs ſenſation, but that they are capable of deriving knowledge from experience. When removed from ſuch places as are entirely covered with the ſea, when deſtitute of experience, they open their ſhells and die in a few days; but, if they happen to eſcape this danger, and the water covers them again, they will not open their ſhells again, but keep them ſhut, as if warned by experience to avoid a danger ſimilar to what they formerly underwent.

The motions of the Echinus, or ſea-urchin, are perhaps more curious and complicated than thoſe of any other animal. It inhabits a beautiful multivalved ſhell, divided into triangular compartments, and covered with great numbers of prickles; from which laſt circumſtance it receives the name of the *ſea-urchin*, or *ſea-hedgehog*. The triangles are ſeparated from one another by regular belts, and perforated by a great number of holes; from every one of which iſſues a fleſhy horn ſimilar to that of a ſnail, and capable of moving in a ſimilar manner. The principal uſe of theſe horns ſeems to be to fix the animal to rocks or ſtones, though it likewiſe makes uſe of them in its progreſſive motion. By means of theſe horns and prickles, it is enabled to walk either on its back or its belly; but it moſt commonly makes uſe of thoſe which are near the mouth. Occaſionally it has a progreſſive motion by turning round like a wheel. See the article Echinus, vol. vi. p. 227.

The animals called *ſea-nettles*, or *Meduſæ*, though extremely ſlow in their motions, are nevertheleſs evidently capable of moving at pleaſure from place to place. The variety of their form is ſuch, that it is difficult to aſſign them any determinate figure whatever. In general, however, they reſemble a truncated cone, the baſe of which is applied to the rock to which they adhere. Their colours are various, whitiſh, brown, red, or greeniſh: the mouth is very large; and when opened appears ſurrounded with filaments reſembling the horns of ſnails, which, being diſpoſed in three rows around it, give the animal the appearance of a flower; and through every one of theſe the animal has the power of ſquirting the ſea-water. The ſtructure of theſe animals is extremely ſingular; they conſiſting all of one organ, viz. a ſtomach. When ſearching for food, they extend their filaments, and quickly entangle any ſmall animals that come within their reach. The prey is inſtantly ſwallowed, and the mouth ſhut cloſe upon it like a purſe; in which ſtate it remains for many days before the nutritive parts are extracted. The animal, though ſcarcely an inch or an inch and a half in diameter, is nevertheleſs ſo dilatable, that it can ſwallow large whelks and muſcles, the ſhells of which are thrown out by the mouth after the nutritive parts have been exhauſted. Sometimes the ſhell is too large to be voided this way; in which caſe the body of the animal ſplits, and the ſhell is voided through the opening, which in a ſhort time heals up again. The progreſſive motion of this creature is ſo ſlow, that it reſembles that of the hour-hand of a clock, and is performed by means of innumerable muſcles placed on the outſide of the body. All theſe are tubular, and filled with a fluid, which makes them project like prickles. On occaſion it can likewiſe looſen the baſe of the cone from the rock, and, inverting its body, move by means of the filaments already mentioned, which ſurround the mouth; but even the motion performed in this manner is almoſt as ſlow as the other. See the article Medusa, vol. xv.

Vegetable Motion. Though vegetables have not the power of moving from one place to another like animals, they are nevertheleſs capable of moving their different parts in ſuch a manner as would lead us to ſuſpect that they are actuated by a ſort of inſtinct. Hence many have been induced to ſuppoſe, that the animal and vegetable kingdoms are in a manner indiſtinguiſhable from one another; and that the higheſt degree of vegetable life can hardly be known from the loweſt degree of animal life. The eſſential and inſuperable diſtinction, however, between the two, is the faculty of ſenſation, and loco-motion in conſequence of it. Were it not, indeed, for the manifeſtation of ſenſe by moving from one place to another, we ſhould not be able to tell whether vegetables were poſſeſſed of ſenſation or not; but, whatever motions they may be poſſeſſed of, it is certain that no vegetable has the faculty of moving from one place to another. The roots of a tree indeed will change their direction when they meet with a ſtone, and will turn from barren into fertile ground; but this is evidently mere mechaniſm, without any proof of will or ſenſation; for the nouriſhment of the root comes not from the ſtone, but from the earth around it; and the increaſe in ſize is not owing to any expanſion of the matter which the root already contains, but to the appoſition of new matter; whence the increaſe of ſize muſt always take place in the direction from whence the nouriſhment proceeds. On this principle alſo may we explain the reaſon why the roots of a tree, after having arrived at the edge of a ditch, inſtead of ſhooting out into the air, will creep down the one ſide, along the bottom, and up the other.

In their other movements the vegetables diſcover nothing like ſenſation or deſign. They will indeed uniformly bend towards light, or towards water; but in the one caſe we muſt attribute the phenomenon to the action of the elements of light and air upon them; and, in the latter, the property ſeems to be the ſame with what in other caſes we call *attraction*. Thus, if a root be uncovered, and a wet ſponge placed near it in a direction different from that in which the root was proceeding, it will ſoon alter its poſition, and turn towards the ſponge; and thus we may vary the direction of the root as often as we pleaſe. The efforts of a plant to turn from darkneſs or ſhade into ſunſhine are very remarkable; as, in order to accompliſh this, not only the leaves will be inclined, but even the ſtems and branches twiſted. When a wet ſponge is held under the leaves of a tree, they bend down in order to touch it. If a veſſel of water be put within ſix inches of a growing cucumber, in leſs than twenty-four hours the latter will alter its direction; the branches will bend towards the water, and never alter their courſe until they come in contact with it. The moſt remarkable inſtance of this kind of motion, however, is, that, when a pole is brought near a vine, the latter will turn towards it, and never ceaſe extending its branches till it lays hold of the ſupport.

The motions of the ſenſitive plant, and others of the ſame kind, have been conſidered as very wonderful; but it is doubtful if any of them be really more ſo than that of the vine juſt mentioned. None of theſe ſhow any kind of propenſity to move without an actual touch. A very ſlight one, indeed, makes the ſenſitive plant contract, and the whole branch, together with the leaves, bend down towards the earth. Theſe phenomena are by ſome aſcribed to electricity. (See Mimosa.) Even the motions of the Hedyſarum gyrans, which at firſt ſight ſeems ſo much more ſurpriſing than thoſe of the ſenſitive plant, may it is ſuppoſed admit of explanation upon the ſame principle. The American plant called Dionæa muſcipula, or Venus's fly-trap, is another example of very wonderful mechaniſm in vegetables, though even this does not argue any degree of ſenſation in this plant more than in others. The leaves of the Dionæa are jointed, and furniſhed with two rows of prickles. A number of ſmall glands upon the ſurface ſecrete a ſweet juice, which entices flies to come and ſettle upon it; but the moment theſe inſects touch the fatal ſpot, the leaves fold up, and ſqueeze them to death between the prickles. The leaves fold up in the ſame manner when the plant is touched with a ſtraw or pin. The Droſera rotundifolia and longifolia, round and long-leafed ſundew, plants of our own country, not uncommon in boggy ground, poſſeſs a ſimilar ſtructure, and perform ſimilar functions.

The folding up of the leaves of certain plants in the abſence of the ſun's light, called their *ſleep*, affords another very curious inſtance of vegetable motion. Almoſt all vegetables, indeed, undergo ſuch a remarkable change in the night, that it is difficult to know exactly how many kinds do really ſleep. They fold up their leaves in many different ways; but all agree in diſpoſing of them in ſuch a manner as to afford the beſt protection to the young ſtems, flower-buds, or fruit. The leaves of the tamarind-tree contract round the young fruit in order to protect it from nocturnal cold; and thoſe of ſenna, glycina, and many other papilionaceous plants, diſpoſe of their leaves in the ſame manner. The leaves of the chickweed, aſclepias atriplex, &c. are diſpoſed in oppoſite pairs. In the night time they riſe perpendicularly, and join ſo cloſe at the top, that the flowers are concealed by them. In like manner do the leaves protect the flowers of the Sida or Althæa theophraſti, Œnothera, Solanum, and the Egyptian vetch. All theſe are erected during the night; but thoſe of the white lupine, in time of ſleep, hang down.

The flowers of plants alſo have motions peculiar to themſelves. Many of them during the night are encloſed in their calyxes. Some, particularly thoſe of the German ſpurge, Geranium ſtriatum, and common whitlow-graſs, when aſleep, bend towards the earth; by which means the noxious effects of rain or dew are prevented. All theſe motions have been commonly aſcribed to the ſun's rays; and Mr. Smellie informs us, that in ſome of the examples above-mentioned the effects were evidently to be aſcribed to heat; but plants kept in a hot-houſe, where the temperature of the day and night are alike, contract their leaves, and ſleep in the ſame manner as if they were expoſed to the open air; "whence it appears (ſays he), that the ſleep of plants, is owing rather to a peculiar law, than to a quicker or ſlower motion of the juices." He ſuſpects, therefore, that, as the ſleep of plants is not owing to the mere abſence of heat, it may be occaſioned by the want of light; and, to aſcertain this, he propoſes an experiment of throwing upon them a ſtrong artificial light. If, notwithſtanding this light (ſays he), the plants are not rouſed, but continue to ſleep as uſual, then it may be preſumed that their organs, like thoſe of animals, are not only irritable, but require the reparation of ſome invigorating influence which they have loſt while awake, by the agitations of the air and of the ſun's rays, by the act of growing, or by ſome other latent cauſe." On this, however, we muſt remark, that the throwing of artificial light upon plants cannot be attended with the ſame conſequences as that of the light of the ſun, unleſs the former were as ſtrong as the latter, which is impoſſible; and, even granting that we could procure an artificial light as ſtrong as that of the ſun, a difference might be occaſioned by the different directions of the rays, thoſe of the ſun being very nearly parallel, while the rays of all artificial light diverge very greatly. If, therefore, we are to make an experiment of this kind, the rays ſhould be rendered parallel by means of a burning mirror. Here again we ſhould be involved in a difficulty: for the rays of the ſun proceed all in one direction; but, as of neceſſity we muſt employ different mirrors in our experiment, the light muſt fall upon the plant in different directions, ſo that we could not reaſonably expect the ſame reſult as when the plants are directly expoſed to the rays of the ſun.

The motion of plants, not being deducible from ſenſation, as in animals, muſt be aſcribed to that property called *irritability;* and this property is poſſeſſed *inſenſibly* by the parts of animals in a greater degree than even by the moſt irritable vegetable. The muſcular fibres will contract on the application of any ſtimulating ſubſtance, even after they are detached from the body to which they belonged. The heart of a frog will continue to beat when pricked with a pin for ſeveral hours after it is taken out of the body. The heart of a viper, or of a turtle, beats diſtinctly from twenty or thirty hours after the death of theſe animals. When the inteſtines of a dog, or any other quadruped, are ſuddenly cut into different portions, all of them crawl about like worms, and contract upon the ſlighteſt touch. The heart, inteſtines, and diaphragm, are the moſt irritable parts of animal bodies; and, to diſcover whether this quality reſides in all plants, experiments ſhould be made chiefly on leaves, flowers, buds, and the tender fibres of the roots.

In a paper read before the Academy of Sciences at Paris, by M. Brouſſonet, the author inclines to confound irritability and ſenſibility together. "The different parts of plants (ſays he) enjoy the faculty of motion; but the motions of a vegetable are very different in their nature from thoſe of an animal: the moſt ſenſible, thoſe that are produced with moſt rapidity in plants, are always influenced by ſome ſtimulating cauſe. Irritability, which is nothing but *ſenſibility* made manifeſt by motion, is a general law to which nature has ſubjected all living beings; and it is this that continually watches over their preſervation. Being more powerful in animals than in plants, it may be often confounded in theſe laſt with phenomena that depend on a quite different cauſe. In the vegetable it is only the organ which is expoſed to the action of the ſtimulating power that moves. Irritation in particular places never produces that prompt combination of ſenſations which we obſerve in animals; in conſequence of which certain parts are put in motion without being directly affected, and which otherwiſe might have been paſſive. The more perfect the organization in the different parts of an animal is, the more apparent are the ſigns of *irritability.* The parts that come neareſt to thoſe of vegetables, and in which of conſequence the organization is moſt imperfect, are the leaſt irritable. The ſame law holds with regard to plants; but the reſult is oppoſite: the ſigns of irritability are moſt ſenſible in proportion to the analogy of the parts with thoſe of animals; and they are imperceptible in thoſe that are diſſimilar. This aſſertion is proved by what we obſerve in the organs deſtined in vegetables to perpetuate the ſpecies. Thoſe parts alone ſeem ſenſible to ſtimuli; the bark, leaves, ſtalks, and roots, ſhowing no ſigns of irritability.

"The motions eſſentially vital, which have in plants the greateſt affinity with thoſe of animals, are the courſe of the ſap, the paſſage of the air in the trachea, the different poſitions which the flowers of certain plants take at certain hours of the day, &c. But, if we attend to the manner in which all theſe motions in plants are performed, we ſhall find that they preſent a greater number of modifications than the analogous motions that take place in animals. The temperature of the atmoſphere, its agitation, light, &c. have great influence on the motions of plants, by accelerating or retarding the courſe of their fluids; and, as they cannot change their place, theſe variations produce in them changes more obvious and more uniform than in animals."

Thoſe motions which are particularly obſerved in the organs deſtined to the reproduction of the individual, not appearing except in circumſtances that render them abſolutely neceſſary, ſeem in ſome meaſure to be the effect of a particular combination: they are, however, merely mechanical; for they are always produced in the ſame way and in the ſame circumſtances. Thus the roſe of Jericho, and the dry fruit of ſeveral ſpecies of Meſembryanthemum, do not open but when their veſſels are full of water. The ſudden diſengagement of fluids produces a kind of motion. To this cauſe we muſt attribute a great number of phenomena obſervable in the leaves of ſeveral plants, and which do not depend on irritability. The ſmall glands in each leaf of the Dionæa are no ſooner punctured by an inſect, than it inſtantly folds up and ſeizes the animal: the puncture ſeems to operate a diſengagement of the fluid which kept the leaf expanded by filling its veſſels. This explanation is the more probable, that in the early ſtate of the vegetation of this plant, when the ſmall glands are hardly evolved, and when probably the juices do not run in ſufficient abundance, the leaves are folded up exactly as they appear when punctured by an inſect at a more advanced period. We obſerve a phenomenon ſimilar to this in both ſpecies of the Droſera (ſun-dew), mentioned above. The mechaniſm here is very eaſily obſervable: the leaves are at firſt folded up; the juices are not yet propelled into the fine hairs with which they are covered; but, after they are expanded, the preſence of the fluid is manifeſt by a drop ſeen at the extremity of each hair: it is by abſorbing this fluid that an inſect empties the veſſels of the leaf, which then folds up, and reſumes its firſt ſtate: the promptitude of the action is proportioned to the number of hairs touched by the inſect. This motion in ſome degree reſembles that which takes place in the limb of an animal kept in a ſtate of flexion by a tumor in the joint; when the matter which obſtructed the motion is diſcharged, the limb inſtantly reſumes its former poſition. The phenomena that depend on the abundance of fluids are particularly evident in plants which grow in wet ſoils; the Droſera and Dionæa are of this kind; and it is known by the experiments of Du Fay and Du Hamel, that ſenſitive plants are particularly ſenſible when the ſun is obſcured by clouds, and the air warm and moiſt.

The influence of external cauſes ſometimes ſo modifies the vital motions in plants, that we might be tempted to aſcribe them to volition, like thoſe that depend entirely on that faculty in animals. If we ſet a pole in the ground near a twining plant, it always lays hold of the pole for ſupport, in whatever place we put it. The ſame thing occurs in the tendrils of the vine; which always attach themſelves to the ſupport preſented them, on whatever ſide it may be placed, provided they can reach it; but theſe motions are entirely vital: the twining plants and the tendrils direct themſelves to every quarter, and conſequently cannot fail of meeting with the bodies within their reach. Theſe motions are performed as long as the parts continue to grow; but, when they ceaſe to elongate, if they have not been able to reach any body on which they can fix, they bend back upon themſelves. This and other obſervations ſhow how far the vital motions in plants may be modified by external cauſes, and how eſſentially they differ from thoſe that are the effect of volition in animals.

Some plants appear endowed with no ſort of motion: ſome have leaves that can move in different directions: their motions are generally modified by different cauſes; but none appear ſo eminently poſſeſſed of this quality as the Hedyſarum gyrans of Linnæus. No part of this plant ſhows any ſigns of irritability upon application of ſtimuli; and the motion of its foliola ceaſes when the leaflets are agitated by the wind. When the ſun is warm, the little leaves of the hedyſarum are alſo immovable; but, when the weather is warm and moiſt, or when it rains, they move very freely. This motion ſeems indiſpenſably neceſſary to the plant; for it begins as ſoon as the firſt leaves unfold, and continues even during the night; but in time it grows weaker. In our ſtoves it is moſt conſiderable during the firſt year; in the ſecond, it is not very ſenſible: in its native place all the leaves have a motion never obſerved here. The moving leaflets are moſt agitated while the plants are in full flower, and the proceſs of fructification goes on. The oſcillatory motion is ſo natural to it, that it not only remains for three or four days in the leaflets of a branch that has been cut off and put in water, but is even continued though the branch be expoſed to the air. The leaves ſeem to perform the office of the heart in vegetables. When a plant is ſtripped of its leaves, the progreſs of vegetation is arreſted; and ſuch vegetables reſemble thoſe animals which have a periodical ſleep, induced by a diminution of the action of the heart. See the article HEDYSARUM, vol. ix. p. 303.

To MO'TION, *v. a.* To propoſe.—I want friends to *motion* ſuch a matter. *Burton's Anat. of Mel.*

Sir, the thing
(But that I would not ſeem to counſel you)
I ſhould have *motion'd* to you at the firſt. *B. Jonſon.*

To MOTION, *v. n.* To adviſe; to make propoſal; to offer plans:

Well haſt thou *motion'd*, well thy thoughts employ'd,
How we might beſt fulfil the work which here
God hath aſſign'd us. *Milton's Paradiſe Loſt.*

MO'TIONER, *ſ.* A mover. *Not in uſe. Cotgrave.*

MO'TIONLESS, *adj.* Wanting motion; being without motion:

Should our globe have had a greater ſhare
Of this ſtrong force, by which the parts cohere;
Things had been bound by ſuch a pow'rful chain,
That all would fix'd and *motionleſs* remain. *Blackmore.*

MOTI'R, a ſmall iſland in the Eaſtern Indian Sea, of a triangular form, about twenty-four miles ſouth from Ternate. Lat. 0. 26. N. lon. 127. 19. E.

MO'TIVE, *adj.* [*motivus*, Lat.] Cauſing motion; having moment.—Shall every *motive* argument uſed in ſuch kind of conferences be made a rule for others ſtill to conclude the like by, concerning all things of like nature, when as probable inducements may lead them to the contrary? *Hooker.*—Having the power to move; having power to change place; having power to paſs foremoſt to motion.—The nerves ſerve for the conveyance of the *motive* faculty from the brain; the ligatures for the ſtrengthening of them, that they may not flag in motion. *Wilkins.*

MO'TIVE, *ſ.* [old Fr. *motive*, cauſe.] That which determines the choice; that which incites the action.—What can be a ſtronger *motive* to a firm truſt on our Maker, than the giving us his Son to ſuffer for us? *Addiſon.*—The *motive* for continuing in the ſame ſtate is only the preſent ſatisfaction in it; the *motive* to change is always ſome uneaſineſs. *Locke.*

Why in that rawneſs left you wife and children,
Thoſe precious *motives*, thoſe ſtrong knots of love,
Without leave-taking? *Shakeſpeare's Macbeth.*

Mover. *Not in uſe:*

Heaven brought me up to be my daughter's dower;
As it hath fated her to be my *motive*
And helper to a huſband. *Shakeſpeare's All's Well.*

Her wanton ſpirits look out
At every joint and *motive* of her body. *Shakeſpeare.*

MOTIV'ITY, *ſ.* The power of moving. *Bailey.*

MOT'LAU, a river of Pruſſia, which joins the Rodaun at Dantzig, near which the united ſtream joins the Viſtula.

MOT'LEY, *adj.* [ſuppoſed to be corrupted from *medley*; perhaps from *mothlike*, coloured, ſpotted or variegated like a garden-*moth*.] Mingled of various colours:

They that come to ſee a fellow
In a long *motley* coat ſpotted with yellow,
Will be deceiv'd. *Shakeſpeare's Hen. VIII.*

Expence, and after-thought, and idle care,
And doubts of *motley* hue, and dark deſpair. *Dryden.*

MOT'LEY-MINDED, *adj.* Fond of imitating a profeſſed fool.—This is the *motley-minded* gentleman, whom I have ſo often met in the foreſt. *Shakeſp. As you like it.*

MOT'MOT, *ſ.* in ornithology. See RAMPHASTOS momotus.

MO'TO, a town of Guzerat: five miles eaſt of Pattun.

MOTODZIEC'NO, a town of Lithuania, in the palatinate of Wilna: ſixty-four miles eaſt-ſouth-eaſt of Wilna.

MO'TOL, a town of Lithuania, in the palatinate of Brzeſc: ſixty miles eaſt of Brzeſc.

MOTO'LA, a town of Africa, in the kingdom of Congo.

MOTO'LA, a town of Naples, in the province of Otranto; the ſee of a biſhop, ſuffragan of Tarento: fifty-nine miles weſt-north-weſt of Lecce, and 134 eaſt of Naples. Lat. 40. 52. N. lon. 17. 2. E.

MOTOO'RAH, a town of Bengal: fifty miles ſouth-ſouth-weſt of Calcutta. Lat. 22. 2. N. lon. 87. 48. E.

MOTOOTABOO', one of the ſmaller Friendly Iſlands: three miles north-weſt of Tongataboo.

MO'TOR, *ſ.* [*moteur*, Fr. from *moveo*, Lat.] A mover.—Tell motion it is worſe than mad, whoſe *motor*'s not Almightie. *Davies's Wit's Pilgrim.*—Thoſe bodies being of a congenerous nature, do readily receive the impreſſions of their *motor*, and, if not fettered by their gravity, conform themſelves to ſituations wherein they beſt unite unto their animator. *Brown's Vulgar Errors.*

MO'TORY, *adj.* [*motorius*, Lat.] Giving motion.—The bones, were they dry, could not, without great difficulty, yield to the plucks and attractions of the *motory* muſcles. *Ray on the Creation.*

MOTOU'A, one of the ſmaller Kurule Iſlands. Lat. 49. 10. N. lon. 154. E.

MOTOUA'LIS, a ſmall nation of Syria, inhabiting to the eaſt of the country of the Druſes, in the valley which ſeparates their mountains from thoſe of Damaſcus; of which the following account is given by Volney in his Travels, vol. ii.

The characteriſtic diſtinction between them and the other inhabitants of Syria is, that, like the Perſians, they are of the ſect of Ali, while all the Turks follow that of Omar or Moawiyah. This diſtinction, occaſioned by the ſchiſm which in the 36th year of the Hegira aroſe among the Arabs, reſpecting the ſucceſſors of Mahomet, is the cauſe of an irreconcilable hatred between the two parties. See the article Arabia, vol. ii. p. 11–14. The ſectaries of Omar, who conſider themſelves as the only "orthodox," aſſume the title of *Sonnites*, which has that ſignification, and term their adverſaries *Shiites*, that is, "ſectaries of Ali." The word *Motou-Ali* has the ſame meaning in the dialect of Syria. The followers of Ali, diſſatisfied with this name, ſubſtitute that of *Adlia*, which means "aſſertors of juſtice," literally "juſticiarians:" a denomination which they have aſſumed in conſequence of a doctrinal point they advance in oppoſition to the Sonnite faith. A ſmall Arabic treatiſe, entitled Theological Fragments concerning the Sects and Religions of the World, has the following paſſage: "Theſe ſectaries who pretend that God acts only on principles of juſtice, conformable to human reaſon, are called *Adlia*, or Juſticiarians. God cannot (ſay they) command an impracticable worſhip, nor ordain impoſſible actions, nor enjoin men to perform what is beyond their ability; but, wherever he requires obedience, will beſtow the power to obey. He removes the cauſe of evil, he allows us to reaſon, and impoſes only what is eaſy, not what is difficult; he makes no man reſponſible for the actions of another, nor puniſhes him for that in which he has no part; he imputes not as a crime what himſelf has created in man; nor does he require him to avoid what deſtiny has decreed. This would be injuſtice and tyranny, of which God is incapable, from the perfection of his being." To this doctrine, which diametrically oppoſes the ſyſtem of the Sonnites, the Motoualis add certain ceremonies which increaſe their mutual averſion. They curſe Omar and Moawiyah as rebels and uſurpers; and celebrate Ali and Hoſein as ſaints and martyrs. They begin their ablutions at the elbow, inſtead of the end of the finger, as is cuſtomary with the Turks; they think themſelves defiled by the touch of ſtrangers; and, contrary to the general practice of the Eaſt, neither eat nor drink out of a veſſel which has been uſed by a perſon not of their ſect, nor will they even ſit at the ſame table.

Theſe doctrines and cuſtoms, by ſeparating the Motoualis from their neighbours, have rendered them a diſtinct ſociety. It is ſaid they have long exiſted as a nation in that country, though their name has never been mentioned by any European writer before the eighteenth century; it is not even to be found in the maps of d'Anville: La Roque, who left their country not a hundred years ago, gives them the name of *Amediens*. Be this as it may, in later times their wars, robberies, ſucceſſes, and various changes of fortune, have rendered them of conſequence in Syria. Till about the middle of this century, they only poſſeſſed Balbec, their capital, and a few places in the valley, and Anti-Lebanon, which ſeems to have been their original country. At that period we find them under a like government with the Druſes, that is to ſay, under a number of Shaiks, with one principal chief of the family of Harfouſh. After the year 1750, they eſtabliſhed themſelves among the heights of Bekaa, and got footing in Lebanon, where they obtained lands belonging to the Maronites, almoſt as far as Beſharrai. They even incommoded them ſo much by their ravages, as to oblige the emir Youſef to attack them with open force and expel them; but, on the other ſide, they advanced along the river even to the neighbourhood of Sour (Tyre). In this ſituation, Shaik Daher had the addreſs, in 1760, to attach them to his party. The pachas of Said and Damaſcus claimed tributes, which they had neglected paying, and complained of ſeveral robberies committed on their ſubjects by the Motoualis; they were deſirous of chaſtiſing them; but this vengeance was neither certain nor eaſy. Daher interpoſed; and, by becoming ſecurity for the tribute, and promiſing to prevent any depredations, acquired allies who were able, as it is ſaid, to arm 10,000 horſemen, all reſolute and formidable troops. Shortly after, they took poſſeſſion of Sour, and made that village their principal ſea-port. In 1771 they were of great ſervice to Ali Bey and Daher againſt the Ottomans. But emir Youſef, having in their abſence armed the Druſes, ravaged their country. He was beſieging the caſtle of Djezin, when the Motoualis, returning from Damaſcus, received intelligence of this invaſion. At the relation of the barbarities committed by the Druſes, an advanced corps, of only five hundred men, were ſo enraged, that they immediately ruſhed forward againſt the enemy, determined to periſh in taking vengeance. But the ſurpriſe and confuſion they occaſioned, and the diſcord which reigned between the two factions of Manſour and Youſef, ſo much favoured this deſperate attack, that the whole army, conſiſting of 25,000 men, was completely overthrown. In the following year, the affairs of Daher taking a favourable turn, the zeal of the Matoualis cooled towards him, and they finally abandoned him in the cataſtrophe in which he loſt his life. But they have ſuffered for their imprudence under the adminiſtration of the pacha who ſucceeded him. After the year 1777, Djezzar, the famous pacha of Acre and Said, inceſſantly laboured to deſtroy them. His perſecution forced them in 1784 to a reconciliation with the Druſes, and to enter into an alliance with the emir Youſef. Though reduced to leſs than ſeven hundred armed men, they did more in that campaign than 15,000 Druſes and Maronites aſſembled at Dair-el-Kamar. They alone took the ſtrong fortreſs of Mar-Djebaa, and put to the ſword all the Epirots who defended it. But the miſunderſtanding which prevailed among the chiefs of the Druſes having rendered abortive all their operations, the pacha obtained poſſeſſion of the whole valley, and the city of Balbec itſelf. At this period not more than five hundred families of the Motoualis remained, who took refuge in Anti-Lebanon, and the Lebanon of the Maronites; and, driven as they now are from their native ſoil, it is probable they will be totally annihilated, and even their very name become extinct.

MOTOVSKA'IA, a town of Ruſſia, in the government of Archangel: twelve miles north-north-eaſt of Kola.

MOTRAPOU'R, a town of Bengal: ten miles north of Mahmudpour.

MOTRI'CO, a ſeaport town of Spain, in Guipuſcoa, in the bay of Biſcay: eighteen miles weſt of St. Sebaſtian.

MO'TRIL, a ſeaport town of Spain, in the province of Granada. From this town, along the coaſt as far almoſt as to Gibraltar, there are ſeveral ſugar-mills, called *ingenios*; and at Motril are four of them, which have been uſed from time immemorial for the manufacture of ſugar; but the culture of ſugar-canes has of late, from political motives, been ſuperſeded by that of the vine. It is four miles eaſt of Malaga. Lat. 36. 45. N. lon. 3. 42. W.

MO'TRIL, a town of Walachia: ten miles north-north-weſt of Krajova, and twenty-eight eaſt of Czernetz.

MO'TRIX, *ſ.* Something that has the power or faculty of moving.

MOT'TA, a town of Italy, in the Treviſan, at the union of the Mottegano and Livenza: eighteen miles eaſt-north-eaſt of Trevigio. It is deſcribed by Mr. Oppenheim, in his Hiſtory of Maritime Auſtria, as a conſiderable and populous borough, with an old caſtle; and contains a church built in a ſplendid ſtyle, after a deſign of Sanſovin. The inhabitants, who are very induſtrious, poſſeſs two hat-manufactories, and two dyeing-houſes, which, together with the much-frequented annual fair, afford them abundant means of ſubſiſtence. Without the borough ſtands a convent belonging to the order of Contemplative Minorites.

MOT'TA, a town of Naples, in the Capitanata: two miles eaſt-ſouth-eaſt of Volturara.

MOT'TA, a town of Sicily, in the valley of Noto: eleven miles weſt of Catania.

MOT'TA, a town of Italy, in the department of the Upper Po: twenty-one miles eaſt of Cremona.

MOT'TA DE BRUZZA'NO, a town of Naples, in Calabria Ultra: ſeventeen miles ſouth of Gierace.

MOT'TA PUL'LU, in botany. See SCIRPUS.

MOT'TA DI REI'NA, a town of Naples, in Capitanata: ſix miles ſouth of Serviero.

MOT'TA ST. GI'O, a town of Naples, in Calabria Ultra: ſix miles ſouth-ſouth-eaſt of Reggio.

MOT'TA SIDERO'NI, a town of Naples, in Calabria Ultra: four miles north-eaſt of Gierace.

MOTTAH'HEN, a town of Arabia, in the province of Yemen: ten miles north-north-eaſt of Beit el Fakih.

MOTTAPA'R, a town of Hindooſtan, in Travancore: twenty-one miles north-eaſt of Porcah.

MOTTAREL'LE, a town of Italy, in the Paduan: nine miles ſouth-ſouth-weſt of Padua.

MOT'TE, a ſmall iſland in Lake Champlain, belonging to the ſtate of Vermont.

MOT'TE (La), a town of France, in the department of the Upper Loire: three miles north-eaſt of Brioude.

MOT'TE (La), a town of France, in the department of the Voſges, ſituated on an eminence, not far from the Mouzon. It belonged to the duchy of Bar, and was taken by Louis XIV. in the year 1645, when the fortifications were deſtroyed. It is ſix miles north-eaſt of Bourmont, and eight ſouth of Neufchâtel ſur Meuſe.

MOT'TE (La), in biography. See LAMOTTE, vol. xii. p. 113.

MOT'TE ACHAR'T, a town of France, in the department of the Vendée: nine miles north-eaſt of Sables d'Olonne, and ten weſt-ſouth-weſt of La Roche ſur Yon.

MOT'TE DU CAI'RE, a town of France, in the department of the Lower Alps: nine miles north of Siſteron.

MOT'TE CHALENSO'N, a town of France, in the department of the Drôme: ſixteen miles ſouth of Die, and twelve north-eaſt of Nions.

MOT'TE LANDERO'N, a town of France, in the department of the Gironde: four miles eaſt of La Reolle, and ſix north-weſt of Marmande.

MO'TTE ST. JEAN', a town of France, in the department of the Saône and Loire: ſix miles weſt-north-weſt of Paray le Monial, and ten ſouth-eaſt of Bourbon Lancy.

MOTTEGA'NO, a river of Italy, in the Treviſan, which runs into the Livenza at Motta.

MOTTE'NE, a town of Arabia, in the province of Yemen: eight miles ſouth-weſt of Sana.

MOT'TENHAGEN, a town of Pruſſia, in the province of Natangen: fifteen miles eaſt-ſouth-eaſt of Konigſberg.

MOT'TER, or MOT'TERN, a river of France, which riſes in the mountains of the Voſges, paſſes by Pfaffenhofen, Haguenau, &c. and runs into the Rhine at Druzenheim.

MOT'TEVILLE, a town of France, in the department of the Lower Seine: nine miles north-eaſt of Caudebec.

MOT'TEVILLE (Frances Bertaud de), daughter of a gentleman in ordinary of the king's bed-chamber, was born in Normandy about 1615. She was brought up at the court of queen Anne of Auſtria, widow of Louis XIII. with whom ſhe ingratiated herſelf by her talents and agreeable manners. The jealouſy which cardinal Richelieu entertained of all the confidantes of this princeſs cauſed her to be baniſhed from court, and ſhe retired with her mother into Normandy, where ſhe married Nicholas Langlois, lord of Motteville, firſt preſident of the chamber of accounts at Rouen. He was of an advanced age at the time of their union, and ſhe became a widow within two years. After the death of Richelieu, queen Anne, then regent of France, recalled her to court, and kept her about her perſon as one of the ladies of her houſehold. Her attachment to her miſtreſs induced her to adopt the deſign of writing memoirs of her life, for which purpoſe ſhe carefully noted down every occurrence that ſhe witneſſed, with all that ſhe learnt in familiar converſations with the queen. She had alſo the advantage of being admitted to the intimacy of Henrietta-Maria, widow of Charles I. From theſe ſources ſhe compiled her "Memoires pour ſervir a l'Hiſtoire d'Anne d'Autriche," printed in 1723 in 5 vols. 12mo. and in 1750 in 6 vols. Theſe memoirs are full of minute particulars, moſtly of ſmall importance, but ſome of them curious, and which diſplay an intimate acquaintance with the court during the minority of Louis XIV. and are marked with the ſtamp of truth. Some letters by this lady are met with in the collection of thoſe of Mademoiſelle de Montpenſier. She died at Paris in 1689. *Moreri.*

MOT'TEUX (Peter Anthony), was a native of France, being born in 1660 at Rohan, in Normandy, where alſo he received his education. On the revocation of the edict of Nantes, he came over to England. He lived at firſt with his godfather and relation, Paul Dominique, eſq. but afterwards became a conſiderable trader himſelf, kept a large Eaſt-India warehouſe in Leadenhall-ſtreet, and had a place in the poſt-office, relating to the foreign letters, being maſter of ſeveral languages. During his reſidence in this kingdom, he acquired ſo perfect a maſtery of the Engliſh language, that he not only was qualified to give a very good tranſlation of Don Quixote, but alſo wrote ſeveral ſongs, prologues, epilogues, &c. and, what was ſtill more extraordinary, became an eminent dramatic writer in a language to which he was not native. He produced ſeventeen or eighteen dramas. This gentleman, who ſeems to have led a very comfortable life, his circumſtances having been perfectly eaſy, was yet unfortunate in his death; for he was found dead in a diſorderly houſe, in the pariſh of St. Clement Danes, not without ſuſpicion of having been murdered. This accident happened to him on the 19th of February 1717-18, which, being his birth-day, exactly completed his fifty-eighth year. *Biog. Dram.*

MOTT'LEY (John), was the ſon of colonel Mottley, who was a great favourite with king James II. and followed the fortunes of that prince into France. James, not being able himſelf to provide for him ſo well as he deſired, procured for him, by his intereſt, the command of a regiment in the ſervice of Louis XIV. at the head of which he loſt his life, in the battle of Turin, in the year 1706. Mr. Mottley received the firſt rudiments of his education at St. Martin's Library-ſchool, founded by archbiſhop Tenniſon; but was ſoon called forth into buſineſs, being placed in the exciſe-office, at ſixteen years of age, under the comptroller, lord viſcount Howe, whoſe brother and ſiſter were both related by marriage to his mother. This place he kept till the year 1720, when, in conſequence of an unhappy contract that he had made, probably in purſuit of ſome of the bubbles of that infatuated year, he was obliged to reſign it. Soon after the acceſſion of king George I. Mr. Mottley had been promiſed by the lord Halifax, at that time firſt lord of the treaſury, the place of one of the commiſſioners of the wine-licenſe office; but, when the day came that his name ſhould have been inſerted in the patent, a more powerful intereſt, to his great ſurpriſe, had ſtepped in between him and the preferment of which he had ſo poſitive a promiſe. Finding his proſpects overclouded, he applied to his pen, and wrote his firſt drama, which was ſucceſsful. From that time he depended chiefly on his literary talents, and wrote five dramatic pieces at leaſt, beſides having a hand in ſome others. He died in 1750. *Biog. Dram.*

MOTT'LING, or METLING, a town of the duchy of Carniola. This town was taken by the Turks in the year 1451, and again in the year 1578: ten miles ſouth-ſouth-weſt of Landſtraſs, and 152 ſouth of Vienna. Lat. 45. 48. N. lon. 15. 15. E.

MOT'TO, *ſ.* [Italian.] A ſentence or word added to a device, or prefixed to any thing written.—It may be ſaid to be the *motto* of human nature, rather to ſuffer than to die. *L'Eſtrange.*—It was the *motto* of a biſhop eminent for his piety and good works in king Charles the Second's reign, *Inſervi Deo & lætare*, Serve God and be cheerful. *Addiſon's Freeholder.*

MOT'TRAM ST. AN'DREW's, a village in Cheſhire, eight miles north-eaſt of Stockport, whoſe fertile paſtures produce remarkably-good cheeſe; and on the higher ground ſtands the ſuperb and elegant ſeat of H. O. Wright, eſq.

MOTUA'RA, an iſland in the Pacific Ocean, between the iſlands of New Zealand, in Queen Charlotte's Sound: here was a fortified village. Lat. 41. 4. S. lon. 184. 50. W.

MOTUGO'GO, a cape of New Zealand, by captain Cook called Cape Brett, (which ſee,) lying in lat. 35. 10. 30. S. lon. 185. 25. W. On the weſt ſide of it is a large and pretty deep bay, lying ſouth-weſt by weſt, in which there appeared to be ſeveral ſmall iſlands. The point that forms the north-weſt entrance lies weſt half north, at the diſtance of three or four leagues, and was called by Cook *Point Pococke.*

MOTY'SIN, a town of Ruſſian Poland, in the palatinate of Kiev: twenty miles weſt-north-weſt of Kiev.

MO'VABLE, *adj.* [from *move*. Some write this word *moveable*, and its derivatives *moveableneſs, moveably;* but there is no neceſſity for retaining the *e*, any more than in *improvable*, or *immovable*, where Dr. Johnſon himſelf omits it; and it is indeed now uſually omitted. *Todd.*] Capable of being moved; not fixed; portable; ſuch as may be carried from place to place.—Any heat whatſoever promotes the aſcent of mineral matter, which is ſubtile, and is conſequently *movable* more eaſily. *Woodward's Nat. Hiſt.*—Any who ſees the Teverone muſt conclude it to be one of the moſt *movable* rivers in the world, that it is ſo often ſhifted out of one channel into another. *Addiſon on Italy.*—Changing the time of the year.—The lunar month is natural and periodical, by which the *movable* feſtivals of the Chriſtian church are regulated. *Holder.*

Movable Feasts, are ſuch as are not always held on the ſame day of the year or month; though they be on the ſame day of the week. Thus, Eaſter is a movable feaſt, being always held on the Sunday which falls upon or next after the firſt full moon following the 21ſt of March. All the other movable feaſts follow Eaſter; i. e. they keep their diſtance from it; ſo that they are fixed with reſpect thereto. Such are Septuageſima, Sexageſima, Aſh Wedneſday, Aſcenſion-day, Pentecoſt, Trinity Sunday, &c. which ſee under their proper articles.

MO'VABLE, *ſ.* [*meuble*, Fr.] Goods; furniture; diſtinguiſhed from real or immovable poſſeſſions; as, lands or houſes:

Let him that moved you hither
Remove you hence; I knew you at the firſt;
You were a *movable.*—Why, what's a *movable?*
—A join'd ſtool. *Shakeſpeare's Tam. of the Shrew.*

Moſt commonly in the plural:

The plate, coin, revenues, and *movables,*
Whereof our uncle Gaunt did ſtand poſſeſs'd. *Shakeſpeare.*

Surveys rich *movables* with curious eye;
Beats down the price, and threatens ſtill to buy. *Dryden.*

MO'VABLENESS, *ſ.* Mobility; poſſibility to be moved.—Du Moulin took his errour, at leaſtwiſe touching the *movableneſs* of the poles of the equator, from Joſeph Scaliger. *Hakewill on Providence.*

MO'VABLY, *adv.* So as it may be moved.—His backpiece is compoſed of eighteen plates, *movably* joined together by as many intermediate ſkins. *Grew.*

MOU'AH, a town of Hindooſtan, in Guzerat, on the gulf of Cambay: fifty-ſix miles ſouth-ſouth-weſt of Gogo.

MOUAMILLADOO'RO, a town of Hindooſtan, in the Carnatic: thirty miles north of Nellore.

MOU'CHA, a bay on the coaſt of Chili, on the weſt coaſt of South America.

MOU'CHAMP, a town of France, in the department of the Vendée: twenty miles north-north-weſt of Fontenay le Comte.

MOUCHERO'N (Frederic), called the *Old*, was a landſcape-painter, born at Embden in 1653, and the diſciple of John Aſſelyn; but at the age of twenty-two he went to Paris to practiſe the leſſons he had learnt in his profeſſion; and was ſo fortunate as to obtain conſiderable applauſe, at an early period, by a freedom and boldneſs of hand, and a certain air of nature which his works poſſeſs, without, however, being highly meritorious, or ever being carried to any great degree of perfection. His choice of ſubjects was generally from the common ſcenes of nature: theſe he wrought with a full pencil, and a touch light and free. His colouring is generally of a negative caſt, with the fore-grounds worked up clear and rich; but his middle diſtances are often pale and indiſtinct, and have a little too much the air of the painter's not being decidedly well-informed of his own intentions. From Paris he went to ſettle at Amſterdam; and, during his continuance in that city, the figures in his landſcapes were frequently painted by Adrian Vander Velde, as during his reſidence in France they were by Theodore Helmbreker. He died in 1706, at the age of fifty-three. His ſon,

MOUCHERO'N (Iſaac), was born at Amſterdam in 1670; and, having had the advantage of his father's inſtructions in the art of painting till he arrived at the twenty-fourth year of his age, he then travelled to Rome, where he made deſigns of the intereſting, and often beautiful, ſcenery around that city. Of theſe he carried back with him to his native place a very conſiderable number; and was there employed in painting pictures from them, in halls, ſaloons, and the apartments of noble edifices; being aſſiſted with figures for his ſcenery, by Verkolie and De Wit. He lived till the year 1744, having enjoyed great praiſe and benefit from the exerciſe of his talents; and his works are ſtill very much eſteemed.

MOUCHOU', a river of China, which runs into the Eaſtern Sea in lat. 36. 56. N. lon. 121. 54. E.

MOUCIUR', a town of Aſiatic Turkey, in Caramania: twenty-ſeven miles ſouth-ſouth-eaſt of Kir-ſhehr, and thirty north-north-eaſt of Akſerai.

MOU'CHY, a town of France, in the department of the Oiſe: ſix miles north of Compiegne.

MOUD, a town of Aſiatic Turkey, in Caramania: ſeventy-eight miles ſouth-eaſt of Cogni, and forty-two weſt-north-weſt of Tarſus.

MOUDA'NIA, &c. See Mudania, &c.

MOUDO'N, a town of the Helvetian republic, which gives name to a bailiwick, in the canton of Berne. It is a handſome town, and was formerly the capital of all that part of the Pays de Vaud which belonged to the duke of Savoy. The town is inconveniently ſituated on the river Broye, part of it being level, and part of it lying on the declivity of a hill, from which a rivulet paſſes, and ruſhes through the lower town, and runs with rapidity into the Broye. In the upper town was formerly a church dedicated to the Virgin Mary, of which nothing now remains but a tower, or kind of ſteeple. In the lower part of the town is one church. Antonine mentions this place in his Itinerary, and it is thought to be one of thoſe which the Swiſs burned in the time of Julius Cæſar. Some ancient medals and other curioſities have been found in this place. The diſtrict or bailliage, in which it lies, is about ten miles long, and eight broad, partly mountainous and woody, and partly fertile; including above ſixty villages. The town, ſituated at the entrance of a narrow valley, is diſtant eleven miles north-eaſt from Lauſanne. Lat. 46. 42. N. lon. 6. 56. E.

MOU'DYEL, a town of Hindooſtan, in the circar of Cuddapa: forty miles north-north-weſt of Gandicotta.

To MOVE, *v. a.* [*moveo*, Lat.] To put out of one place into another; to put in motion.—Sinai itſelf was *moved* at the preſence of God. *Pſal.* lxviii.—At this my heart trembleth, and is *moved* out of his place. *Job*, xxvii. 1. To give an impulſe to.—The will, being the power of directing our operative faculties to ſome action, for ſome end, cannot at any time be *moved* towards what is judged at that time inattainable. *Locke.*

He ſorrows now, repents, and prays contrite;
My motions in him; longer than they *move,*

His heart I know, how variable and vain
Self-left. *Milton's Paradiſe Loſt.*

To propoſe; to recommend.—They are to be blamed alike, who *move* and who decline war upon particular reſpects. *Hayward's Edw. VI.*—To perſuade; to prevail on; to diſpoſe by ſomething determining the choice.—Sometimes the poſſibility of preferment prevailing with the credulous, expectation of leſs expence with the covetous, opinion of eaſe with the fond, and aſſurance of remoteneſs with the unkind parents, have *moved* them, without diſcretion, to engage their children in adventures of learning, by whoſe return they have received but ſmall contentment. *Wotton.*

What can thy mind to this long journey *move?*
Or need'ſt thou abſence to renew thy love? *Dryden.*

To affect; to touch pathetically; to ſtir paſſion.—Images are very ſparingly to be introduced; their proper place is in poems and orations, and their uſe is to *move* pity or terrour, compaſſion, and reſentment. *Felton on the Claſſicks.*

O let thy ſiſter, daughter, handmaid, *move;*
Or all thoſe tender names in one, thy love. *Pope.*

To make angry:

Throw your diſtemper'd weapons to the ground
And hear the ſentence of your *moved* prince. *Shakeſpeare.*

To put into commotion.—When they were come to Bethlehem, all the city was *moved* about them. *Ruth*, i. 19.—To incite; to produce by incitement:

Then feed on thoughts, that voluntary *move*
Harmonious numbers. *Milton's Paradiſe Loſt.*

To conduct regularly in motion:

They, as they *move*
Their ſtarry dance in numbers that compute
Days, months, and years, tow'rds his all-cheering lamp,
Turn ſwift their various motions. *Milton's Paradiſe Loſt.*

To MOVE, *v. n.* To be in a ſtate of changing place; not to be at reſt.—The ſenſes repreſent the earth as immovable; for, though it do *move* in itſelf, it reſts to us who are carried with it. *Glanville.*

Whether heaven *move* or earth
Imports not, if thou reckon right. *Milton's Paradiſe Loſt.*

To have a particular direction of paſſage:

The ſun
Had firſt his precept ſo to *move*, ſo ſhine,
As might affect the earth with cold and heat. *Milton's P. L.*

To go from one place to another.—Any thing that *moves* round about in a circle in leſs time than our ideas are wont to ſucceed one another in our minds, is not perceived to *move*, but ſeems to be a perfect entire circle of that matter. *Locke.*

On the green bank I ſat and liſten'd long,
Nor till her lay was ended could I *move*,
But wiſh'd to dwell for ever in the grove. *Dryden.*

To have vital action.—In him we live, *move*, and have our being. *Acts*, xvii. 28.—Every *moving* thing that liveth ſhall be meat for you. *Gen.*—To walk; to bear the body:

See great Marcellus! how inur'd in toils
He *moves* with manly grace, how rich with regal ſpoils.
Dryden.

To march as an army:

Anon they *move*
In perfect phalanx to the Dorian mood. *Milton's P. L.*

To go forward:

Through various hazards and events we *move*
To Latium. *Dryden's Æn.*

To change the poſture of the body in ceremony.—When Haman ſaw Mordecai that he ſtood not up, nor *moved* for him, he was full of indignation. *Eſth.* v. 9.

MOVE, *ſ.* The act of moving, commonly uſed at cheſs:

With man alas no otherwiſe it proves;
An unſeen hand makes all their *moves*. *Cowley.*

MO'VELESS, *adj.* Unmoved; not to be put out of the place.—The lungs, though untouched, will remain *moveleſs* as to any expanſion or contraction of their ſubſtance. *Boyle.*

The Grecian phalanx, *moveleſs* as a tow'r,
On all ſides batter'd, yet reſiſts his pow'r. *Pope's Iliad.*

MO'VEMENT, *ſ.* Manner of moving.—Under-workmen are expert enough at making a ſingle wheel in a clock, but are utterly ignorant how to adjuſt the ſeveral parts, or regulate the *movement*. *Swift.*—Motion:

Could he, whoſe laws the rolling planets bind,
Deſcribe or fix one *movement* of the mind. *Pope.*

MO'VENT, *adj.* Moving.—If it be in ſome part *movent*, and in ſome part quieſcent, it muſt needs be a curve line, and ſo no radius. *Grew's Coſmol. Sacra.*

MO'VENT, *ſ.* That which moves another.—That there is a motion which makes the viciſſitudes of day and night, ſenſe may aſſures us; but whether the ſun or earth be the common *movent*, cannot be determined but by a further appeal. *Glanville's Scepſis.*

MO'VER, *ſ.* The perſon or thing that gives motion.—The ſtrength of a ſpring were better aſſiſted by the labour of ſome intelligent *mover*, as the heavenly orbs are ſuppoſed to be turned. *Wilkins's Math. Magick.*

O thou eternal *mover* of the heavens,
Look with a gentle eye upon this wretch. *Shakeſpeare.*

Something that moves, or ſtands not ſtill:

So orbs from the firſt *mover* motion take,
Yet each their proper revolutions make. *Dryden.*

A propoſer.—If any queſtion be moved concerning the doctrine of the church of England expreſſed in the thirty-nine articles, give not the leaſt ear to the *movers* thereof. *Bacon.*

See here theſe *movers*, that do prize their honours
At a crack'd drachm; cuſhions, leaden ſpoons,
Ere yet the fight be done, pack up. *Shakeſpeare.*

MOU'FET, or MUF'FET (Thomas), a phyſician and naturaliſt of the ſixteenth century, was born in London, and received his early education in that metropolis. He was then ſent to Cambridge, and ſubſequently proceeded on his travels, which he proſecuted through ſeveral of the countries of Europe, where he contracted an acquaintance with many of the moſt eminent foreign phyſicians and chemiſts. Before his return he had taken the degree of M.D. and he ſettled in London, where he practiſed phyſic with conſiderable reputation. It appears alſo, that he reſided for ſome time at Ipſwich. He was particularly patronized by Peregrine Bertie, lord Willoughby; and accompanied him on his embaſſy, to carry the enſigns of the order of the garter to the king of Denmark. He likewiſe was in the camp with the earl of Eſſex in Normandy, probably in 1591. He ſpent much of the latter part of his life at Bulbridge near Wilton, as a retainer to the Pembroke family, from which he received an annual penſion. He died in that retirement, about the end of queen Elizabeth's reign.

Dr. Moufet was a writer of conſiderable diſtinction in his day, and appears to have been among the firſt phyſicians who introduced chemical medicines into practice in England. He publiſhed in 1584, at Frankfort, an apology for the chemical ſect, which was then beginning to prevail in Germany, though much oppoſed by the adherents of the ſchool of the ancients: it was entitled "De Jure et Præſtantia Chemicorum Medicamentorum, Dialogus Apologeticus." The work diſplays a good deal of learning and ſkill in argumentation. This tract was republiſhed in the Theatrum Chemicum, in 1602, with the addition of "Epiſtolæ quinque Medicinales, ab eodem Auctore conſcriptæ," which are all dated from London in the years 1582, 3, and 4. Theſe epiſtles contain a farther defence of the chemical doctrines, ſome keen remarks on the fanciful reaſonings of the Galeniſts, and many ſenſible obſervations againſt abſolute ſubmiſſion to the authority of great names. The laſt of theſe letters treats of the benefits of foreign travel to a phyſician, and deſcribes Padua as the beſt medical ſchool. His liberality, as well as his learning, was evinced in the publication of another work, "Noſomantica Hippocratica, ſive Hippocratis Prognoſtica cuncta, ex omnibus ipſius ſcriptis, methodicè digeſta, Libri ix." Franc. 1588: for the writings of the father of phyſic were treated with contempt by Paracelſus, and the majority of the chemical ſect. The laſt medical work of Moufet's is entitled "Health's Improvement; or, Rules compriſing and diſcovering the Nature, Method, and Manner, of preparing all ſorts of Food uſed in this Nation." A corrected and enlarged edition of this book was printed by Chriſtopher Bennet at London, 1655, 4to. It is a curious and entertaining performance, on account of the information which it contains reſpecting the diet uſed in this country at that time. Moufet, however, was moſt particularly diſtinguiſhed as a naturaliſt; and he enlarged and finiſhed, with great labour and expenſe, a work entitled "Inſectorum, ſive minimorum Animalium Theatrum; olim ab Edw. Wottono, Conrado Geſnero, Thomaque Pennio, inchoatum." It was left in manuſcript, and publiſhed in London, in 1634, by ſir Theodore Mayerne, who complains of the difficulty he found in getting a printer to undertake it. An Engliſh tranſlation of it was publiſhed in 1658. Though not free from the imperfections of an infant ſcience, this was really a reſpectable and valuable work; and Haller does not ſcruple to place the author above all other entomologiſts previous to Swammerdam. *Aikin's Biog.*

MOU'GDEN. See CHEN-YANG, vol. iv. p. 403.

MOU'GH, or MOUGHT, *ſ.* [Sax. moȝðe.] A moth.—Your clothis ben eten of *moughtis. Wicliffe's St. James.*—Ne *mough* after bite it. *P. Ploughman.*

MOUGHT. Uſed for *might.* Obſolete. *Dr. Johnſon.*—It is the pret. of the old verb *mowe,* now converted into *may. Todd.*

Godfrido this both heard, and ſaw, and knew,
Yet nould with death them chaſtiſe, though he *mought.*
Fairfax.

MOU'GINS, a town of France, in the department of the Var: five miles ſouth-eaſt of Graſſe.

MOUGO'N, a town of France, in the department of the Two Serves: eleven miles ſouth-ſouth-weſt of St. Maixent, and eight eaſt-ſouth-eaſt of Niort.

MOUHU'N, a town of Hindooſtan, in Lahore: ten miles ſouth of Kooſhaub.

MO'VING, *ſ.* Motive; impulſe.—Repreſent the firſt *movings* of the heart towards any forbidden object, as unlawful in themſelves, and deſtructive in their conſequence. *South.*

MO'VING, *part. adj.* Pathetic; touching; adapted to affect the paſſions:

Great Jupiter
The *moving* prayer of Æacus did grant,
And into men and women turn'd the ant. *Blackmore.*

MO'VINGLY, *adj.* Pathetically; in ſuch a manner as to ſeize the paſſions.—The choice and flower of all things profitable in other books, the Pſalms do both more briefly and more *movingly* expreſs, by reaſon of that poetical form wherewith they are written. *Hooker.*

His air, his voice, his looks, and honeſt ſoul,
Speak all ſo *movingly* in his behalf,
I dare not truſt myſelf to hear him talk. *Addiſon's Cato.*

MO'VINGNESS, *ſ.* Power to affect the paſſions.—There is a ſtrange *movingneſs,* and, if the epithet be not too bold, a kind of heavenly magick, to be found in ſome paſſages of the Scripture, which is to be found no where elſe. *Boyle's Style of H. Script.*

MOUILLERON', a town of France, in the department of the Vendée: ſix miles north-weſt of Châtaigneraye.

MOU'KI, a town of Arabia, in the province of Hedsjas: ſixty miles ſouth-weſt of Mecca.

MOUL, a cape of Scotland, on the eaſt coaſt of the iſland of Shetland. Lat. 60. 24. N. lon. 1. 10. W.

MOUL-ELAVOU', *ſ.* in botany. See BOMBAX.

MOUL HEAD', a cape of Scotland, on the north coaſt of the iſland of Papa Weſtra. Lat. 59. 13. N. lon. 2. 45. W.

MOUL HEAD', a cape on the eaſt coaſt of the iſland of Pomona. Lat. 58. 52. N. lon. 2. 34. W.

MOULAMKENG', a mountain of Thibet. Lat. 30. 46. N. lon. 99. 56. E.

MOULAPUD'DY, a town of Hindooſtan, in the province of Dindigul: ſeven miles north-eaſt of Dindigul.

MOULA'R, a town of Hindooſtan, in the Carnatic: ten miles north of Tiagar.

MOULA'R (Le), a town of France, in the department of the Po: three miles ſouth-weſt of Suſa.

MO'ULD, *ſ.* [from *mouiller,* Fr. to wet or moiſten; *mouillé,* angliciſed, becoming *mouilled, mouill'd, mould.* H. Tooke.—Skinner had propoſed a ſimilar derivation; *ſoftneſs,* he ſays, being the occaſion of *mould.* Menage derives *mouiller* from the Lat. *molliare,* to ſoften.] A kind of concretion on the top or outſide of things kept motionleſs and damp; now diſcovered by microſcopes to be perfect plants. See the article MUCOR.—All *moulds* are inceptions of putrefaction, as the *moulds* of pies and fleſh, which *moulds* turn into worms. Moſs is a kind of *mould* of the earth and trees, but may be better ſorted as a rudiment of germination. Another ſpecial affinity is between plants and *mould,* or putrefaction; for all putrefaction, if it diſſolve not in arefaction, will, in the end, iſſue into plants. *Bacon's Nat. Hiſt.*

MO'ULD, *ſ.* [Saxon.] Earth; ſoil; ground in which any thing grows.—The black earth, every where obvious on the ſurface of the ground, we call *mould. Woodward.*—For the different ſpecies of mould, ſee the generic title HUMUS, vol. x. p. 463.—Thoſe *moulds* that are of a bright cheſnut or hazelly colour are accounted the beſt; next to that, the dark grey and ruſſet *moulds* are accounted beſt; the light and dark aſh-colour are reckoned the worſt, ſuch as are uſually found on common or heathy ground: the clear tawny is by no means to be approved, but that of a yellowiſh colour is reckoned the worſt of all; this is commonly found in wild and waſte parts of the country, and for the moſt part produces nothing but goſs, furze, and fern. All good lands after rain, or breaking-up by the ſpade, will emit a good ſmell; that being always the beſt that is neither too unctuous or too lean, but ſuch as will eaſily diſſolve; of a juſt conſiſtence between ſand and clay. *Miller.*

Though worms devour me, though I turn to *mould,*
Yet in my fleſh I ſhall his face behold. *Sandys.*

Matter of which any thing is made:

Nature form'd me of her ſofteſt *mould,*
Enfeebled all my ſoul with tender paſſions,
And ſunk me even below my weaker ſex. *Addiſon's Cato.*

MO'ULD, *ſ.* [*molde,* Span. *moule,* Fr.] The matrix in which any thing is caſt; in which any thing receives its form.—If the liturgies of all the ancient churches be compared, it may be perceived they had all one original *mould. Hooker.*—We may hope for new heavens and a new earth, more pure and perfect than the former; as if this was a refiner's fire, to purge out the droſs and coarſe parts, and then caſt the maſs again into a new and better *mould. Burnet.*

The liquid ore he drain'd
Into fit *moulds* prepar'd; from which he form'd
Firſt his own tools: then what might elſe be wrought
Fuſile, or grav'n in metal. *Milton.*

Under the article FOUNDERY, vol. vii. p. 622 & ſeq. we have given an account of the moulds employed by makers of ſtatues, of bells, of cannon, and of printers' types. But moulds are of very extenſive uſe, being found, of different forms, ſizes, and denominations, among paper-makers, glaſs-grinders, glaziers, plumbers, tallow-chandlers, goldſmiths, goldbeaters, crucible-makers, firework-makers, baſket-makers, bullet-caſtors, and even ſhip-builders, maſons, &c. &c. ſo that their deſcriptions muſt naturally occur under various articles in this work.

A ſort of concave moulds made of clay, having within them the figures and inſcriptions of ancient Roman coins, are found in many parts of England, and ſuppoſed to have been uſed for the caſting of money. Mr. Baker, having been favoured with a ſight of ſome of theſe moulds found in Shropſhire, bearing the ſame types and inſcriptions with ſome of the Roman coins, gave an account of them to the Royal Society. They were found in digging of ſand, at a place called Ryton in Shropſhire, about a mile from the great Watling-ſtreet road. They are all of the ſize of the Roman denarius, and of little more than the thickneſs of our halfpenny. They are made of a ſmooth pot or brick clay, which ſeems to have been firſt well cleanſed from dirt and ſand, and well beaten or kneaded, to render it fit for taking a fair impreſſion. There were a great many of them found together, and they are not unfrequently found in Yorkſhire; but they do not ſeem to have been met with in any other kingdom, except that ſome have been ſaid to be once found at Lyons. They have been ſometimes found in great numbers joined together ſide by ſide, on one flat piece of clay, as if intended for the caſting of a great number of coins at once; and both theſe, and all the others that have been found, ſeem to have been of the emperor Severus. They are ſometimes found impreſſed on both ſides, and ſome have the head of Severus on the ſide and ſome well-known reverſe of his on the other. They ſeem plainly to have been intended for the coinage of money, though it is not eaſy to ſay in what manner they can have been employed for that purpoſe, eſpecially thoſe which have impreſſions on both ſides, unleſs it may be ſuppoſed that they coined two pieces at the ſame time by the help of three moulds, of which this was to be the middle one. If, by diſpoſing theſe into ſome ſort of iron frame or caſe, as our letter-founders do the braſs moulds for caſting their types, the melted metal could be eaſily poured into them, it would certainly be a very eaſy method of coining, as ſuch moulds require little time or expenſe to make, and therefore might be ſupplied with new ones as often as they happen to break. Theſe moulds ſeem to have been burnt or baked ſufficiently to make them hard; but not ſo as to render them porous like our bricks, whereby they would have loſt their ſmooth and even ſurface, which in theſe is plainly ſo cloſe, that whatever metal ſhould be formed in them would have no appearance like the ſand-holes by which counterfeit coins and metals are uſually detected. *Phil. Tranſ.* vol. xliv. p. 557. anno 1747.

MO'ULD, *ſ.* Caſt; form.—William earl of Pembroke was a man of another *mould* and making, being the moſt univerſally beloved of any man of that age, and, having a great office, he made the court itſelf better eſteemed, and more reverenced in the country. *Clarendon.*

What creatures there inhabit, of what *mould*,
Or ſubſtance, how endu'd, and what their power,
And where their weakneſs. *Milton.*

Hans Carvel, impotent and old,
Married a laſs of London *mould.* *Prior.*

The future or contexture of the ſkull. *Ainſworth.*—It is uſed in a ſenſe a little ſtrained by Shakeſpeare:

New honours come upon him,
Like our ſtrange garments, cleave not to their *mould*,
But with the end of uſe. *Macbeth.*

A ſpot: as, an iron-*mould;* [from the Goth. *malo*, ruſt; Sax. mal, a ſpot. More correctly, and anciently, *mole.*]

Thy beſt cote, Hankin,
Hath many *moles* and ſpottes. *Piers Ploughman.*

To MO'ULD, *v. n.* [*meluwen*, Teut. to be worm-eaten, from *meluwe*, a little worm; whence *multen*, rotten, putrified. But ſee the deduction from the French *mouiller*, by Mr. Tooke; and it muſt be obſerved, our word was at firſt written *moule* and *mowle.*] To contract concreted matter; to gather mould; to rot; to breed worms; to putrefy.—Let us not *moulen* thus in idleneſs. *Chaucer's Man of Lawes Prol.*—For feare of worme-eatyng, *mowlynge*, or ſtynking. *Bale's Acts of Eng. Vot.*—When the hoſt reſerved beginneth to *mowl* or putrifie, and ſhould ingender wormes, then an other ſubſtance ſucceedeth it. *Abp. Cranmer's Anſw. to Bp. Gardiner.*—Pureneſs cannot *moule*, nor ſweteneſs cannot be ſour. *Cranmer.*—There be ſome houſes wherein ſweet meats will relent, and baked meats will *mould*, more than in others. *Bacon.*

In woods, in waves, in wars, ſhe wants to dwell,
And will be found with peril and with pain;
Ne can the man that *moulds* in idle cell
Unto her happy manſion attain. *Spenſer.*

To MO'ULD, *v. a.* To cover with mould; to corrupt by mould.—Shall never cheſt *bymoulen* it, ne mough after byte it. *P. Ploughman.*—The gylt of man with ruſt of ſynne *ymouled. Lydgate's Lyfe of our Lady.*—Sour wyne, and *mowled* bread. *Cranmer's Anſw. to Gardiner.*—Very coarſe hoary *moulded* bread the ſoldiers thruſt upon their ſpears, railing againſt Ferdinand, who made no better proviſion. *Knolles's Hiſt. of the Turks.*

To MO'ULD, *v. a.* [*mouler*, Fr.] To form; to ſhape; to model.—By education we may *mould* the minds and manners of youth into what ſhape we pleaſe, and give them the impreſſions of ſuch habits as ſhall ever afterwards remain. *Atterbury.*—Fabellus would never learn any moral leſſons till they were *moulded* into the form of ſome fiction or fable like thoſe of Æſop. *Watts.*

Here is the cap your worſhip did beſpeak.—
Why this was *moulded* on a poringer,
A velvet diſh. *Shakeſpeare.*

To knead: as, to *mould* bread. *Ainſworth.*

MO'ULDABLE, *adj.* That may be moulded.—The differences of figurable and not figurable, *mouldable* and not *mouldable*, are plebeian notions. *Bacon's Nat. Hiſt.*

MO'ULDER, *ſ.* He who moulds.—We are againſt thoſe unthinking, overbearing people, who, in theſe odd times, under that pretence, [freedom of thought,] ſet up for reformers, and new *molders* of the conſtitution. *Bp. Berkeley's Diſc. Addr. to Magiſtrates.*

To MO'ULDER, *v. n.* To be turned to duſt; to periſh in duſt; to be diminiſhed; to wear or waſte away.—If he had ſat ſtill, the enemies' army would have *mouldered* to nothing, and been expoſed to any advantage he would take. *Clarendon.*—Finding his congregation *moulder* every Sunday, and hearing what was the occaſion of it, he reſolved to give his pariſh a little Latin in his turn. *Addiſon's Spectator.*

To them, by ſmiling Jove 'twas given,
Great William's glories to recal,
When ſtatues *moulder*, and when arches fall. *Prior.*

To MO'ULDER, *v. a.* To turn to duſt; to crumble.—The natural hiſtories of Switzerland talk of the fall of thoſe rocks, when their foundations have been *mouldered* with age, or rent by an earthquake. *Addiſon on Italy.*

With nodding arches, broken temples, ſpread,
The very tombs now vaniſh'd like their dead;
Some felt the ſilent ſtroke of *mould'ring* age,
Some hoſtile fury. *Pope.*

MO'ULDINESS, *ſ.* The ſtate of being mouldy.—Fleſh, fiſh, and plants, after a *mouldineſs*, rottenneſs, or corrupting, will fall to breed worms. *Bacon's Nat. Hiſt.*—The white down, or *lanugo*, which is produced on the ſurface of animal or vegetable matters in a ſtate of putrefaction. This mouldineſs, when viewed with a microſcope, affords a curious ſpectacle: being a kind of meadow, out of which ariſe herbs and flowers; ſome only in the bud, others full blown, and others decayed; each having its little root, ſtalk, and other parts; the figure of which may be ſeen in Hook's Micrographia. The ſame may be obſerved of the mouldineſs which gathers on the ſurface of liquid bodies. Mr. Bradley obſerved this mouldineſs in a melon very accurately, and found the vegetation of theſe little plants to be exceedingly quick. Each plant had its ſeeds in great abundance, which did not ſeem to be three hours before they began to ſhoot up; and in ſix hours more the new plant was complete and mature, and the ſeed ready to fall. When the fruit had been covered with a mould for ſix days, its vegetative quality began to abate, and it was entirely gone in two days more; then came on a putrefaction, and the fleſhy part of the melon yielding nothing but a ſtinking water, which began to have a gentle motion on its ſurface; and in two days' time maggots appeared, which in ſix more laid themſelves up in their bags, where they continued four days, and then came out flies. Theſe maggots were owing to the eggs of flies depoſited in the putrefaction. *Phil. Tranſ.* N° 349.

MO'ULDING, *ſ.* Any thing caſt in a mould, or that ſeems to have been ſo, though in reality it were cut with a chiſel or the axe.

MO'ULDINGS, *ſ.* in architecture, projectures beyond the naked wall, column, wainſcot, &c. the aſſemblage of which forms corniches, door-caſes, and other decorations of ARCHITECTURE. See that article, vol. ii.

MO'ULDWARP, *ſ.* [molꝺ, and ƿeoꞃpan, Sax. This is thought to be the proper and original name of the mole, as being a creature that *turns mould.*] A mole; a ſmall animal that throws up the earth.—With gins we betray the vermin of the earth, namely, the fichat and the *mouldwarp. Walton's Angler.*

Above the reach of loathful ſinful luſt,
Whoſe baſe effect, through cowardly diſtruſt
Of his own wings, dare not to heaven flie,
But like a *mouldwarp* in the earth doth lie. *Spenſer.*

MO'ULDY, *adj.* Overgrown with concretions.—The marble looks white, as being expoſed to the winds and ſalt ſea-vapours, that by continually fretting it preſerve it from that *mouldy* colour which others contract. *Addiſon.*

Is thy name Mouldy?
—Yea.
—'Tis the more time thou wert uſed.
—Ha, ha, ha; moſt excellent. Things that are *mouldy*
lack uſe. Well ſaid, ſir John. *Shakeſpeare's Hen. IV.*

MO'ULE, a river of Devonſhire, which runs into the Taw two miles north of Chumleigh.

MOU'LE (Le), a town of the iſland of Guadaloupe, on the north coaſt. Lat. 16. 30. N. lon. 61. 27. W.

MOU'LER. See SALER MOULER.

MOULIBER'NE, a town of France, in the department of the Mayne and Loire: ſix miles ſouth-eaſt of Baugé.

MOULIN', a town of France, in the department of the Moſelle, on the Moſelle: three miles ſouth-weſt of Metz, and five north-north-eaſt of Gorze.

MOULIN' (Charles du), a very eminent French juriſt, was born at Paris of an ancient and noble family in 1500. From his earlieſt years he diſtinguiſhed himſelf by the facility with which he imbibed the leſſons of his maſters, and the ardour of his application. After a preliminary education in the univerſity of Paris, he was ſent to ſtudy law at Orleans and Poitiers. He was admitted an advocate in the parliament of Paris in 1522, and acted for ſome years as a pleader in the courts; but an impediment in his ſpeech cauſed him at length to quit the bar, and devote himſelf to the compoſition of thoſe writings which have conferred ſo much celebrity on his name. In 1539, he publiſhed his "Commentaire ſur les Matieres féodales de la Coutume de Paris." In 1551 appeared his "Obſervations ſur l'Edit du Roi Henri II. contre les Petites Dates." This edict contained various regulations concerning the conduct of notaries and other perſons relative to the conveyance of benefices, and had ariſen from the hoſtility between the court of France and that of Rome. Du Moulin exaggerated all the abuſes imputed to the Roman ſee, and warmly defended the liberties of the Gallican church; whence his work, though much admired in France, was highly offenſive to the papal court, which procured a cenſure of it from the Sorbonne; and ſo much was the court of France afraid of the pope, that the parliament of Paris likewiſe decreed the ſuppreſſion of this work; and ſome zealous catholics found means to excite the populace againſt him as a favourer of hereſy: his houſe was pillaged, and he thought it neceſſary to quit Paris and retire into Germany. He ſpent ſome years at different towns in that country and in Burgundy, continually occupied in writing, and in giving lectures on the law with extraordinary reputation. In 1556, the count de Montbelliard, upon his refuſal to undertake an unjuſt cauſe, threw him into priſon, whence, after a confinement of four months, he was liberated in conſequence of the ſolicitations of his wife. He returned to Paris, which he quitted for Orleans in the religious wars of 1562. He again returned to the capital in 1564, where having printed "Three Conſultations," the laſt of which regarded the council of Trent, he was impriſoned in the Conciergerie, but ſoon obtained his diſcharge through the intereſt of Joan d'Albret. He was, however, enjoined to write no more on matters of ſtate, or theological ſubjects. He died in 1566, having firſt entirely reconciled himſelf to the catholic church.

Charles du Moulin was conſidered in France as an oracle of juriſprudence, of an authority equal to that of the greateſt names in the ſcience ancient or modern. He was conſulted from all the provinces of the kingdom, and his opinions were ſeldom deviated from in the civil or eccleſiaſtical tribunals. It was particularly in the knowledge of canon and cuſtomary law that he excelled; and in theſe his views were equally profound and extenſive. Of his own ſuperiority he was abundantly ſenſible, and he did not ſcruple to entitle himſelf "the Doctor of France and Germany;" and to prefix to his Conſultations, "I, who am ſecond to no one, and whom no one can teach any thing." His works were printed collectively in 1681, in 5 vols. folio, and form a great maſs of legal erudition. *Gen. Biog.*

MOULIN' (Peter du), a learned and very eminent French proteſtant divine, was the ſon of Joachim du Moulin, a proteſtant miniſter at Orleans, and was born at Buhy in the French Vexin, in the year 1568. He purſued his ſtudies at Paris, and afterwards in England, whence he removed to the univerſity of Leyden in Holland, where he taught philoſophy for ſome time with great applauſe. After having been admitted to the miniſtry, he accepted an invitation to become paſtor to the proteſtant church of Charenton, near Paris; where he acquired high reputation as a preacher, and by his able and ſpirited writings againſt the catholics, and in defence of the principles of his party. He was honoured with the appointment of chaplain to Catharine de Bourbon, princeſs of Navarre, and ſiſter of Henry IV. who in 1599 was married to Henry de Lorraine, duke of Bar. In the year 1615, he paid a viſit to England, on the invitation of king James I. who was at that time intent on bringing about an union between the reformed and Lutheran churches, and requeſted his aſſiſtance in drawing up a ſcheme which might have a tendency to determine the diſputes then exiſting between thoſe churches, and to prevent them for the future. Accordingly du Moulin applied himſelf to this work, and formed a plan for a congreſs of deputies from the proteſtant princes and churches, with propoſals relative to the ſubjects to be taken into their conſideration, and the manner of carrying them into execution, which, it was thought, offered a practicable expedient for accompliſhing that ſalutary purpoſe. This plan was communicated to the churches of France and the Low Countries; but no meaſures were adopted for carrying it on with ſpirit. Du Moulin's ſcheme may be ſeen at length in the ſecond volume of Brandt's Hiſtory of the Reformation in and about the Low Countries; and, though we cannot approve of ſome of its fundamental points, and have little faith in its efficacy, had it been brought to a fair trial, we think that it offers much matter that deſerves the ſerious attention of all well-wiſhers to peace and union among proteſtants, particularly ſome truly catholic and liberal poſitions, which the author ſeems to have forgotten afterwards, when he joined in the condemnation of the Remonſtrants.

In the year 1619, the curators of the univerſity of Leyden ſent Erpenius into France, to invite du Moulin and Rivet to become profeſſors of divinity in that city. With this invitation Rivet cloſed; but du Moulin could not be prevailed upon to relinquiſh his connexions in France. In 1620, he preſided in the ſynod of the proteſtants at Alais; and ſoon afterwards he received information that the king had determined to iſſue orders for laying him under an arreſt, in conſequence of his having written privately to king James, imploring his aſſiſtance on behalf of the Elector Palatine, his majeſty's ſon-in-law, and alſo entreating him to eſpouſe the cauſe of the reformed in France. Upon this he withdrew to Sedan, where the duke de Bouillon appointed him profeſſor of divinity, and miniſter. He was afterwards frequently invited by the ſynods of the French churches to reſume his labours amongſt them; but he preferred ſpending the remainder of his life under the protection of the duke de Bouillon. In this aſylum he acquired great celebrity as a preacher and profeſſor; by the numerous productions of his pen, critical, practical, and controverſial; and by his counſels, as well as perſonal ſervices, in managing the moſt important civil and eccleſiaſtical concerns of the French proteſtants. A vein of keen ſatire pervades ſeveral of his controverſial pieces. He died at Sedan in 1658, at the great age of ninety. The following is a liſt of his principal works: 1. Verſio et Notæ in Epiſt. Greg. Epiſcopi Nyſſæ, de euntibus Hieroſolym. cum ejuſdem Tractatibus de Peregrinationibus, et altaribus Chriſtianorum, 1607, 8vo. 2. De Monarchia Temporali Pontificis Romani, 1614, 8vo. 3. Vates, ſeu de Præcognitione futurorum, et bonis et malis Prophetis, 1640, 8vo. 4. Elementa Logicæ, Phyſicorum, et Ethicorum, 1645, 8vo. 5. Waters of Siloe to quench the Fire of Purgatory, 1612, 8vo. 6. The Buckler of the Faith, or a Defence of the Confeſſion of Faith of the reformed Churches in the Kingdom of France, againſt the Objections of the Sieur Arnoux, a Jeſuit, 1619, 8vo. 7. Catalogue of the Romiſh Traditions, 1632, 8vo. 8. The Novelty of Popery, 1633, 4to. 9. The Anatomy of the Maſs, 1636, 8vo. 10. Concerning the Judge of Controverſies and Traditions, 1636, 8vo. 11. The Capuchin, or the Hiſtory of thoſe Monks, 1641, 12mo. 12. Anſwer to the Book of Cardinal du Perron, intitled, A Reply to the Anſwer of James I. King of Great Britain, 1641, 4to. 13. Sermons, Letters in Latin and French, Relations of Conferences, &c. *Brandt's Hiſt. Reformation*, vol. ii.

MOULIN (Peter du), ſon of the preceding, and a divine of the church of England, was born, moſt probably, at Paris, while his father was miniſter of Charenton, about the year 1600. We are furniſhed with no particulars of his life before we find him at the univerſity of Leyden, where he was admitted to the degree of doctor of divinity. Afterwards he came into England, and was incorporated in the ſame degree at the univerſity of Cambridge; but whether he received any preferment in this country before the civil wars, is not known. After the reduction of Ireland by the parliament-forces, he went thither, and reſided ſucceſſively at Liſmore, Youghall, and Dublin, under the patronage of Richard earl of Cork. By that nobleman he was appointed tutor or governor to his ſons viſcount Dungarvon and Mr. Richard Boyle, whom he accompanied in that capacity to the univerſity of Oxford. Here Dr. du Moulin remained two or more years, and for a conſiderable time preached conſtantly in the church of St. Peter in the Eaſt, with great acceptability. In 1656, he was incorporated doctor of divinity in this univerſity. After the reſtoration of king Charles II. he was appointed chaplain in ordinary to his majeſty, and promoted to a prebendal ſtall in the metropolitan church of Canterbury, where he ſpent the remainder of his life. He died in 1684, when in the eighty-fourth year of his age. Anthony Wood gives him the character of being an honeſt and zealous Calviniſt; and ſays, that the laſt words which he uttered on his death-bed were, "Since Calviniſm is cried down, actum eſt de religione Chriſti apud Anglos," &c. He was the author of, 1. *Regii Sanguinis Clamor ad Cœlum*, which was publiſhed at the Hague, in 1652, in 4to. by Alexander More, and drew down on its foſter-father the ſevere literary caſtigation of John Milton. 2. A Treatiſe of Peace and Contentment of Mind, 1657, 8vo. which paſſed through ſeveral editions, in an enlarged form. 4. A Week's Soliloquies and Prayers, with a Preparation to the Holy Communion, 1657, 12mo. 4. Vindication of the Sincerity of the Proteſtant Religion in the Point of Obedience to Sovereigns, &c. in anſwer to a jeſuitical libel, intitled *Philanax Anglicus*, 1667, 4to. 5. Ten Sermons, preached on ſeveral Occaſions, 1684, 8vo. &c. *Wood's Athen. Oxon.* vol. ii.

MOULIN (Louis du), younger brother of the preceding, and the author of ſeveral learned pieces maintaining the principles of nonconformity to the church of England, was likewiſe, moſt probably, born at Paris, about the year 1603. He purſued his ſtudies at the univerſity of Leyden, where he was created doctor of phyſic; and afterwards he ſettled in England, and was incorporated in the ſame degree at the univerſity of Cambridge, in the year 1634. In 1649, he was incorporated M. D. at Oxford. He became zealouſly attached to the puritan cauſe, and particularly to the ſect of Independents, through whoſe influence he was appointed Camden-profeſſor of hiſtory at Oxford, by the committee of parliament for the reformation of the univerſity, about the year laſt mentioned. This preferment he retained till the reſtoration of Charles II. when he was expelled from it by the king's commiſſioners for regulating the univerſity. Upon this event he retired to the city of Weſtminſter, where he practiſed as a phyſician, and continued publiſhing various writings till his death, which took place in 1680, when he was about the age of ſeventy-ſeven. Wood calls him "a fiery, violent, and hot-headed, Independent; a croſs and ill-natured man." Among other works he publiſhed, 1. Epiſtola ad Renatum Veridæum (or Andrew Rivet), in qua aperitur Myſterium Iniquitatis noviſſime in Anglia redivivum, et excutitur Liber Joſephi Hall, quo aſſeritur Epiſcopatum eſſe Juris divini, 1641, 4to. under the aſſumed name of Irenæus Philadelphus. 2. Apologia pro Epiſtola ad Ren. Veridæum, 1641, 4to. 3. The Power of the Chriſtian Magiſtrate in ſacred Things, delivered in ſome Propoſitions ſent to a Friend, &c. 1650, 8vo. 4. Oratio Auſpicalis, cui ſubjuncta eſt Laudatio Clariſſ. Vir. Guil. Camdeni, 1652, 4to. 5. Paræneſis ad Ædificatores Imperii in Imperio, in qua defenduntur Jura Magiſtratus adverſus Moſeum Amyraldum, et cæteros Vindices poteſtatis Eccleſiaſticæ Preſbyterianæ, &c. 1656; dedicated to Oliver Cromwell. 6. Corollarium ad Paræneſim, &c. 1657, 8vo. 7. Of the Right of Churches, and of the Magiſtrate's Power over them, &c. 1658, 8vo. 8. Propoſals, and Reaſons whereon ſome of them are grounded, humbly preſented to the Parliament, towards the ſettling of a religious and godly Government in a Commonwealth, &c. 1659, 4to. 9. Patronus bonæ Fidei, in Cauſa Puritanorum, contra Hierarchos Anglos, &c. 1672, 8vo. for writing which he was committed to cuſtody. 10. Jugulum Cauſæ, ſeu nova, &c. ratio, per quam totus Doctrinarum Romanenſium Complexus, de quibus lis eſt inter Proteſtantes et Pontificios, &c. 1671, 8vo. to which are prefixed about ſixty letters to different perſons. 11. A ſhort and true Account of the ſeveral Advances the Church of England hath made towards Rome, &c. 1680, 4to. 12. The Conformity of the Government of thoſe who are commonly called Independents, to that of the ancient Primitive Chriſtians, 1680, 4to. Soon after his death a piece was publiſhed, as was ſuppoſed by Dr. Gilbert Burnet, which had been ſigned by the author, and is intitled, "His Laſt Words, being his Retractation of all the perſonal Reflections he had made on the Divines of the Church of England," 1680, 4to. *Wood's Athen. Oxon.* vol. ii. *Neal's Hiſt. Purit.* vol. iii.

MOULIN BA'Y, a bay of the iſland of St. Vincent, on the weſt coaſt. Lat. 13. 10. N. lon. 61. 18. W.

MOULINET', *ſ.* [Fr. a little mill.] In mechanics, a roller, which, being croſſed with two levers, is uſually applied to cranes, capſtans, and other ſorts of engines of the like nature, to draw ropes, heave up ſtones, &c. *Moulinet* is alſo a kind of turnſtile, or wooden croſs which turns horizontally upon a ſtake fixed in the ground; uſually placed in paſſages to keep out horſes, and to oblige paſſengers to go and come one by one. Theſe moulinets are often ſet near the outworks of fortified places at the ſides of the barriers, through which people paſs on foot. *Chambers.*

MOULI'NS, a city of France, and capital of the department of the Allier, and ſeated on the river of that name. Before the revolution, it was the capital of the Bourbonnois, and was eſteemed one of the pleaſanteſt towns in France; but Mr. Pinkney, the American traveller, who viſited it in 1808, deſcribes it differently: "Moulins ſomewhat diſappointed my expectation. It is indeed beautifully ſituated, in the midſt of a riſing and variegated country; but the interior of the town does not merit deſcription: the ſtreets are narrow, the houſes dark, and built in the worſt poſſible ſtyle. The market-place is only worthy of mention as introducing the price of proviſions: beef, and mutton, and veal, are plentiful; vegetables ſcarcely coſt any thing, and fuel is very moderate; fruit is ſo cheap as ſcarcely to be ſold, and very good; eggs two dozen for an Engliſh ſixpence; poultry abundant, and about ſixpence a fowl. A good houſe, ſuch a one as is uſually inhabited by the lawyer, the apothecary, or a gentleman of five or ſix hundred per annum, in the country-towns in England, is at Moulins from twelve to fourteen pounds per year, including garden and paddock. Our inn at Moulins was horrible; our beds would have frightened any one but an experienced traveller. The population amounts to 13,509 ſouls: the principal trade is cutlery. Near it is a medicinal ſpring. It is thirty-ſix poſts ſouth-ſouth-eaſt of Paris. Lat. 46. 35. N. lon. 3. 24. E.

MOULI'NS (Guyars des), a French prieſt, and canon of Aire in Artois, who flouriſhed towards the cloſe of the thirteenth century. He is entitled to the honour of having been the firſt perſon who gave a tranſlation of the Scriptures (or, more properly ſpeaking, a conſiderable portion of the Scriptures) in the French language. In this work he did not pretend to give a verſion from the originals of the ſacred writings, but only to render into French the celebrated performance of Peter, dean of Troyes in the twelfth century, diſtinguiſhed by the ſurname of *Comeſtor,* or the Eater. That performance conſiſts of an abridgment, particularly of the hiſtorical parts of the Old and New Teſtament, accompanied with gloſſes and comments; and it is the form in which alone the Bible was read for a long period in France. Des Moulins commenced his undertaking in 1291, when he was at the age of forty, and finiſhed it in about four years. In 1297, he was promoted to the deanery of his chapter; which is the laſt circumſtance that is related concerning him, no mention being made of the time of his death. It has been maintained by ſome critics that the work attributed to des Moulins ought to be aſcribed to Nicholas Oreſme, biſhop of Liſieux in the fourteenth century. This point father Simon has fully diſcuſſed, and decided very ſatisfactorily in favour of the claims of our author. His tranſlation was printed in 1487, by order of Charles VIII. *Simon's Hiſt. Crit.*

MOULINS EN GILBE'RT, a town of France, and principal place of a diſtrict, in the department of the Nyevre: ſeven miles ſouth-weſt of Château Chinon, and twenty-ſeven eaſt of Nevers. Lat. 46. 59. N. lon. 3. 53. E.

MOULINS LA MA'RCHE, a town of France, in the department of the Orne: nine miles ſouth-weſt of L'Aigle, and eighteen north-eaſt of Alençon.

MOULON'GE I'SLANDS, a cluſter of ſmall iſlands in the Indian Sea, near the coaſt of Africa. Lat. 10. 45. S.

MOU'LS, a ſmall iſland near the north coaſt of the county of Cornwall, a little to the north of the mouth of the river Alan.

MO'ULSEY. See vol. xi. p. 749.

MO'ULSHAM. See vol. iv. p. 142, 3.

To MO'ULT, *v. n.* [*muyten,* Teut. Our own word at firſt was *mout* or *mowt;* from *muto,* Lat. to change.] To ſhed or change the feathers; to loſe feathers:

Time ſhall *moult* away his wings,
  Ere he ſhall diſcover
In the whole wide world again
  Such a conſtant lover. *Suckling.*

MO'ULT, *ſ.* The act or time of moulting; as, Many birds do not acquire their full plumage till after their ſecond *moult.*

MO'ULTAN, a province of Hindooſtan, principally lying on the eaſt ſide of the Indus; bounded on the north by Lahore, on the eaſt by Delhi, on the ſouth by ſandy deſerts which ſeparate it from Agimere, and on the weſt by Perſia. In 1739, this country was ceded to Perſia. It at preſent belongs to the dominions of the ſheiks of Candahar. The principal productions are cotton, ſugar, opium, ſulphur, &c. Its trade in the time of Aurungzebe was flouriſhing; but at preſent it is inconſiderable, on account of the rapacious diſpoſition of its poſſeſſors.

MO'ULTAN, a city of Hindooſtan, the capital of the before-mentioned province, and one of the moſt ancient towns of Hindooſtan. Although it is a place of ſmall extent for the capital of viceroyalty, it is ſtrongly fortified, and much celebrated for its pagoda, which is held in great veneration by the Hindoos. This is the modern capital of the country deſigned by the hiſtorians of Alexander for that of the Malli, although the ancient capital ſtood nearer to Toulumba.

Moultan ſtands about four miles from the left bank of the Cheraub, or Aceſines; it is four miles and a half in circumference; and ſurrounded with a fine wall more than forty feet high, flanked with towers at regular diſtances. The ſurrounding country is pleaſant, well cultivated, and watered from wells, with the help of the Perſian wheel. The principal manufacture is ſilk, and a kind of carpet inferior to that of Perſia. This account is by Mr. Elphinſtone, who, with the miſſion to Caubul, 1809, halted here nineteen days. Lat. 30. 36. N. lon. 71. 22. E.

MO'ULTING, or MOLTING, *ſ.* The falling-off or change of hair, feathers, ſkins, horns, or other parts of animals; happening in ſome annually, in others only at certain ſtages of life.—Some birds, upon *moulting,* turn colour; as robin red-breaſts, after their *moulting,* grow to be red again by degrees. *Bacon.*—The generality of animals moult in the ſpring. The moulting of a hawk is called *mewing.* The moulting of a deer is the quitting of his horns in February or March. The moulting of a ſerpent is the putting off his ſkin. Even a horſe's caſting his coat is ſometimes called moulting; at which period theſe uſeful animals ſhould be well dreſſed, and not have too much work; for every creature is affected with weakneſs at this period.

MO'ULTING, *adj.* Under the influence of the *moult:*

The widow'd turtle hangs her *moulting* wings,
And to the woods in mournful murmurs ſings. *Garth.*

MO'ULTONBOROUGH, a town of New Hampſhire, now called *New Hampton.*

MOULTRIEVIL'LE, a town of South Carolina, on Sullivan's Head.

To MOU'NCH, MAUNCH, or MOUCH, *v. a.* [This word is retained in Scotland, and denotes the obtunded action of toothleſs gums on a hard cruſt, or any thing eatable: it ſeems to be a corruption of the French word *manger*, to eat, or *macher*, to chew.] To chew; to maſticate.—Some of them would *mouche* their meate alone. *Chaucer's Tr. and Cr.*

A ſailor's wife had cheſnuts in her lap,
And *mouncht*, and *mouncht*, and *mouncht*. *Shakeſpeare.*

MOU'ND, *ſ.* [munꝺian, Sax. to defend.] Any thing raiſed to fortify or defend: uſually a bank of earth and ſtone.—The ſtate of Milan is like a vaſt garden ſurrounded by a noble *mound* of rocks and mountains. *Addiſon.*

No cold ſhall hinder me with horns and hounds
To thrid the thickets, or to leap the *mounds.* *Dryden.*

To MOU'ND, *v. a.* To fortify with a mound:

We will ſweep the curled vallies
Bruſh the banks that *mound* our alleys;
We will muſter nature's dainties. *Drayton.*

MOU'ND, *ſ.* [*monde*, Fr.] In heraldry, a ball or globe with a croſs upon it, ſuch as our kings are uſually drawn with, holding it in their left hand, as they do the ſceptre in the right. See LONDON, vol. xiii. p. 442.

MOU'NEE, a town of Hindooſtan, in the circar of Hiſſar: twenty miles north-weſt of Hiſſar.

MOUNESNESS', a cape on the ſouth-eaſt coaſt of the iſland of Unſt, one of the Shetland Iſlands. Lat. 61. 3. N. lon. 1. 2. W.

MOU'NSEY (John Meſſenger, M. D.), an Engliſh phyſician of ſome eminence, but of the early part of whoſe long life very little is known, was born in the year 1692. In 1742 we find him at Abo in Finland, the head-quarters of the Ruſſian army, with the title of phyſician to the army of the czarina; whence he tranſmitted to the Royal Society "An Abſtract of the Remarkable Caſe and Cure of a Woman, from whom a Fetus was extracted, that had been lodged 13 Years in one of the Fallopian Tubes;" which is printed in the Phil. Tranſ. for 1747, 8. vol. lxv. After his return from abroad, Dr. Mounſey was elected phyſician to Chelſea Hoſpital; which ſituation he enjoyed for a number of years, to the great diſappointment of ſeveral other phyſicians, to whom the reverſion of that place had been promiſed. Dr. M. was a very eccentric character; and, although the few written documents, which he has left on medical or other ſubjects, poſſeſs no remarkable excellence; yet we are told that in his converſation he diſcovered great ſtrength of underſtanding, joined to an exquiſite degree of humour. He died in Dec. 1788, at the advanced age of ninety-ſix. In the morning on which he died, he ſaid to his attendant, "I ſhall certainly loſe the game." Being aſked what game? he replied, "The game of 100, which I have played for very earneſtly many years; but I ſhall now loſe it, for I expect to die in a few hours:" and his prediction proved true. By his will he directed that his body ſhould not ſuffer any funeral ceremony, but undergo diſſection; after which, the "remainder of his carcaſe (to uſe his own expreſſion) may be put into a hole, or crammed into a box with holes, and thrown into the Thames," at the pleaſure of the ſurgeon. The ſurgeon to whom he aſſigned this charge was Mr. Forſter, of Union-court, Broad-ſtreet. In purſuance of the doctor's ſingular will, Mr. F. gave a diſcourſe, in the theatre of Guy's Hoſpital, to the medical ſtudents and a conſiderable number of intelligent viſitors, on the diſſection of the body. He introduced the ſubject by a ſketch of the mental powers of Dr. M. obſerving, that his underſtanding was very comprehenſive, that his genius and wit ranked him high in the literary world, that his company was courted by men of the firſt character for talents and diſtinction, and that he retained the ſtrength of his judgment, and the livelineſs of his fancy, to the very advanced period at which his life ended. He vindicated the doctor from all affectation, vanity, or whim, in having ordered his body for diſſection, and prohibited all funeral ceremony, ſtating, that whatever of ſingularity might appear in his will was reſolvable merely into a zeal for knowledge, and a deſire of benefiting mankind, as he conceived that a diſſection of his body would lead to the illuſtration of much uſeful truth. He mentioned alſo the philoſophic contempt in which the doctor held all funeral pomp, and every ſpecies of unneceſſary form. Mr. F. then adverted to the morbid parts which he had prepared for demonſtration, deſcribing the appearance of the thorax and the abdomen, with their viſcera. The moſt remarkable circumſtance he mentioned was, "that all the cartilages between the vertebræ were abſorbed, conſequently the ſpine was one entire bone:" hence the extreme difficulty the doctor experienced, for many years, in riſing from the horizontal poſition. After the whole of the demonſtration he ſaid, that, having made his report of theſe morbid affections to Dr. Heberden, according to the will, he ſhould depoſit all the parts with theſe ſingular appearances in the muſeum of Mr. Cline, as that able anatomiſt would doubtleſs, in his lectures, be able to render them ſubſervient to the promotion of public utility. *Gent. Mag.* 1788, p. 1183.

MOU'NT, *ſ.* [munꞇ, Sax. *mont*, Fr. *mons*, Lat.] A mountain; a hill.—The words *mount* and *mountain* are ſynonymous; but the former is ſcarcely ever uſed in proſe, unleſs when accompanied with ſome proper name; as *mount* Ætna, *mount* Gibel, *mount* Lebanon, *mount* Sinai, *mount* Atlas, *mount* Parnaſſus, &c. *Chambers.*—Jacob offered ſacrifice upon the *mount.* *Gen.* xxxi. 54.

Behold yon mountain's hoary height,
Made higher with new *mounts* of ſnow. *Dryden.*

An artificial hill raiſed in a garden or other place.—He might ſee what *mounts* they had in ſhort time caſt, and what a number there was of warlike ſoldiers. *Knolles.*—A public treaſure; a bank. *Now obſolete.*—Theſe examples confirmed me in a reſolution to ſpend my time wholly in writing; and to put forth that poor talent God hath given me, not to particular exchanges, but to banks or *mounts* of perpetuity, which will not break. *Bacon.*

To MOU'NT, *v. n.* [*monter*, Fr.] To riſe on high.—Doth the eagle *mount* up at thy command, and make her neſt on high? *Job*, iii. 27.

The fire of trees and houſes *mounts* on high,
And meets half-way new fires that ſhow'r from ſky. *Cowley.*

To tower; to be built up to great elevation.—Though his excellency *mount* up to the heavens, and his head reach unto the clouds, yet he ſhall periſh. *Job*, xx. 6.—To get on horſeback.—He was readie to his ſteede to *mount.* *Spenſer.*—[For *amount.*] To attain in value:

Bring then theſe bleſſings to a ſtrict account,
Make fair deductions, ſee to what they *mount.* *Pope.*

To MOU'NT, *v. a.* To raiſe aloft; to lift on high.—The air is ſo thin, that a bird has therein no feeling of her wings, or any reſiſtance of air to *mount* herſelf by. *Raleigh.*

What power is it which *mounts* my love ſo high,
That makes me ſee, and cannot feed mine eye? *Shakeſp.*

To aſcend; to climb:

Shall we *mount* again the rural throne,
And rule the country kingdoms once our own. *Dryden.*

To place on horſeback; to furniſh with horſes.—Clear reaſon, acting in conjunction with a well-diſciplined but ſtrong and vigorous fancy, ſeldom fail to attain their end: fancy without reaſon is like a horſe without a rider; and reaſon without fancy is not well *mounted.* *Grew.*

Three hundred horſes in high ſtables fed,
Of theſe he choſe the faireſt and the beſt,
To *mount* the Trojan troop. *Dryden's Æneis.*

To embelliſh with ornaments.

To Mount *guard.* To do duty and watch at any particular poſt.—Is not *ſtatio* properly a military term, ſignifying a ſoldier's being upon his duty, or (as we now ſay in England) *mounting the guard? Harris on Iſaiah.*

To Mount *a cannon.* To ſet a piece on its wooden frame for the more eaſy carriage and management in firing it.

MOU'NT AI'RY, a town of North Carolina: four hundred miles ſouth of Waſhington.

MOU'NT AI'RY, a town of North Corolina: twenty-one miles north of Saliſbury.

MOU'NT BA'KER, a mountain on the weſt coaſt of North America. Lat. 48. 39. N. lon. 238. 20. E.

MOUNT BAT'TOCK, a mountain of Scotland, in the weſt part of the county of Kincardine: ſixteen miles north-weſt of Bervie.

MOUNT's BA'Y, a bay in the Engliſh Channel, on the ſouth coaſt of the county of Devon, between the Land's End and Lizard Point. Lat. 50. 7. N. lon. 5. 20. W. See Marazion, vol. xiv. p. 333.

MOUNT CAL'DER, a barren mountain, which forms the extreme ſouth point of Port Protection, in the north-weſt part of the Prince of Wales's Archipelago.

MOUNT CAL'VARY. See Calvary.

MOUNT CAM'EL, a mountain of New Zealand, at the north extremity of Eaheinomauwe: thirty miles ſouth-ſouth-eaſt of Cape Maria Van Diemen.

MOUNT CAM'PBEL, a mountain on the north-eaſt coaſt of Kerguelen's Land. Lat. 49. 12. S. lon. 70. 20. E.

MOUNT CAR'MEL. See Carmel, vol. iii.

Knights of Mount Carmel. See the article Knighthood, vol. xi. p. 816.

MOUNT CAS'SEL. See *Mont* Cassel, vol. iii. p. 371. and Morini, vol. xv. and, for a flouriſh upon the ſurrounding ſcenery and the French revolution, ſee Gent. Mag. for Apr. 1816. p. 294.

MOUNT CAU'CASUS. See Mount Kasbeck.

MOUNT of CO'COS, an iſland in the South Pacific Ocean, diſcovered by Le Maire and Schouten in the year 1616. It is repreſented as a high mountain full of trees, of which the greater part appeared to be cocoa-nut trees. The inhabitants were handſome, ſtout, and well-proportioned; their hair of various colours, and worn in different forms; very greedy of iron, and thieves. The navigators obtained cocoa-nuts, bananas, yams, ſome ſmall hogs, and freſh water. The natives call it Kootahee. Lat. 16. S. lon. 177. E.

MOUNT DES'ERT, an iſland near the coaſt of Main, about thirty-ſix miles in circumference. Lat. 44. 20. N. lon. 68. 10. W.

MOUNT ED'GECUMB, a round mountain on the north-eaſt coaſt of New Zealand, in the South Pacific Ocean. Lat. 38. S. lon. 176. 53. E.

MOUNT ED'GECUMB, a mountainous iſland in the North Pacific Ocean, at the entrance of Norfolk Sound, near the weſt coaſt of America.

MOUNT ED'GECUMB, a mountain of England, on the weſt coaſt of the entrance into Plymouth Harbour, on the coaſt of Devonſhire. Lat. 50. 21. N. lon. 4. 9. W.

Here are ſituated the beautiful ſeat and park, belonging to the earl of Mount Edgecumbe. The public days for viſiting this moſt enchanting ſpot are Mondays, Wedneſdays, and Fridays; the only ceremony required, being that of ſetting down your name and addreſs in a book kept at the porter's lodge. You are then permitted to ſtroll through the park and grounds, which contain moſt delightful walks, particularly that which terminates with a view of Cawſand Bay. A cottage is built in the park for the accommodation of ſtrangers, where hot water for making tea, and other conveniences, may be procured. The vaſt number of parties, in the ſummer-time, from the adjacent towns and country, for the purpoſe of viſiting Mount Edgecumbe, gives the park the appearance of a fair being held. On the public days, numerous groupes are aſſembled, ſome playing, ſome ſinging, ſome dancing, which forms a rural ſcene, highly exhilarating, from the number of beautiful well-dreſſed women, who give life to the different parties. The walks and grounds from various points are ſuppoſed to poſſeſs the moſt complete views of hill, wood, and water, in England. *Webb's Obſ. on various Parts of Great Britain;* 1811.

MOUNT FA'IRWEATHER, a mountain on the weſt coaſt of North America: twelve miles north-eaſt of Cape Fairweather.

MOUNT FE'LIX, a lofty Cape on the north-eaſt coaſt of Africa, at the entrance of the Arabian Gulf: forty miles weſt-north-weſt of Cape Guardafui. Lat. 12. N. lon. 50. 40. E.

MOUNT GAR'DNER, a mountain and promontory on the ſouth-weſt coaſt of New Holland, forming the eaſt boundary of King George the Third's Sound. Lat. 35. 4. S. lon. 118. 29. E.

MOUNT HEL'LEBY, a lofty mountain in the iſland of Barbadoes.

MOUNT HER'MON. See Hermon, vol. ix.

MOUNT HIL'LARY, a mountain of Ireland, in the county of Cork: ſeven miles weſt of Mallow.

MOUNT HOL'LY, a town of the ſtate of New Jerſey: twelve miles ſouth-eaſt of Burlington.

MOUNT HOL'LY, a townſhip in Rutland county, Vermont, formed out of a part of Wallingsford, a part of Ludlow, and a gore of land between them; containing 668 inhabitants.

MOUNT HOPE BA'Y, a bay on the north-eaſt part of Narraganſet Bay.

MOUNT HO'REB. See Horeb, vol. x.

MOUNT JOLI', lies on the northern coaſt of the gulf of St. Lawrence, in Labrador. Lat. 50. 5. N. lon. 61. 35. W.

MOUNT JOY', a Moravian ſettlement in Pennſylvania: ſixteen miles from Litiz.

MOUNT JOY', the name of two townſhips in Pennſylvania; the one in Lancaſter, the other in Adam's, county.

MOUNT I'SLAND, an iſland in the gulf of St. Lawrence, on the coaſt of Labrador. Lat. 50. 5. N. lon. 61. 35. W.

MOUNT KAS'BECK, one of the higheſt of the Caucaſian mountains, which, with the adjacent country, was explored by Meſſrs. Englehardt and Parrot in the year 1811. They were furniſhed with guides by the lord of the country, (under the Ruſſian government,) and *Kaſbeck* is the name by which he is diſtinguiſhed. The Ruſſians, governing by policy as well as ſtrength, ſeek to maintain their influence by beſtowing military rank and pay, and orders of knighthood, upon the Caucaſian chieftains.

Kaſbeck is a prince in his own right; and, although he has condeſcended to accept a colonelcy in the Ruſſian ſervice, he is one of the moſt powerful of theſe leaders. He is lord of the village Stephan Zminda, otherwiſe Kaſbeck, which is ſituated at the foot of the lofty mountain which bears the latter name; and the Oſſetes who inhabit the Valley of the Terek, from the fortreſs Dariel to Mount Kaſchaw, are ſubjected to him. This valley is upwards of thirty miles in length; and all the villages within it are either under his protection, or peopled by his immediate vaſſals. General del Pozzo, the commandant of Wladi Kawkas, invited Kaſbeck to the fort, in order that he might introduce him to Englehardt and Parrott, who were deſirous of viſiting the ſources of the Terek, and of exploring the mountain which Kaſbeck conſiders as his property. The prince attended accordingly, accompanied by a train of well-armed followers. He was diſtinguiſhed amongſt them by his white horſe and his dreſs; and there was a ſlight and ſuperficial appearance of European breeding about him. Near Stephan Zminda is the caſtle of the prince, formed by a high wall, encloſing his dwelling-houſe and ſeveral other buildings. The caſtle of the Baron in Candide was the fineſt in all Weſtphalia, becauſe it had a door and windows; and Kaſbeck is not a little proud of his reſidence for the ſame reaſon. The faſtneſs, it ſeems, wore rather a forbidding aſpect. Kaſbeck's retainers came out to meet him; they were all armed; and they evidently looked on the ſtrangers with an eye of ſuſpicion. Englehardt and Parrott did not dare to diſmount, till the dogs, who were ready to tear them in pieces, were driven away. They were then ſhown into a kind of neglected barn; the walls were damp; it received the light only through a loop-hole; nor did it contain any furniture whatever. Preparations, however, were ſoon made for their entertainment. The ſervants brought in chairs and tables, and beds, and their dinner made its appearance: it was a European meal, but badly dreſſed. Kaſbeck filled a ſilver beaker with wine, which he drank off to the health of his gueſts. When they had finiſhed eating, the Georgian ſervants took poſſeſſion of the remains of the feaſt, and quarrelled and fought for the ſcraps and bones. The villagers would not give a clear account of the relation in which they ſtood toward their chieftain. They ſaid that "they were not *obliged* to obey his orders; they worked freely, and of their own accord; he paid them either in victuals or in money; and, in their turn, they made him *preſents* of a portion of their crops." The true nature of theſe feudal benevolences, however, might be eaſily judged from the care which Kaſbeck took to number the ſheaves in the fields; and the chaſtiſement which was inflicted on two of the villagers, who had attempted to quit the valley, and to carry off their cattle to Wladi Kawkas, gave a practical illuſtration of their rights and privileges. The tributes, however, which Kaſbeck can exact from his vaſſals, muſt be of ſmall account. The Oſſetes are miſerably poor; they cultivate no other grain but rye and barley; and theſe in ſmall quantities. Kaſbeck is proprietor of numerous flocks of ſheep; but he has no opportunity of turning them into money. Englehardt therefore conjectures, that his income ariſes, not from his chieftainſhip, but from his trade. He is a carrier on a large ſcale, and ſupplies the Ruſſian government with forage and draught-cattle; and he is without a competitor in this profitable calling.

The firſt excurſion of Englehardt and Parrott was to the ſprings of the Terek. The guides on this occaſion were ſeven ſturdy Oſſetes from the village Kobi. Their departure was accompanied with a certain degree of ſolemnity. Kaſbeck ordered his attendants to quit the room; and, after having divided amongſt the guides the money which had been promiſed to them, he addreſſed their leader in the Ruſſian language: "Gegor Machmetiew Tawamiew, I deliver theſe men into thy care; their heads are as my head; lead them truly and faithfully to the ſprings of the Terek, and conduct them ſafely back again; if they ſeparate from each other, each muſt be equally protected; and now depart with the Lord." The valley of the Terek is peopled by the Oſſetes. This tribe is ſaid to have been anciently converted to Chriſtianity by the Georgian miſſionaries. But their converſion was probably little more than nominal; and at preſent they are very ſinful and lukewarm Mahometans. A Turkiſh mullah ventures among them now and then, to inſtruct them in the law of the faithful; and the Oſſetes treat the Mahometan miſſionaries with great perſonal reſpect, at the ſame time that they are wholly heedleſs of their exhortations.

The excurſions of Englehardt and Parrott furniſh us with ſtriking pictures of the manners of the Caucaſians. Their guides avoided coming too near to the hamlets. "The villagers," as they told the travellers, "often fire at one another from the towers of their houſes, if any trifling diſpute has taken place; and ſtrangers are in ſtill greater danger." Near Abana they diſcovered a mineral ſpring. Englehardt and his companion taſted the water, which is ſtrongly aſtringent. They wiſhed to examine the ſtrata from whence it ſprung; but, when they came near to the rocks, the women, who obſerved them, ſcreamed out their threats and vituperations. The guides feared that the male Oſſetes would come to the aſſiſtance of their ſcreaming helpmates; and our travellers withdrew. On their return they had better ſucceſs; and they procured ſpecimens of the rock; a clay-ſlate, which is very rich in alum and ſulphur. The women were well aware of the mineral contents of the rock; and hence aroſe their jealouſy of the ſtrangers; for the Oſſetes make their own gunpowder, which is of an excellent quality; and they are very careful to conceal the proceſſes which they employ, and the places where they collect the materials for this important manufacture.

The mountains of Caucaſus form two chains running parallel to each other. The higheſt range is covered with perpetual ſnow. The lower or northern mountains are called the Black Mountains. In the ſnowy chain, the mountains Elbrus and Kaſbeck riſe towering above the reſt, the former of which is ſuppoſed to exceed Mont Blanc in height; and its baſe is unapproachable during the greater part of the year, when it is ſurrounded by ſwamps formed by the melted ſnows. The neighbourhood of Mount Kaſbeck affords greater facilities; they were, however, compelled to wait many days before the weather was ſuch as to allow them to make the attempt of attaining the ſummit of the ſnow-mountain, till at length a briſk ſouth wind diſperſed the clouds which hung upon it. "It is now a good time to aſcend the mountain," ſaid the old Georgian prince; "and your guides are ready." Theſe guides were two Georgian hunters, and an interpreter; and the travellers were alſo furniſhed with a horſe, upon which their inſtruments and baggage were loaded. The way up the ſide of the mountain lay through romantic ravines; and, after they had journeyed up hill during ſome hours, the top of Kaſbeck appeared yet more diſtant than when it was ſeen from the banks of the Terek, as they were now at the foot of a lofty cliff of rock over which it was juſt perceptible. They reſted themſelves in a hut belonging to Kaſbeck's ſhepherds; and the two Georgians already began to be faint-hearted, and propoſed to ſtop there: but our travellers were not to be deterred; and after a toilſome aſcent, they found themſelves at the verge of the fields of frozen ſnow, which perpetually cover the upper parts of the mountain. From this ſpot they proceeded, accompanied only by one of their guides.

Caucaſus is yet the ſeat of fiction. The legends which have been embelliſhed by the inventive fancy of the Arabs and Perſians, are found even now amongſt the inhabitants. Theſe mountains have been conſidered as the cradle of the nations of Europe and Aſia; and, if we knew more of the traditions which are remembered in this diſtrict, much curious illuſtration would be given to the mythology of the old world. The Caucaſians believe that Mount Elbrus is haunted by numberleſs ſpirits and demons, whoſe ſovereign, Dſchin Padiſchaw, ſtrikes the wretch who invades his dominions with inſtant blindneſs. Dſchin Padiſchaw is undoubtedly the Gian ben Gian of the Tarikh Tabari, though now he is no better than King Puck. Elbrus, "the gracious, the holy, mountain," is alſo venerated, becauſe the ark of Noah firſt drifted there; the veſſel afterwards floated to Mount Ararat: nor can the ſummit of the mountain be attained by ſinful man. Kaſbeck is viewed with equal awe. The neighbouring tribes, whoſe creed is a ſtrange amalgamation of Paganiſm and Chriſtianity, and Judaiſm and Mahometry, revere it under the name of *Chriſte-Zup*, the Hill of Chriſt. It was once inhabited by the Virgin Mary; and an enormous bird, a roc, or a ſimorgh, watches over the cradle and the garments which ſhe left there. And ſacrifices are offered up by them to the prophet Elias, who alſo affects this high place of devotion. In the reign of Heraclius, a couple of adventurous prieſts, father and ſon, undertook to viſit the relics in the mountain. The old man ſucceeded; he brought down a rag of the tent in which the cradle is placed, and a chip of the cradle itſelf, both of which bore the moſt authentic marks of antiquity, for the cloth was worm-eaten, and the wood was worm-eaten; beſides which, he obtained a ſample of the treaſure of the Virgin Mary, from which it appeared, that, in the days of the Virgin Mary, the current coin was very much like the Turkiſh paras which were afterwards coined in the days of the emperor Selim. The old prieſt preſented his acquiſitions to his ſon; and then he informed him, that it was his intention to aſcend the hill again, to rejoin the company of the holy angels; and the ſtory ends in myſtery, for he certainly never returned. It is thought that he periſhed amongſt the ſnows. We can recogniſe the ſame vein of fabling in the tales which ſir John Mandeville has given reſpecting "Mounte Ararathe, which a man maye not gon up for gret plentie of ſnow that is alle weys in that mountayne. So that no man may gon up there; no, never man did ſith the tyme of Noe, ſaf a monke, that by the grace of God brought one of the planks of the ark down, which is yet in the mynſter at the foot of the mountayne."

Englehardt and Parrott were labouring up the glaciers, when their guide told them they muſt ſtop: "No one dares to go further than yonder crag; if you try to paſs beyond it, the mountain will diſappear in darkneſs, and your lives will be forfeited." But from this ſpot, he ſaid, they could ſee the wonders of Kaſbeck; "the croſs on that ridge of rocks, and the monaſtery on the inacceſſible cliff, in which the cradle of Chriſt, and other invaluable treaſures, are depoſited." Whilſt he was ſpeaking, two pillars of cloud emerged out of the gulf before them, and hid the rocks to which he was pointing. The Georgian now appeared ſeized with a fit of enthuſiaſm, which cauſed him to forget his warnings; and he ran beyond the fated crag, croſſing himſelf, and exclaiming aloud, Chriſte, Chriſte, Chriſte! The clouds became thinner; he lifted up his voice, and repeated his ejaculations; when all at once there aroſe a violent guſt of wind, which rent the cloudy veil. The guide was overjoyed at the ſucceſs of his exorciſms: he ſnatched the teleſcope from Englehardt, and exclaimed, that he ſaw the croſs, and the iron door and ſhining pillars of the monaſtery. The travellers took the teleſcope in their turn, but they could diſcover nothing ſave rocks of porphyry, ſhivered and broken in fantaſtic forms; and they began to ſuppoſe, that the wondrous objects in which the hunter was rejoicing, were nothing more than the creations of his fancy; when at length they alſo diſtinctly ſaw the croſs on the rocks. They would gladly have purſued the enterpriſe: but the clouds gathered round them again, and it was near nightfall; they were therefore compelled to make the beſt of their way to the ſhepherd's hut, a mere hovel of ſtones rudely piled, where they paſſed the night. On the next day they renewed their endeavours to ſurmount the difficulties which oppoſed them; but there was no probability of perſuading the guide to proceed much further than they had done on the preceding day. Dr. Parrott ſhowed him a couple of ducats; but neither bribes, nor threats, nor entreaties, could move him; and the doctor was compelled to proceed alone along the glaciers bearing his barometer in his hand. As he aſcended, the fiſſures in the frozen ſnow became wider, the ſlope became ſteeper; and, when he had reached a ſtation which he aſcertained by barometric admeaſurement to be 2003 toiſes above the level of the Black Sea, he was reluctantly compelled to deſiſt. By dint of great exertion, however, he reached the croſs which he had ſeen from below; it was hewn out of a block of porphyry, and fixed, by means of ſmaller ſtones, on another block which projected from the face of the cliff. Near the croſs was a low circular wall of looſe ſtones; and, on the other ſide, there is a cairn of ſtones of conſiderable height, near which is ſtanding a rude pillar of porphyry. The *monaſtery*, as the guide called it, and which is the ſubject of ſo many legends, is a grotto excavated in the cliff, about 150 toiſes higher than the croſs: it appeared wholly inacceſſible from beneath; but Dr. Parrott conjectured, that it might be entered by gaining the top of the rocks, and then letting the adventurer down in front by means of a rope. A part of the rock was cut ſmooth; and in the centre of this ſpace was the portal of the cavern, which is partly cloſed by two ſlabs of ſtone reſembling folding doors. They are ſupported on each ſide by pillars; and the ſtone doors, as well as the pillars, glitter like mica. The great elevation of this grotto, renders it exceedingly remarkable. The rock is at leaſt five hundred toiſes above the boundary of perpetual ſnow; and, in this reſpect, we believe that, whether it be of Chriſtian origin, or whether, as is more probable, it ſhould be referred to a period anterior to the introduction of Chriſtianity, the grotto of Mount Kaſbeck is without a parallel amongſt the cavern temples and ſepulchres of antiquity. Dr. Parrott was indefatigable; and he made a third attempt to gain the ſummit of Mount Kaſbeck, in company with four Ruſſian ſoldiers from the garriſon of Stephan Zminda; and, although he did not reach the very top, yet he came ſufficiently near to it to enable him to aſcertain the total height of the mountain with tolerable accuracy. He reckons it at 2400 toiſes above the level of the Black Sea.

Our travellers lament that they had not an opportunity of extending their botanical reſearches through the Caucaſian ranges, particularly as they found the vegetation of Mount Kaſbeck was rich in new and intereſting appearances. At the height of 1800 toiſes above the level of the ſea, and four hundred higher than Ramond, under an equal parallel of latitude, they found the laſt plant in the Pyrenees; they diſcovered a new ſpecies of Ceraſtium, to which they gave the name of *Ceraſtium Kaſbeck*. The plants which ſprung from the *debris* of the decompoſed porphyry rocks, in which there was not the ſlighteſt admixture of vegetable mould, were both in bud and in flower: "It was to be expected that ſuch an unuſual habitat would be attended with correſponding phenomena in the ſtructure of the plant; and many particulars were obſervable, which were ſufficiently remarkable. The buds, the capſules, and the ſeeds, had ſuſtained no alteration; the firſt were full as large as in the Ceraſtium alpinum. On the contrary, the ſtalks and leaves wore a new appearance. The former were exceedingly thin and creeping. The leaves were of a yellowiſh green; ſome of the uſual form, but very ſmall; others were very long and narrow, like the leaves of graſſes. *Reiſe in die Krym und den Kaukaſus*; Berlin, 1815.

MOUNT LEIN'STER, a mountain of Ireland, in the county of Carlow, on the borders of Wexford: twelve miles ſouth-ſouth-eaſt of Carlow.

MOUNT MA'JOR, a mountain of New Hampſhire, on the ſide of Lake Winnipiſſiokee. Lat. 43. 23. N. lon. 71. 20. W.

MOUNT MIS'ERY, a mountain of the iſland of St. Chriſtopher, near the weſt end.

MOUNT MIS'ERY, a town of the ſtate of Connecticut: eight miles north-eaſt of Norwich.

MOUNT MORI'AH. See MORIAH, vol. xv.

MOUNT NU'GENT, a ſmall poſt-town of Ireland, in the county of Cavan: forty-ſix miles north-weſt from Dublin.

MOUNT OF OL'IVES, or OLIVET, a beautiful eminence in Paleſtine, ſituated to the eaſt of Jeruſalem, about a mile diſtant, and commanding a proſpect of the whole city, from which it is parted by the brook Kidron, or Cedron, and the valley of Jehoſhaphat. This is not a ſingle hill, but rather part of a long ridge, with three, or, according to Pococke, four, heads or ſummits, extending from north to ſouth; the middlemoſt of which is that from which our Saviour aſcended into heaven. On this ſummit is a ſmall round church. Here was formerly a magnificent church, built by the empreſs Helena, in memory of Chriſt's aſcenſion; but there only remains a Gothic octagonal cupola, about eight yards in diameter. The natives have here two altars; and the Greeks, Copts, and Armenians, one each, in which they ſay maſs; but Chriſtians of every deſcription have free acceſs to the place throughout the whole year, upon paying a certain *caphar*, or tribute. Every place that is ſhown upon this mountain has either a church, chapel, or oratory, to feed the devotion of pilgrims, and the indigence of the monks that reſide upon the ſpot. The ſecond ſummit of the mountain, towards the ſouth, is that called the Mount of Corruption, or Offence. The third, towards the north, which is the higheſt ſummit of all, and ſtands about two furlongs from the middlemoſt, is that which was moſt commonly ſtyled the Mount of Galilee. Here are alſo ſhown many places mentioned in the Goſpel; ſuch as that where Chriſt mounted the aſs; where he wept over Jeruſalem, &c. Theſe are ſtill viſited by multitudes of Chriſtians of all ſorts; though the Latins have the poſſeſſion of them, and perform the particular ceremonies that belong to each reſpective place; e. g. on Palm Sunday, the monks and prieſts attend their ſuperior from the place where Chriſt, mounted on an aſs, proceeded to Jeruſalem. He is dreſſed in his pontifical habit, mounted alſo on an aſs, and accompanied by crowds of ſpectators, who cut down and ſtrew branches before him, and make the air reſound with their harangues. The Mount of Olives was originally called by the Jews the "Mount of Unction," on account of the great quantity of oil that was made from the olives that grew upon it; but, when Solomon had once defiled it, by erecting ſundry temples to the gods of the Ammonites, Moabites, &c. in complaiſance to his ſtrange wives, they changed the name of it by a ſmall alteration of the letters, that is, of שרה into משחית, which ſignifies the "Mount of Corruption, Deſtruction, or Offence." The Greeks, however, have retained its ancient appellation.

In the time of king Uzziah, the Mount of Olives was ſo ſhattered by an earthquake, that half of the earth that was on the weſtern ſide fell down, and rolled four furlongs towards the mountain which was oppoſite to it on the eaſt; ſo that the earth blocked up the highways, and covered the king's gardens.

The evangeliſt Luke, ſuppoſed to be the writer of the Acts, as well as of the Goſpel that bears his name, has been charged by one advocate of the cauſe of infidelity, with having contradicted himſelf; for in his Goſpel he tells us, that Jeſus aſcended into heaven from Bethany; and in the Acts of the Apoſtles he informs us, that he aſcended from Mount Olivet. This objection proceeds, as the learned biſhop of Landaff has obſerved in his excellent Apology for Chriſtianity, either from ignorance of geography or ill-will to Chriſtianity; and he recommends to the writer to recollect for the future, that Bethany was not only the name of a town, but alſo of a diſtrict of Mount Olivet adjoining to the town.

Mr. Maundrell tells us, that he and his company, going out of Jeruſalem at St. Stephen's gate, and croſſing the valley of Jehoſhaphat, began immediately to aſcend the mountain; that, being got above two-thirds of the way up, they came to certain grottoes cut with intricate windings and caverns under ground, which were called the Sepulchres of the Prophets; that a little higher up were twelve arched vaults under ground, ſtanding ſide by ſide, and built in memory of the apoſtles, who are ſaid to have compiled their creed in this place; that ſixty paces higher they came to the place where Chriſt is ſaid to have uttered his prophecy concerning the final deſtruction of Jeruſalem; and a little on the right hand, to another, where he is ſaid to have dictated a ſecond time the Lord's Prayer to his diſciples; that ſomewhat higher is the cave of a ſaint called Pelagia; a little above that, a pillar denoting the place where an angel gave the Bleſſed Virgin three days warning of her death; and, at the top of all, the place of our bleſſed Lord's aſcenſion.

If Mount Calvary has ſunk beneath the overwhelming influence of ſuperſtition, ſtudiouſly endeavouring to modify and to disfigure it, through ſo many ages; if the ſituation of Mount Sion yet remains to be aſcertained; the Mount of Olives, undiſguiſed by fanatical labours, exhibits the appearance it preſented in all the periods of its hiſtory. Dr. Clarke viſited it in the year 1801; and it ſtill afforded ſo commanding a view of Jeruſalem, that the eye roamed over its ſtreets and walls as if in the ſurvey of a model. The Mount of Olives, from which the travellers made this ſurvey, is remarkable for various events in the Jewiſh hiſtory. It was to its ſummit that king David aſcended to addreſs a prayer to Heaven, when he was about to be driven from Jeruſalem by Abſalom's rebellion: it was at the deſcent of this mount that our Saviour foretold the downfall of the holy city: and, finally, it was on the ſide of this mount that the army of Titus encamped to accompliſh the prediction. The view of the country from its top is extenſive; the moſt ſtriking object being the wide expanſe of the Dead Sea, or Lake Aſphaltites, ſurrounded by lofty mountains. Between this lake and Jeruſalem are ſeen the fertile paſtures of the plain of Jericho, watered by the Jordan, whoſe courſe may be diſtinctly traced. On coming down from the mount, the travellers viſited the olive-ground, which is deſcribed, and with reaſon, as the garden of Gethſemane. Near this they found a grove of olive-trees, of immenſe ſize, which ſuggeſted to them the idea of cutting off ſpecimens as preſents to thoſe friends who might wiſh to obtain memorials of the Holy Land. Thus olives continue to grow on the hill which derived its name from them three thouſand years ago, in the ſame way that promegranates are ſtill ſeen to abound in Rhodes, and oaks in the foreſts of Dodona. *Clarke's Travels*, Part II.

MOUNT OLYM'PUS, in ancient geography and fabulous hiſtory. See OLYMPUS.

MOUNT OLYM'PUS, in modern geography, a mountain on the weſt coaſt of North America. Lat. 47. 50. N. lon. 236. 24. E.

MOUNT ORGU'EIL CAS'TLE, or GOWRAY CASTLE, a fortreſs in the iſland of Jerſey. It was called *Gowray Caſtle*, from the adjacent village of that name. The preſent appellation of *Mount Orgueil* is derived from the proud promontory on which it is ſituated; a title, according to the vulgar tradition, given it by Henry V. but this opinion Mr. Falle corrects in the ſecond edition of his hiſtory of this iſland, and there attributes it to the duke of Clarence.

Neither the age nor founder of this building is aſcertained; common report gives its conſtruction to Robert Curthoſe, ſon of William the Conqueror, who is ſaid to have built moſt of the caſtles in this iſland, and alſo that of Guernſey. It however was in being, and occurs in hiſtory, as early as the reign of king John. Falle ſays, it was already then, and had been long before, a conſiderable fortreſs; and, as that king repaired and ſtrengthened the fortifications here and at Guernſey, Gowray-caſtle, the principal defence of the iſland, was undoubtedly not neglected. In the reign of Edward III. this caſtle was more than once attacked by the French, who were always repulſed. A manuſcript in the library of the late Thomas Aſtle, eſq. had the following account of the garriſon of this caſtle, together with their pay, in the 15th year of that king's reign: "Henry de la More, lieutenant of the caſtle of Gurry, per diem, twelve pence ſterling; ſix men at arms, at twelve pence ſterling per day; ſix other men at arms, at ſixpence ſterling per day; one hundred archers, at threepence per day." The latter end of this reign this fortreſs was again attacked by Bertrand du Gueſclin, conſtable of France, at the head of an army of 10,000 men. The ſiege was carried on with great ſkill and vigour, and as gallantly defended; ſome of the outer works were thrown down by ſap, when at length, to ſave the effuſion of blood, it was agreed that, if it was not relieved before the next Michaelmas, the beſiegers ſhould be put in poſſeſſion; on this the conſtable retired, and the caſtle was relieved within the ſtated time by a fleet from England. In the reign of Henry V. the edifice was repaired; and, as has before been obſerved, received the name of Mount Orgueil, which it has ever ſince retained. It was at this time conceived to be of ſuch importance, that, according to d'Argentre, no Frenchman was ever ſuffered to come within the gate without being firſt blindfolded. Towards the latter end of the reign of Henry VI. it was, under the pretence of a ſurpriſe, delivered up to Surduval, for the count de Maulevrier, chamberlain of France, in conſequence of an agreement between him and the queen Margaret, as a reward for the aſſiſtance he had afforded her huſband, Henry VI. of England. Maulevrier proclaimed himſelf lord of the iſlands of Jerſey, Guernſey, Alderney, &c. as holding it feudally from the king of France. On the acceſſion of Edward IV. a plan was laid for expelling the French, who occupied the caſtle and ſome other parts of the iſland: a fleet appeared before it, and Philip de Carteret, lord of St. Ouen, beſieged it by land, and, at length, obliged it to ſurrender. In the reign of queen Elizabeth, when Elizabeth-caſtle was built, ſome repairs ſeemed to have been done here, her arms, with thoſe of the Paulets, and the date, 1593, being placed over a gate in the inner ward. On the 15th of Auguſt, 1637, W. Prynne was ſent priſoner to this caſtle, where he remained till the 19th of November, 1640. He has deſcribed and celebrated it in a copy of verſes, intitled "a Poetical Deſcription of Mount Orgueil Caſtle, in the Iſle of Jerſey, interlaced with ſome brief Meditations from its rocky, ſteep, and lofty, ſituation." In the civil wars, in 1651, this caſtle, which had long been held for the king, was beſieged, and taken, after a ſhort reſiſtance, by Haines, the republican general: the trifling defence it made was owing, as is reported, to its being much out of repair, it having been neglected in favour of Elizabeth-caſtle. Ever ſince Elizabeth-caſtle had been made the reſidence of the governor, the chief care was laid out on that, and very little done to ſupport this. Mount Orgueil Caſtle is unfortunately commanded by a neighbouring hill, ſomewhat overawing the rampart; an inconvenience leſs regarded in former days by reaſon of the wide deep vale interpoſing betwixt the hill and the caſtle, which hindered approaches. It is now in a manner ſlighted, and conſidered as indefenſible. Poſſibly government may think it needleſs to maintain two grand fortreſſes in ſo ſmall an iſland; and in that caſe there can be no diſpute which of the two ought to have the preference. The caſtle ſtands, and will long ſtand, unleſs purpoſely demoliſhed, on its own ſtrength and firmneſs, and under its diſgrace retains an air of greatneſs that ſtrikes the eye. For farther particulars, ſee the article JERSEY, vol. x. p. 777. It is five miles weſt of St. Helier.

MOUNT PAT'ERSON, a mountain on the north coaſt of Chatham, in the North Pacific Ocean: ten miles north of Cape Young.

MOUNT OF PI'ETY, a fund or eſtabliſhment in ſome parts of Italy, where money is lent out on ſome ſmall ſecurity. There were alſo mounts of piety in England, raiſed by contribution for the benefit of people ruined by the extortions of the Jews.

MOUNT PLE'ASANT, a town of the ſtate of New York, on the eaſt bank of Hudſon's River.

MOUNT PLE'ASANT, a town of Maryland: eleven miles ſouth of Churchill.

MOUNT RAINI'ER, a mountain of North America, in New Georgia. Lat. 47. 3. N. lon. 238. 2. E.

MOUNT SA'INT, ſ. A game at cards.—Here are cards. At what game will your majeſty play? At *mount-ſaint.* *Machin's Dumb Knight.*

MOUNT ST. AUGUS'TINE, an iſland in the North Pacific Ocean, near the weſt coaſt of North America, a little within the entrance of Cooke's Inlet, riſing with an uniform aſcent to the centre of the iſland, inclining ſomewhat to its eaſtern ſide. The width of the paſſage between it and the main land is about ſix miles. This iſland is ſtated by Mr. Puget to be about twenty-ſeven miles in circuit; towards the ſea-ſide it is very low; from whence it riſes, though regular, with rather a ſteep aſcent, and forms a lofty uniform conical mountain, preſenting nearly the ſame appearance from every point of view, and clothed down to the water's edge with ſnow and ice, through which neither tree nor ſhrub were ſeen to protrude; ſo that, if it did produce any, they muſt either have been very ſmall, or the ſnow muſt have been ſufficiently deep to have concealed them. The landing upon this iſland was effected with ſome difficulty on the ebbing tide, in conſequence of the ſhore being bounded at the diſtance of a quarter of a mile by innumerable large detached rocks, through which a paſſage was found, with much labour, for a boat: fragments of rocks appeared to lie off moſt parts of the iſland, but no-where at ſo great a diſtance as from its northern ſhore. Lat. 59. 22. N. lon. 207. 9. E.

MOUNT ST. ELI'AS, a mountain on the weſt coaſt of North America, about thirty-ſix miles from the Pacific Ocean, perpetually covered with ſnow. Lat. 60. 22. N. lon. 219. 21. E.

MOUNT ST. HEL'EN's, a mountain on the weſt coaſt of North America. Lat. 46. 9. N. lon. 203. 1. E.

MOUNT ST. MI'CHAEL. See MARAZION, vol. xiv. p. 334.

MOUNT SE'IR, in ancient geography, the name of mountains which lay to the eaſt and ſouth of the Dead Sea, appropriated to them before the eſtabliſhment of the Iſraelites in the Land of Promiſe.—A mountain on the frontier of the tribe of Judah and that of Dan. *Joſh.* iv. 10.

MOUNT SHAN'NON, a ſmall town of Ireland, in the ſouth-eaſtern corner of the county of Galway, and on the river Shannon, oppoſite to the iſland of Innis Calthra. It is about eight miles north-by-weſt from Killaloe, and 105 miles weſt-by-ſouth from Dublin.

MOUNT SI'NAI, a famous mount of Arabia Petræa, on which God gave the law to Moſes. (Exod. xix. 1. xxiv. 16. xxxi. 18. xxxiv. 2, 4, &c. Levit. xxv. 1. xxvi. 46.) It is ſituated on a kind of peninſula, formed by the two arms of the Red Sea; one extending north, called the Gulf of Kolſun; the other extending eaſt, called the Gulf of Elan. The Arabs call Mount Sinai by the name of *Tor*, i. e. The Mountain, by way of excellence; or *Jebbel Muſa*, the Mountain of Moſes; comprehending a range of mountains, which riſes at the interior extremity of the Valley of Fazan; reſtricting the name of Tor Sinai to that part of the range on which the convent of St. Catharine ſtands, and diſtant about 260 miles from Cairo. The wilderneſs of Sinai, where the Iſraelites continued encamped almoſt a year, and where Moſes erected the tabernacle, is conſiderably elevated above the reſt of the country; the aſcent to it is very craggy, the greater part being cut out of the rock; and then you arrive at a large ſpace of ground, which is a plain ſurrounded on all ſides by rocks and eminences, whoſe length is nearly twelve miles. Towards the extremity of this plain, on the north, two high mountains appear, the higheſt of which is called *Sinai*, the other *Horeb*. They are both of a very ſteep aſcent; and the ground on which they ſtand is inconſiderable, when compared with their height. Sinai is one-third part higher than the other, and its aſcent more upright and difficult. The Greeks have cut a flight of ſteps up the rock. Pococke reckons 3000 of theſe ſteps to the top of the mountain, or rather bare pointed rock.

Two German miles and a half up the mountain, ſtands the convent of St. Catharine. The body of this monaſtery is a building 120 feet in length, and almoſt as many in breadth. Before it ſtands another ſmall building, in which is the only gate of the convent, and which remains always ſhut, except when the biſhop is there. At other times, whatever is introduced within the convent, whether men or proviſions, is drawn up by the roof in a baſket, with a cord and pulley. The whole building is of hewn ſtone, which, in ſuch a deſert, muſt have been conſtructed with great labour and expenſe. Within the walls is a ſmall moſque for the convenience of the Arabs. This monaſtery belongs to Greek monks, who had in former times only a tower erected near the burning buſh of Moſes; but, being moleſted by the inſults and depredations of the Arabs, they petitioned the emperor Juſtinian to build for them a ſtrong monaſtery for their future ſecurity; and the emperor is ſaid to have complied with their requeſt. Before the convent is a large garden, planted with excellent fruit-trees. According to the account of the Arabs, the monks enter it by a ſubterraneous paſſage. Theſe Greek eccleſiaſtics are not allowed to receive any European viſitor, without an order from the biſhop of Mount Sinai, who reſides ordinarily at Cairo. When the biſhop happens to be preſent, the gate is opened, and the convent muſt entertain all the Arabs who come in there; and this is a grievous charge on the poor monks, who live merely on alms, and whoſe proviſions, which they are obliged to bring from Cairo, are often ſtolen by the way. The Arabs are, in general, very dangerous neighbours, as they often fire on the convent from the adjacent rocks; and ſeize the monks whenever they find them without the walls of the monaſtery, and refuſe to releaſe them without a conſiderable ranſom. Five hundred ſteps above the convent is an excellent ſpring, which ſuperſtitious perſons have counted miraculous, as the mountain is ſo high and ſo barren. A thouſand ſteps higher ſtands a chapel dedicated to the Bleſſed Virgin; and five hundred above this, are two other chapels, ſituated in a plain, which the traveller enters by two ſmall gates of maſon-work. Upon this plain are two trees, under which, at high feſtivals, the Arabs are regaled at the expenſe of the Greeks.

Mount Sinai is held in great veneration, on account of the law which God gave on this mountain. The whole mountain is a very remarkable rock of red granite, interſperſed with ſpots, to which ſoil has been brought by human labour, or waſhed down by rain, and in which grow almond-trees, figs, and vines. Mount Horeb ſtands weſt of Sinai, ſo that at ſun-riſe the ſhadow of Sinai covers Horeb. Beſides the little fountain at the top of Sinai, there is another at the foot of Horeb, which ſupplies the monaſtery of St. Catharine. At a ſmall diſtance is ſhown a ſtone, four or five feet high, and three broad, from which, it is pretended, Moſes cauſed the water to guſh out. Its colour is of a ſpotted grey, and it is as it were ſet in a kind of earth, where no other rock appears. This ſtone has twelve holes, or channels, which are about a foot wide, whence it is thought the water came forth for the Iſraelites to drink.

Much has been ſaid of the writings to be ſeen at Mount Sinai and in the plain about it; and ſuch were the hopes of diſcoveries reſpecting the wanderings of the Iſraelites from theſe writings, that Dr. Clayton biſhop of Clogher offered 500l. ſterling to defray the expenſes of the journey to any man of letters who would undertake to copy them. No man, we believe, undertook this taſk; and the accurate Daniſh traveller Niebuhr found no writings there, but the names of perſons who had viſited the place from curioſity, and of Egyptians, who had choſen to be buried in that region.

Knights of St. Catharine of MOUNT SINAI. See the article KNIGHTHOOD, vol. xi. 792.

MOUNT SI'ON, or ZION, a mountain of Paleſtine, on which the chief part of ancient JERUSALEM was built. See that article.

SION was alſo one of the names of Mount Hermon, or rather of a chain of mountains, called Mountains of Hermon, from Mount Hermon, the principal of them.

MOUNT SOR'REL, or MOUNT SOAR-HILL, a ſmall market-town in the hundred of Weſt Goſcote, Leiceſterſhire, England, is ſituated, as its name imports, on an eminence near the banks of the Soar, on the great turnpike-road from Leiceſter to Derby, at the diſtance of ſeven miles from the former, and 104 from London. On the weſtern ſide is the termination of a ridge of high hills, which extend through Charnwood foreſt into Derbyſhire. The higheſt point, almoſt overhanging the town, is called Caſtle-hill, where was formerly a fortreſs, which is mentioned as early as the reign of king Stephen, and was of diſtinguiſhed note in the contentions between the barons and the crown, in the time of king John and Henry III. in the latter reign it was razed to the ground, and has never been re-built. The town is partly in the pariſh of Barrow-upon-Soar, and partly in that of Rothley; and the vicars and proprietors of each are allotted their proportionate ſhare of lands and tythes by an act of parliament which paſſed in the year 1781. Mount-Sorrell-hill is a rock of reddiſh granite, with pieces of which the ſtreets are paved. They are commonly called Charley-foreſt ſtone, and in many places ſtand out bare, and are of ſuch hardneſs, after being expoſed to the air, as to reſiſt all tools. Such pieces as can be got from under the ground are broken with a ſledge, and uſed for building in the ſhape in which they are broken. Many houſes are built with them, and make a very ſingular appearance. They are often imperfect cones; and, being too hard to be cut or broken, the ſmootheſt face is laid outermoſt, in beds of excellent lime. At the end of Barn-lane, which ſeparates the pariſhes of Rothley and Barrow, formerly ſtood a curious croſs, which conſiſted of a ſlender octagonal ſhaft, fluted, and ornamented within the flutes with carved heads, quartrefoils, &c. the upper part of the ſhaft was terminated by a crocketted pediment and niches, ſupported by angels. This relic of monaſtic antiquity was taken down in 1793, and removed into the grounds of ſir John Danvers, who cauſed a ſmall market-houſe, in imitation of a pavilion, to be erected in its ſtead. In this town were formerly two chapels; but it now has only one, which is ſubordinate to the church of Barrow. Here are alſo three meeting-houſes for Preſbyterians, Baptiſts, and Methodiſts. A weekly market is held on Monday, which, with an annual fair, July 10, were firſt granted, in 1292, by Edward I. to Nicholas de Seagrave and his heirs. *Nichols's Hiſt. of Leiceſterſhire.*

Thurcaſton is a village to the ſouth of Mount Sorrel. Here they ſhow a houſe in which they ſay Bp. Latimer was born. It contains alſo a charity-ſchool.

MOUNT STE'PHENS, a mountain on the weſt coaſt of North America: five miles north of Point Philip.

MOUNT TAL'BOT, a ſmall poſt-town of Ireland, in the county of Roſcommon, ſituated on the river Suck, and ſeventy-ſix miles weſt-by-north from Dublin.

MOUNT TIR'ZA, a town of North-Carolina: ſixty miles north-eaſt of Salem.

MOUNT TOM', a mountain of North America, in the ſtate of Connecticut, between Lichfield and Waſhington. —A mountain of New Hampſhire, on the right bank of the Connecticut, near Northampton.

MOUNT VER'NON, a town of Virginia: ten miles ſouth of Waſhington. Here was the ſeat of the late celebrated George Waſhington, pleaſantly ſituated on the Virginia bank of Patowmac-river, where the river is nearly two miles wide; nine miles below Alexandria, 127 from Point Look-out at the mouth of the river, and 280 from the ſea. The area of the mount is two hundred feet above the ſurface of the river; and, after furniſhing a lawn of five acres in front, and about the ſame in rear of the buildings, falls off rather abruptly in thoſe two quarters. On the north end it ſubſides gradually into extenſive paſture-grounds; while on the ſouth it ſlopes more ſteeply, in a ſhort diſtance, and terminates with the coach-houſe, ſtables, vineyards, and nurſeries. On either wing is a thick grove of different flowering foreſt-trees. Parallel with them, on the land ſide, are two ſpacious gardens, into which one is led by two ſerpentine gravel-walks, planted with weeping willows and ſhady ſhrubs. The manſion-houſe itſelf appears venerable and convenient; and, viewed from the land ſide, the whole aſſemblage of buildings bears a reſemblance to a rural village. A ſmall park on the river, where the Engliſh fallow deer and the American wild deer are ſeen through the thickets, alternately with the veſſels as they are ſailing along, give a romantic and pictureſque appearance to the whole ſcenery. On the oppoſite ſide of a ſmall creek to the northward, an extenſive plain, exhibiting corn-fields and cattle grazing, affords in ſummer a luxuriant landſcape; while the blended verdure of woodlands and cultivated declivities, on the Maryland ſhore, variegates the proſpect in a charming manner. Such are the philoſophic ſhades to which the commander-in-chief of the American army retired in 1783, at the cloſe of a victorious war; which he again left in 1789 to dignify with his unequalled talents the higheſt office which his fellow-citizens could confer; and hither he again retreated in 1797, loaded with honours and the benedictions of his country. Here, in 1798, he again heard and obeyed the call of his endangered country, to command her armies; and here he died, on the 14th of December, 1799. See WASHINGTON.

MOUNT VER'NON, a town of Maſſachuſetts, in the province of Maine: ſeventeen miles north-weſt of Hallowell.

MOUNT WA'RNING, a mountain on the eaſt coaſt of New Holland. Lat. 28. 22. S.

MOUNT WASH'INGTON, a mountain in the upper part of the iſland of New York.—Alſo, one of the higheſt peaks of the White Mountains, in New Hampſhire.—Alſo, the ſouth-weſternmoſt townſhip of Maſſachuſetts, in Berkſhire county, incorporated in 1779, and containing 291 inhabitants: thirty miles weſt-ſouth-weſt from Springfield.

MOU'NTABLE, *adj.* That may be aſcended.

MOU'NTAGU (Richard), a learned prelate of the church of England, and celebrated writer of eccleſiaſtical antiquities, was born about the year 1578, at Dorney in Buckinghamſhire, of which place his father was miniſter. He received a claſſical education at Eton-ſchool, where he was admitted king's ſcholar, and was elected, in 1594, to King's-college, Cambridge. He took his degrees in arts at the ſtatutable periods; and, when arrived at the canonical age, was admitted into holy orders. The firſt preferment which he obtained was the living of Wotton-Courtney in Somerſetſhire, in the dioceſe of Wells; of which church he afterwards became a prebendary. About the year 1608, he was promoted to a fellowſhip of Eton-college, where he aſſiſted ſir Henry Saville in preparing for the preſs his celebrated edition of St. Chryſoſtom's Works. In 1610, he gave the firſt ſpecimen of his learning to the public by editing, in Greek, Gregory Nazianzen's two Invectives againſt Julian, with the notes of Nonnius, in quarto. Three years afterwards, he was inducted into the rectory of Stamford-Rivers in Eſſex, which was in the gift of Eton-college. In 1616 he was preſented to the deanery of Hereford; which he exchanged, in 1617, for the archdeaconry of the ſame church. In the year 1621, he publiſhed his "Diatribæ in primum partem Joannis Seldeni Tractatus de Decimis," quarto; with which work king James was ſo well pleaſed, that he laid his commands on Mr. Selden not to continue the controverſy. Our author's next performance made its appearance in 1622, under the title of "Analecta Eccleſiaſticarum Exercitationum," in folio; conſiſting of animadverſions upon the Annals of Baronius, which diſplay an extenſive acquaintance with the fathers, and church-hiſtory, and ably expoſe many of the errors and legendary fictions that are introduced into the performance of that eccleſiaſtical hiſtorian.

In the year laſt mentioned, ſome of the Romiſh emiſſaries having attempted to proſelyte one of his pariſhioners at Stamford-Rivers, he endeavoured to procure a conference with them; but, failing in that deſign, he ſent three propoſitions in writing, by way of challenge, to their place of meeting, offering to become a convert to them himſelf, ſhould they prove victorious in a debate on the points in queſtion. To this challenge he received no other reply than a popiſh tract, which was ſent to him after an interval of about eighteen months, intitled, "A Gag for the new Goſpel." To this piece he wrote an anſwer, which was publiſhed in 1624, under the title of, "A new Gag for an old Gooſe, &c." No ſooner did this anſwer appear, than it gave high offence to many zealous members of the church of England, as well as to the calviniſtical puritans: and two puritan miniſters at Ipſwich drew up articles, charging him with popery and arminianiſm, founded on paſſages ſelected from it, with the intention of laying them before the next parliament. Mountagu, having procured a copy of the articles, and being informed of their deſign, applied to the king for protection; who gave him leave to appeal to himſelf, and to print his defence, provided that he obtained the ſanction of Dr. White, dean of Carliſle, to his doctrine, as agreeable to that of the church of England. Having received the approbation of the dean, he committed his defence to the preſs, under the title of "*Appello Cæſarem*, or, a juſt Appeal from two unjuſt Informers," &c. which was publiſhed in 1625, in quarto, addreſſed to king Charles I. James dying before the impreſſion was finiſhed. This Appeal, conſidered in reſpect either to ſentiment or language, ſerved only to increaſe the number of the author's adverſaries; and it provoked anſwers from ſeveral eminent divines and others, among whom were Drs Sutcliffe, Good, and Featly, Mr. Wotton, Mr. William Prynne, and Dr. George Carleton, biſhop of Chicheſter. When the parliament met in 1625, it was likewiſe complained againſt in the houſe of commons, as calculated to promote Arminianiſm, to bring about a reconciliation with Rome, and to advance the king's prerogative above law. Upon this the houſe ordered him to their bar, where the ſpeaker informed him, that the cenſure of his book ſhould be poſtponed for ſome time, but that in the interim he ſhould be committed to the cuſtody of the ſerjeant at arms; and he was afterwards obliged to give a bond of two thouſand pounds for his appearance at the next ſeſſion.

In proportion, however, as Mr. Mountagu became obnoxious to the popular branch of the government, he ſeems to have increaſed in favour at court; and in the year 1628 he was promoted to the biſhopric of Chicheſter, while lying under the cenſure of the houſe of commons. At his conſecration an unuſual ſcene occurred. One William Jones, a ſtationer of London, having furniſhed himſelf with objections, founded on the opinions reported to the houſe of commons, and drawn up by an advocate of the arches, when the uſual proclamation was made, "that any perſon who could or would object againſt the biſhop elect, ſhould then ſpeak according to due form of law," this man ſtood up, and with an audible voice three times excepted againſt his qualifications for a biſhopric, delivering a copy of his objections to the judge of the court of arches. Theſe objections, however, were overruled, becauſe they were not ſigned by a doctor of the arches, and delivered in by a proctor, notwithſtanding the declaration of Jones, that he could not prevail upon any proctor to prefer them, though he offered the cuſtomary fees. This oppoſition of Jones ſuggeſted to our new prelate the wiſdom of being prepared to ward off any future attack on account of his paſt actions or writings; and he therefore applied again to the king, who granted him a ſpecial pardon, in form like thoſe given at a coronation, only with the difference of its containing the inſertion of ſome particulars for the pardoning of all errors before committed, either in ſpeaking, writing, or publiſhing, concerning which he might afterwards be queſtioned.

Biſhop Mountagu now applied himſelf cloſely to his favourite ſtudy of church-antiquities. In the year 1636, he publiſhed his "Originum Eccleſiaſticarum, Tomus Primus," folio. In 1638, upon the promotion of Dr. Wren, biſhop of Norwich, to the ſee of Ely, our author was tranſlated to the vacant biſhopric; in which he diſtinguiſhed himſelf by the zeal with which he promoted the intereſts of the eſtabliſhed church, and the rigour with which he proſecuted the puritans. He had not yet learned moderation; but was particularly active in ſuppreſſing the puritan lecturers. For the ſeverity of his conduct towards them, as well as for introducing ſuperſtitious innovations into the church, accuſations were preferred againſt him before the long parliament; and he would no doubt have felt their reſentments, had he not been removed beyond the reach of all human power. At the time when he came to Norwich, he had been afflicted for more than a year and a half by the attacks of a quartan ague; and he ſuffered much from its effects while completing his "Originum Eccleſiaſticarum, Pars poſterior," which was publiſhed in 1640, in folio. At length the diſorder roſe to ſuch a height that it proved fatal to him in 1641, when he was about ſixty-three years of age.

Biſhop Mountagu was celebrated for his knowledge of the Greek language, as well as of eccleſiaſtical antiquities and of the fathers; but his fondneſs for the latter was carried to an extravagant length, and involved him in miſtakes, ſome of which are of a very glaring nature. His creed was Arminian, which he propagated with activity and ſucceſs; and, in church and alſo ſtate affairs, he was the imitator and aſſociate of archbiſhop Laud. Speaking of the ſtyle of his polemical works, Fuller ſays, that "his great parts were attended with a tartneſs of writing; very ſharp the nib of his pen, and much gall in the ink, againſt ſuch as oppoſed him. However, ſuch the equability of this ſharpneſs of his ſtyle, he was impartial therein; be he ancient or modern writer, Papiſt or Proteſtant, that ſtood in his way, they ſhould equally taſte thereof." Beſides the works already mentioned, he publiſhed many others; and after his death were publiſhed from his papers, The Acts and Monuments of the Church before Chriſt incarnate, with a dedication to Jeſus Chriſt in Latin, 1642, folio. *Biog. Britan. Fuller's Church-Hiſt. Neal's Hiſt. Purit.*

MOU'NTAIN, *ſ.* [*montagne,* Fr.] A large hill; a vaſt protuberance of the earth:

The ark no more now floats, but ſeems on ground,
Faſt on the top of ſome high *mountain* fix'd. *Milton.*

From Acmon's hands a rolling ſtone there came,
So large, it half deſerv'd a *mountain*'s name. *Dryden.*

Any thing proverbially huge.—I had been drowned; a death that I abhor; for the water ſwells a man, and what ſhould I have been when I had been ſwelled? I ſhould have been a *mountain* of mummy. *Shakeſpeare.*

She did corrupt frail nature with ſome bribe,
To make an envious *mountain* on my back,
Where ſits deformity to mock my body. *Shakeſpeare.*

In the language of common life, the more conſiderable of thoſe inequalities with which the ſurface of the earth is diverſified are generally termed *mountains*, while thoſe of inferior elevation are diſtinguiſhed by the appellation of *hills*. It is unneceſſary to point out the inſufficiency of this popular but vague diſtinction, for which, by the geologiſts of the preſent day, eſpecially thoſe of the Wernerian ſchool, a diviſion has been ſubſtituted, which is far better adapted to the preſent advanced ſtate of geognoſy and phyſical geography.

The inequalities on the ſurface of the earth may be divided into two great claſſes, viz. the bottom of the ſea, and the dry land. The dry land, with regard to its inequalities, is divided into high land and low land; the former denoting an uneven tract of land conſiderably elevated above the level of the ſea; the latter conveying the idea of an extenſive country quite flat, or of inconſiderable elevation above the ſea, chiefly compoſed of plains, but alſo hilly where it borders on alpine country; and, if groups of mountains occur in it, theſe are always ſmall, and occupy its central part.

High land is principally compoſed of alpine, mountainous, and hilly, land; here and there alſo ſome plains occur in it.

Alpine land is formed of groups of mountains, which again are compoſed of mountain-chains, or connected ſeries of ſingle mountains. Mountain-groups are generally higheſt in the middle, and each of them, in an alpine country, takes a particular direction; they are ſeparated from each other by plains and valleys, but more frequently by mountainous or hilly country. Each group conſtitutes a connected whole, both with regard to its baſe and its acclivity; it is not, however, an entire maſs, but interſected in many places, though never quite down to its foot or baſe: where the latter takes place, the mountain-group is conſidered as terminated.

Mountainous land is compoſed of ſingle mountains collected into chains, which however, not being joined together by a central or high mountain chain, are never ſeen to form groups.

Hilly land, which conſiſts of gentle rounded and undulated elevations; it is much lower than the preceding, and, by means of the plains which ſometimes conſtitute a part of high land, forms a tranſition into low land.

In conſidering the various parts of which alpine land is compoſed, we obſerve that a mountain-group always conſiſts of ſeveral mountain-chains, the higheſt part of which, extending through the whole group without being interſected, is called the high mountain-chain, or alſo the high middle chain, in caſes where its ſituation is nearly in the middle of the group; from it a great number of inferior chains proceed under various angles, which form the acclivity of the group, and are called ſubordinate and lateral chains. They vary in magnitude and extent; the moſt conſiderable, called alſo the chief mountain-chain, is that which, proceeding from the middle of the high mountain chain, reaches to the foot of the group; the other chains either ſhoot from the foot of the group towards the principal mountain-chain, but never reach the high mountain-chain; or they proceed from the high mountain-chain, without however reaching the foot of the group. The ſummit of a mountain-chain is called its ridge, that of the higheſt chain the higheſt ridge. The concavities in a mountain-group, which generally run parallel with its longitudinal direction, or ſeparate one chain from another, are called *valleys*.

Mountain-groups, with regard to their extent, are divided into principal groups, or ſuch as are from thirty to forty geographical miles in length, for inſtance, the alps of Swiſſerland, and the Pyrenees; into middle-ſized mountain-groups (Mittelgebirge), which have an extent of from ten to twenty geographical miles, ſuch as the Hartz Mountains, the Rieſengebirge, &c. and into ſmall mountain-groups, which are only from two or three to ten geographical miles in length. With regard to their height, mountain-groups are called high, if their elevation exceed 7000 feet, as is the caſe with the Andes in South America, and the Alps of Swiſſerland, Savoy, Tyrol, and the Pyrenees in Europe. They are of a middle height, if their ridge is elevated from 3500 to 7000 feet above the level of the ſea; ſuch as ſeveral mountain-groups of Bohemia, Franconia, &c. Low mountain-groups are from 700 to 2500 feet high. Generally the length of a mountain-group is proportionate to its height, and to the breadth of its baſe. If the length and the breadth of the baſe be nearly alike, the mountain-group is called *maſſive;* if, on the other hand, the length is very conſiderable in compariſon of the breadth of the baſe, it is denominated a *long* mountain-group.

Another diſtinction of mountain-groups is derived from the difference in the form and the connexion of the mountains and mountain-chains of which they are compoſed. Thus we have common, alpine, and conic, mountain-groups. The common mountain-groups have a middle-ſized lengthened principal mountain-chain, which gives out ſhorter lateral chains, and the individual mountains of which theſe chains are compoſed are ſingly aggregated in rows: they are moſtly mountain-groups of an intermediate height and extent. In the conical groups the individual mountains are for the moſt part ſingly aggregated like the preceding, but only joined together at their foot, or not higher up than the declivity, by which the conical form is produced, which principally characterizes the mountains of the fletz-trap formation. The alpine mountain-group does not conſiſt, like the common group, of ſimple rows of mountains, the ſummits of which are ſingly projecting, but as it were of pyramidally-aggregated cluſters; and is therefore to be conſidered as a double aggregation. Theſe alpine mountain-groups are the moſt extenſive, and their higheſt ridges and ſummits generally conſiſt of granite.

With regard to the different parts of *ſingle mountains*, we diſtinguiſh the foot, the acclivity, and the ſummit. The foot is generally very flat, and more or leſs extenſive; the acclivity, or the ſpace between the foot and the ſummit, is the moſt conſiderable and uſually the ſteepeſt part of the mountain, ſometimes even forming perpendicular precipices: the more gentle and gradual the aſcent of a mountain, the richer it generally proves in ores. The ſummit varies both with regard to its ſteepneſs and ſhape, which latter is for the moſt part indicative of the nature of the rock of which it is compoſed; gneiſs and tranſition rocks forming flat or round-backed; clay-ſlate conical; and baſalt, &c. ſhort and obtuſe conical ſummits; while granite and lime-ſtone mountains are often characterized by ſharp-pointed ſummits or peaks. If ſeveral of the mountains in a group are flattened, ſuch a ridge is called a *platteforme*. Very ſteep and lofty ſummits are called peaks, needles, or horns. Sometimes the ſummit is marked by a depreſſion; ſometimes it is interſected by ravines, and the inequalities thus formed are called caps.

Though mountains have been emphatically called "la charpente et l'oſſature du globe terreſtre," yet even the moſt elevated of them muſt appear as ſlight rugoſities only, when their proportion to the diameter of the earth is conſidered: for the higheſt mountain of Europe, the Mont Blanc, is, on the ſurface of our planet, what the protuberance of a line would be on the ſurface of a globe of about twenty-one feet in diameter. It is not a long time ſince we have obtained correct notions of the heights of mountains; before the barometer was applied to the meaſurement of altitudes, their elevation was generally greatly exaggerated by travellers, ſo much ſo, that the learned jeſuit Riccioli, who flouriſhed towards the middle of the ſeventeenth century, gives it as his opinion that mountains like the Caucaſus may have a perpendicular elevation of fifty Italian miles; and Iſbrand Ides, in his embaſſy to China, having traverſed ſome mountains of Siberia, ſtates their height to be about 5000 toiſes. For the mode of computing the height of mountains by means of the BAROMETER, ſee that article, vol. ii. and MECHANICS, vol. xiv. where the heights of the principal mountains are given. Since that article was printed, the Aſiatic Society have publiſhed an account, in their twelfth volume, of the height of the Himalaya Mountains, hitherto inacceſſible to Europeans. Theſe mountains have, however, been long believed, in India, to ſurpaſs in height all other mountains on the earth. The Himalaya chain is viſible from Patna, on the ſouthern banks of the Ganges, as a continued well-defined line of white cliffs, extending through more than two points of the compaſs, at a diſtance of about ſixty leagues, while, at an equal diſtance, Chimboraço, the higheſt of the Andes, is ſeen as a ſingle point, the reſt of the Cordillera being inviſible. It appears, from Capt. Turner's account, that the Peak of Chamalaſi, near which he paſſed, after croſſing the frontier of Thibet, is the ſame mountain which is ſeen from various ſtations in Bengal, the moſt remote of which is not leſs than 232 Engliſh miles diſtant. This, in the mean ſtate of the atmoſphere, requires an elevation of 28,000 feet. The preſident himſelf obſerved the uſual altitude of a peak of the Himalaya to be 1° 1′, as viewed from a ſtation in Bengal, diſtant not leſs than 150 Engliſh miles, which, after a due allowance for terreſtrial refraction, would give a height of not leſs than 26,000 feet. According to the mean of ſeveral obſervations of a peak, taken by Lieut.-col. Colebrooke, its height, above the level of the plains of Rohilkhund, is 22,291 feet, or about 22,800 feet above the level of the ſea. According to the obſervations communicated to the preſident, Mount Dhaibun is 20,140 above Cathmandu, which is itſelf more than 4500 above the level of the ſea; and another exceeds the elevation of the ſame ſtation by 17,819 feet, another by 20,025 feet, another by 18,662 feet. All theſe are viſible from Patna, the neareſt being nearly 170 Engliſh miles diſtant, and the fartheſt about 226 miles. The *Dhawalagiri*, or White Mountain, ſuppoſed to be ſituated near the ſource of the Glandac River, was found, by obſervations of bearings, taken by Mr. Webb, from four points, and of altitudes from three, to be (allowing $\frac{1}{8}$ for refraction) 26,784 feet; and, allowing $\frac{1}{11}$, 27,551. Suppoſing the errors ariſing from refraction, and thoſe from obſervation, to be the higheſt poſſible, and both in exceſs, the preſident calculates that its height, above the plains of Gorakhpur, cannot fall ſhort of 26,462 feet, or 26,862 above the level of the ſea. The following meaſurements are given by the writer as near approaches to the truth:

	Eng. Ft.
Dhawalagiri, or Dholagir—on a mean of three obſervations - - - - -	27,677
Yamunavatari, or Jamautri, above the ſea -	25,500
A mountain, ſuppoſed to be Dhaibun, above the ſea - - - - -	24,740
A mountain not named, obſerved from Pilibhit and Jethpur, above the ſea - -	25,669
A mountain not named, above the valley of Nepaul, which is 4600 feet higher than the ſea - -	20,025
Above the ſea - - - -	24,625
Another near it, above the valley of Nepaul	18,662
Above the ſea - - - -	23,262
A third in its vicinity, above the valley of Nepaul	18,452
Above the ſea - - - -	23,052

Mr. Webb ſucceeded in accurately determining the altitudes of twenty-ſeven peaks of the Snowy Mountains in the province of Kumaon in Nepaul, which, together with that gentleman's ſurvey of the province, has been tranſmitted to the marquis of Haſtings, the governor-general of India. By a reference to the Aſiatic Reſearches, vol. xii. it will be ſeen, that, out of theſe twenty-ſeven peaks, the very loweſt (No. 10) ſurpaſſes Mont Blanc, the higheſt point of the European continent, by 111 feet; that 19 out of the 27 exceed Chimboraço, hitherto conſidered the moſt elevated point of the globe; and that the higheſt of theſe Aſiatic peaks (No. 14) towers to the prodigious elevation of 6074 feet above that giant of the Andes!

Attraction of Mountains.—This is a late diſcovery, and a very conſiderable confirmation of ſir Iſaac Newton's theory of univerſal gravity. (See, however, this doctrine impugned under the article MOTION, p. 108.) According to the Newtonian ſyſtem, an attractive power is not only exerted between thoſe large maſſes of matter which conſtitute the ſun and planets, but likewiſe between all comparatively ſmaller bodies, and even between the ſmalleſt particles of which they are compoſed. Agreeably to this hypotheſis, a heavy body, which ought to gravitate or tend toward the centre of the earth, in a direction perpendicular to its ſurface, ſuppoſing the ſaid ſurface to be perfectly even and ſpherical, ought likewiſe, though in a leſs degree, to be attracted and tend towards a mountain placed on the earth's ſurface; ſo that a plumb-line, for inſtance, of a quadrant, hanging in the neighbourhood of ſuch a mountain, ought to be drawn from a perpendicular ſituation, in conſequence of the attractive power of the quantity of matter of which it is compoſed

acting

acting in a direction different from that exerted by the whole maſs of matter in the earth, and with a proportionably inferior degree of force.

Though ſir Iſaac Newton had long ago hinted at an experiment of this kind, and had remarked, that "a mountain of an hemiſpherical figure, three miles high and ſix broad, would not, by its attraction, draw the plumb-line two minutes (1′ 18″) out of the perpendicular:" yet no attempt to aſcertain this matter by actual experiment was made till about the year 1738; when the French academicians, particularly Meſſrs. Bouguer and Condamine, who were ſent to Peru to meaſure a degree under the equator, attempted to diſcover the attractive power of Chimboraço, in the province of Quito, at that time ſuppoſed to be the higheſt mountain in the world. According to their obſervations, which were however made under circumſtances by no means favourable to an accurate ſolution of ſo nice and difficult a problem, the mountain Chimboraço exerted an attraction equal to eight ſeconds. Though this experiment was not perhaps ſufficient to prove ſatisfactorily even the reality of an attraction, much leſs the preciſe quantity of it; yet it does not appear that any ſteps had been ſince taken to repeat it. Through the munificence of his Britannic majeſty, the Royal Society were enabled to undertake the execution of this delicate and important experiment; and the aſtronomer royal was choſen to conduct it. After various inquiries, the mountain Schehallien, ſituated nearly in the centre of Scotland, was pitched upon as the moſt proper for the purpoſe that could be found in this iſland. The obſervations were made by taking the meridian zenith diſtances of different fixed ſtars, near the zenith, by means of a zenith-ſector of ten feet radius; firſt on the ſouth and afterwards on the north ſide of the hill, the greateſt length of which extended in an eaſt and weſt direction. It is evident, that, if the maſs of matter in the hill exerted any ſenſible attraction, it would cauſe the plumb-line of the ſector, through which an obſerver viewed a ſtar in the meridian, to deviate from its perpendicular ſituation, and would attract it contrariwiſe at the two ſtations, thereby doubling the effect. On the ſouth ſide the plummet would be drawn to the northward, by the attractive power of the hill placed to the northward of it; and on the north ſide, a contrary and equal deflection of the plumb-line would take place in conſequence of the attraction of the hill now to the ſouthward of it. The apparent zenith-diſtances of the ſtars would be affected contrariwiſe; thoſe being increaſed at the one ſtation which were diminiſhed at the other: and the correſpondent quantities of the deflection of the plumb-line would give the obſerver the ſum of the contrary attractions of the hill, acting on the plummet at the two ſtations; the half of which will of courſe indicate the attractive power of the hill.

The various operations requiſite for this experiment laſted about four months; and from them it appears, that the ſum of the two contrary attractions of the mountain Schehallien, in the two temporary obſervations which were ſucceſſively fixed half way up the hill (where the effect of its attraction would be greateſt), was equal to 11·6″. From a rough computation, founded on the known law of gravitation, and on an aſſumption that the denſity of the hill is equal to the mean denſity of the earth, it appears that the attraction of the hill ſhould amount to about the double of this quantity. From thence it was inferred, that the denſity of the hill is only about half the mean denſity of the earth. It does not appear, however, that the mountain Schehallien has ever been a volcano, or is hollow; as it is extremely ſolid and denſe, and ſeemingly compoſed of an entire rock.

The inferences drawn from theſe experiments may be reduced to the following:

1. It appears, that the mountain Schehallien exerts a ſenſible attraction; therefore, from the rules of philoſophizing, we are to conclude, that every mountain, and indeed every particle of the earth, is endued with the ſame property, in proportion to its quantity of matter.

2. The law of the variation of this force, in the inverſe ratio of the ſquares of the diſtances, as laid down by ſir Iſaac Newton, is alſo confirmed by this experiment. For, if the force of attraction of the hill had been only to that of the earth as the matter in the hill to that of the earth, and had not been greatly increaſed by the near approach to its centre, the attraction thereof muſt have been wholly inſenſible. But now, by only ſuppoſing the mean denſity of the earth to be double to that of the hill, which ſeems very probable from other conſiderations, the attraction of the hill will be reconciled to the general law of the variation of attraction in the inverſe duplicate ratio of the diſtances, as deduced by ſir Iſaac Newton from the compariſon of the motion of the heavenly bodies with the force of gravity at the ſurface of the earth; and the analogy of nature will be preſerved.

3. We may now, therefore, be allowed to admit this law, and to acknowledge that the mean denſity of the earth is at leaſt double of that at the ſurface; and conſequently that the denſity of the internal parts of the earth is much greater than near the ſurface. Hence alſo, the whole quantity of matter in the earth will be at leaſt as great again as if it had been all compoſed of matter of the ſame denſity with that at the ſurface; or will be about four or five times as great as if it were all compoſed of water. This concluſion, Mr. Maſkelyne adds, is totally contrary to the hypotheſis of ſome naturaliſts, "who ſuppoſe the earth to be only a great hollow ſhell of matter; ſupporting itſelf from the property of an arch, with an immenſe vacuity in the midſt of it." But, were that the caſe, the attraction of mountains, and even ſmaller inequalities in the earth's ſurface, would be very great, contrary to experiment, and would affect the meaſures of the degrees of the meridian much more than we find they do; and the variation of gravity, in different latitudes, in going from the equator to the poles, as found by pendulums, would not be near ſo regular as it has been found by experiment to be.

4. As mountains are by theſe experiments found capable of producing ſenſible deflections of the plumb-lines of aſtronomical inſtruments; it becomes a matter of great importance, in the menſuration of degrees in the meridian, either to chooſe places where the irregular attraction of the elevated parts may be ſmall; or where, by their ſituation, they may compenſate or counteract the effects of each other.

The reader will bear in mind the arguments we have admitted, under the article Motion, (p. 112.) in contravention of this doctrine; and may now decide for himſelf.

Direction of Mountains.—Buffon erroneouſly believed that the moſt elevated chains of mountains are the moſt approximated to the equator. Mount Elias, which, under ſixty degrees twenty-one minutes of north latitude, riſes to 12672 feet; Fair-weather Peak, ſituated on the ſame coaſt, at fifty-nine degrees of latitude, which reaches to an elevation of 10240 feet; and, in ſhort, our European Alps; contradict this aſſertion. If the loftieſt ſummits of the Old World are in the mountains of Thibet, and thoſe of the New World in the centre of the Andes, near la Paz, we ſhould, on the contrary, infer that the higheſt mountains are in the neighbourhood of the two tropics, and not of the equator; and that a chain of very high mountains may exiſt in the interior of Notaſia, or New Holland, and in the ſouth of Africa, ſince the ſouthern tropic traverſes theſe two continents. But we are not in poſſeſſion of a ſufficient number of accurate obſervations to aſcertain whether nature, in this reſpect, has obſerved general and fixed rules; we only know that the mountain-chains which are ſituated beyond the fifty-fifth degree of latitude, in each hemiſphere, diminiſh in height in proportion as we approach the poles; yet Mount Parnaſſus, in Spitzbergen, riſes to the height of 3666 feet, and Snæfials Jokull, in Iceland, to 4887 feet.

Nature, however, in the direction of the principal mountain-ranges, ſtrictly adheres to a law which ſeems not to us to have been ſufficiently noticed, and which it is neceſſary to explain. The moſt continuous, the moſt extenſive, and the moſt elevated, chains of mountains, always coincide in direction with that of the largeſt dimenſions of the continents or iſlands; thoſe next in reſpect of height, with that of the open or cloſed peninſulæ which form their terminations; and the minor chains are ſubordinate in their direction to that of the broadeſt expanſion of the lands which they traverſe. Thus, the two Americas, which extend much more in the direction of ſouth and north than in that of eaſt and weſt, are pervaded by the immenſe chain of the Rocky or Columbian mountains, and by the Andes. This chain, at once the longeſt and moſt elevated on the globe, is prolonged without interruption from ſouth to north, and approaches almoſt equally near to either pole, from which its two extremities are removed only between thirty and forty degrees. The greateſt dimenſion of Aſia is meaſured by a curve, extending from the Dardanelles weſtward to Behring's Straits, and eaſtward inclining to the north; and Mount Taurus in Aſia Minor, Caucaſus, the mountains of the two Bucharias, the Himmalaya or Thibetian Alps, and the Altaic and Jablonnoic mountains, which form the principal and the moſt elevated chains of this continent, are alſo directed from weſt to north-eaſt, and in the line of that largeſt dimenſion. Europe, which, conſidered phyſically, is only a prolongation of Aſia, is in like manner traverſed from eaſt to weſt by the ſame principal chains; which are in ſome meaſure continued by the Balkan and Carpathian mountains, and by the Alps, Cevennes, and Pyrenées.

The dilatation of the two continents of the New World, towards the eaſt, is accompanied by the chain of the Alleghany or Blue Mountains, which ſtretch out in a direction parallel with the coaſt from ſouth-weſt to north-eaſt; and by the mountains of Braſil, which follow the line of the coaſt. The peninſulæ of California and Florida are divided in the middle by mountains which, like themſelves, ſtretch from north to ſouth; while the mountains of the peninſula of Alatſka, thoſe of the iſlands of Cuba, St. Domingo, Jamaica, and Porto Rico, extend, on the contrary, from weſt to eaſt, in the direction of the largeſt expanſion of the peninſula, and of the iſlands which they traverſe; and conſequently in a direction contrary to that of the two continents of the New World. The ſame appearances prevail in Aſia: Arabia, India, the peninſula of Malacca, and thoſe of Korea and Kamtſchatka, are traverſed by chains of mountains which extend from north to ſouth, and in the oppoſite direction to that of the continent. The Iberian chain, which in Spain makes a right angle with the Pyrenées; the Appennines, which divide Italy, throughout its length; the Dofrefels, or Scandinavian Alps, and the Uralian Mountains, which follow the dilatation of the European continent towards the eaſt; all theſe chains, which ſtretch from ſouth to north, are inferior in height to the Carpathian mountains, the Alps, and the Pyrenées, or to the principal chains which traverſe Europe in the contrary direction, namely, from eaſt to weſt; and they furniſh ſo many evident proofs of the law which is here propounded.

It is in the regions of mountains that nature diſplays her moſt aſtoniſhing aſpects, and all the charms of her pictureſque beauty. Smiling and fruitful valleys, the refuge of induſtry and happineſs, are contraſted with the naked and barren ſummits which encompaſs them; with thoſe huge ridges, inveſted in eternal ſnow; with thoſe reſplendent glaciers, the abode of ſilence and of death. It is on the ſublime heights of mountains that we breathe a purer air, that we are conſcious of a more lively and delightful ſenſation of exiſtence, that we contemplate the clouds and the thunder rolling far beneath our feet, and that we embrace in viſion that immenſe horizon on which whole kingdoms appear like patch-work, and flattened, as on our maps. But it is alſo in mountains that the powers of nature ſeem to maintain a perpetual ſtruggle, and that they threaten, in the moſt alarming manner, the exiſtence of men and of all animals. Snow and ſtones agglomerate in their fall, accumulate as they roll, and form thoſe dreadful *avalanches* which bury entire villages: rocks break aſunder, or tumble down, cruſhing the habitations, filling up lakes, or obſtructing rivers, and cauſing them to overflow: the ſtorms murmur and explode with hideous din, and let looſe winds which overturn every thing in their courſe: the rains, in an inſtant, produce devaſtating torrents, and change into a rapid and menacing river the limpid ſtream, on whoſe margin, a few moments before, the feeble child fearleſsly ſported. It is in the mountains, or near the chains which they form, that we contemplate, with the deepeſt feelings of apprehenſion, the moſt majeſtic and the moſt formidable of all natural phenomena, that of volcanos, &c.

Who are thoſe that, in the proſecution of philoſophical diſcoveries, will venture to brave the rigours of the north pole, of that ſpot on the globe which knows but one day and one night in the year, and where the guiding needle can no longer point to the north or the ſouth? Who would be ſufficiently intrepid to advance into the midſt of thoſe mountains and pyramids of cryſtal, or to ſet foot on thoſe lands which the accumulated congelations of winters have rendered undiſtinguiſhable from waves conſolidated by the cold; where rocks ſplit and diſplode with a noiſe like thunder, by the mere force of ice interpoſed in their crevices? Who would not dread to be expoſed to the obſcurity of that zone, where the enduring nights and the denſe and gloomy fogs ſeem to give eternity to darkneſs? The ſombre horrors of the ſcene are, however, at intervals, enlightened by the moon's ſilver diſk; and the *aurora borealis* is ſuddenly ſpread abroad, like the radiance of a vaſt conflagration, darting forth in ſtreams, rolling in fiery waves, or whirling in rapid volumes: in the atmoſphere all is commotion, and on the ground all is ſtillneſs. This meteor ſometimes ſheds over theſe frozen ſolitudes and diſtant ſnows a dingy glare, a pale light, a myſterious tint, a magical ambiguity of day; the moſt abſolute ſilence reigns in ſpace: except that, from ſome remote receſs, mournful and hollow echoes repeat the hoarſe and ſavage deſcant of aquatic birds, enfeebled by the cold, tormented with hunger, and roaming forlorn in theſe horrible deſerts. But ſoon a panic-terror ſeizes on the adventurous traveller; a tremendous craſh is heard; mountains of ice break aſunder, totter, impinge on one another, preſent a partial opening, float, and diſperſe in threatening fragments; a ſhocking and inevitable death now ſtares him in the face, as the laſt term of the perils which he has encountered, and of the ſufferings which he has endured. *Walckenaer's Coſmologie*, Paris, 1815.

Burning MOUNTAINS. See ETNA, HECLA, VESUVIUS, &c. ſee alſo VOLCANO.

Marble MOUNTAINS. Of theſe there are great numbers in Egypt, from which, though immenſe quantities have been carried off for the multitude of great works erected by the ancient Egyptians; yet, in the opinion of Mr. Bruce, who paſſed by them in his journey to Abyſſinia, there is ſtill a ſufficient ſupply to build Rome, Athens, Corinth, Syracuſe, Memphis, Alexandria, and half a dozen more of ſuch cities. The firſt mountain of this kind mentioned by Mr. Bruce, is one oppoſite to Terfowey, conſiſting partly of green marble, partly of granite, with a red bluſh upon a grey ground, and ſquare oblong ſpots. Here he ſaw a monſtrous obeliſk of marble very nearly ſquare, broken at the end, and nearly thirty feet long and nineteen feet in the face. Throughout the plain there were ſcattered ſmall pieces of jaſper, with green, white, and red, ſpots, called in Italy *diaſpro ſanguineo:* and all the mountains upon that ſide ſeemed to conſiſt of the ſame materials. From Mr. Bruce's deſcription of theſe mountains, it would appear that they are compoſed of ſerpentine, and not of calcareous, marble.

Table Mountain. See vol. viii. p. 678.

MOU'NTAIN, *adj.* Found on the mountains; pertaining to the mountains; growing on the mountains:

Now for our *mountain* ſport, up to yond hill,
Your legs are young. *Shakeſpeare's Cymbeline.*

You may as well forbid the *mountain* pines
To wag their high tops, and to make a noiſe,
When they are fretted with the guſts of heav'n. *Shakeſp.*

MOUNTAIN ASH'. See Sorbus.

MOUNTAIN BLU'E. See the article Mineralogy, vol. xv. p. 491.

MOUNTAIN BUT'TER. See vol. xv. p. 474.

MOUNTAIN COR'K. See vol. xv. p. 445.

MOUNTAIN EB'ONY. See Bauhinia.

MOUNTAIN FLAX'. See vol. xv. p. 445.

MOUNTAIN of FOR'TY DA'YS, a mountain of Judea, ſituated in the plain of Jericho, to the north of that city. According to the abbé Mariti's deſcription, the ſummit of it is covered neither with ſhrubs, turf, nor earth; it conſiſts of a ſolid maſs of white marble, the ſurface of which is become yellow by the injuries of the air. “The path by which who aſcend to it (ſays our author) fills one with terror, as it riſes with a winding courſe between two abyſſes, which the eye dares ſcarcely behold. The path is at firſt pretty broad; but it at length becomes ſo confined, that one can with difficulty place both feet upon it at the ſame time. When we had aſcended a little higher, we found an Arab ſtretched out on the path, who made us pay a certain toll for our paſſage. Here the traveller requires courage. One of the parapets of the path being broke, we clung to the part which remained until we had reached a ſmall grotto, ſituated very commodiouſly, as it gave us an opportunity of recovering our breath. When we had reſted ourſelves a little, we purſued our courſe, which became ſtill more dangerous. Suſpended almoſt from the rock, and having before our eyes all the horror of the precipice, we could advance only by dragging one foot after the other; ſo that, had the ſmalleſt fragment given way under us, we ſhould have been hurried to the bottom of this frightful abyſs. This mountain is one of the higheſt in the province, and one of its moſt ſacred places. It takes its name from the rigorous faſt which Chriſt obſerved here after having triumphed over the vanities of the world and the power of hell. In remembrance of this miracle, a chapel was formerly conſtructed on the ſummit of the mountain. It may be ſeen from the plain; but we could not approach it, as the path was almoſt entirely deſtroyed. It, however, may be acceſſible on the other ſide of the mountain, which we did not viſit. A great many ſcattered grottos are ſeen here; in one of which, according to Quareſmius, were depoſited the bodies of ſeveral anchorets, which are ſtill entire. I have heard the ſame thing aſſerted in the country, but I could never meet with any perſon who had ſeen them. Here we enjoyed the moſt beautiful proſpect imaginable. This part of the Mountain of Forty Days overlooks the mountains of Arabia, the country of Gilead, the country of the Ammonites, the plains of Moab, the plain of Jericho, the river Jordan, and the whole extent of the Dead Sea. It was here that the devil ſaid to the Son of God, “*All theſe kingdoms will I give thee, if thou wilt fall down and worſhip me.*”

MOUNTAIN GREE'N. See vol. xv. p. 492.

MOUNTAIN HE'ATH. See Saxifraga.

MOUNTAIN IN'DIANS, Indians of North America, in lat. 65. N. lon. 127. to 130. W.

MOUNTAIN of INSCRIP'TIONS, or Written Mountain, a ſuppoſed mountain or chain of mountains, in the wilderneſs of Sinai; on which, for a great extent of ſpace, the marble of which the mountain conſiſts is inſcribed with innumerable characters, reaching from the ground ſometimes to the height of twelve or fourteen feet. Theſe were mentioned by a Greek author in the third century, and ſome of them have been copied by Pococke, and other late travellers; but, after all, there is a very great uncertainty even of the *exiſtence* of ſuch mountain or mountains. The vaſt number of theſe inſcriptions, the deſert place in which they are found, and the length of time requiſite for executing the taſk, have induced a notion by no means unnatural, that they are the work of the Iſraelites during their forty years wandering in the wilderneſs. Others are of opinion that they contain nothing of any importance; but conſiſt merely of the names of travellers, and the dates of their journeys.

Niebuhr, who viſited this country during his travels in the eaſt, made every attempt in his power, though without ſucceſs, to obtain a ſight of this celebrated mountain. On applying to ſome Greeks at Suez, they all declared that they knew nothing of the Written Mountain: they, however, directed him to an Arabian ſheik, who had paſſed all his life-time in travelling between Suez and Mount Sinai; but he knew no more of it than the former. Underſtanding, however, that a conſiderable reward would be given to any perſon who would conduct them thither, this Arab directed them to another; who pretended not only to know that mountain, but all others upon which there were any inſcriptions throughout the deſert. On inquiring particularly, however, our travellers found that he was not to be depended upon; ſo that they were obliged to have recourſe to a fourth ſheik, who by his converſation convinced them that he had ſeen mountains with inſcriptions in unknown characters upon them. It does not appear, however, that this perſon was very capable, more than the reſt, of leading them to the place they ſo much wiſhed for; though he conducted them to ſome rocks upon which there were inſcriptions in unknown characters. They are moſt numerous in a narrow paſs between two mountains named Om-er-ridſtein; and, ſays M. Niebuhr, “the pretended Jibel-el-Mokatteb may poſſibly be in its neighbourhood.” Some of theſe inſcriptions were copied by our author; but he does not look upon them to be of any conſequence. “They ſeem (ſays he) to have been executed at idle hours by travellers, who were ſatisfied with cutting the unpoliſhed rock with any pointed inſtrument, adding to their names and the date of their journeys ſome rude figures, which beſpeak the hand of a people but little ſkilled in the arts. When ſuch inſcriptions are executed with the deſign of tranſmitting to poſterity the memory of ſuch events as might afford inſtructive leſſons, greater care is generally taken in the preparation of the ſtones, and the inſcriptions are engraven with more regularity.”

When M. Niebuhr arrived at laſt at the mountain to which the ſheik had promiſed to conduct him, he did not find any inſcriptions; but, on climbing up to the top, he found out an Egyptian cemetery, the ſtones of which were covered with hieroglyphics. The tomb-ſtones are from five to ſeven feet in length, ſome ſtanding on end and others lying flat; and “the more carefully they are examined (ſays he), the more certainly do they appear to be ſepulchral ſtones, having epitaphs inſcribed on them. In the middle of theſe ſtones is a building, of which only the walls now remain; and within it are likewiſe a great many of the ſepulchral ſtones. At one end of the building ſeems to have been a ſmall chamber, of which the roof ſtill remains. It is ſupported upon ſquare pillars; and theſe, as well as the walls of the chamber, are covered with hieroglyphic inſcriptions. Through the whole building are various buſts, executed in the manner of the ancient Egyptians. The ſepulchral ſtones and the buſts are of hard and fine-grained ſand-ſtone.” M. Niebuhr is of opinion that this cemetery was not the work of the Egyptians themſelves, but of ſome colony which came from Egypt, and had adopted the manners and cuſtoms of the people. He ſuppoſes that it might have been built by the Arabs, who had conquered Egypt under the ſhepherd-kings, and adopted the Egyptian manners during their reſidence there. As it muſt have belonged to an opulent city, however, he owns that there is a great difficulty in accounting for the exiſtence of ſuch a city in the midſt of a deſert.

The tranſlator of Volney's Travels aſcribes theſe inſcriptions to the pilgrims who viſit Mount Sinai. But to this, as well as to every other conjecture, there is this objection, that, whether the inſcriptions be well executed or not, whether they contain matters of importance or not, they ought to have been written in a language which *ſomebody* could underſtand; but, from the copies that have been taken of them by Dr. Pococke and others, it does not appear that they could be explained either by him or any other perſon.

When Dr. Clayton, biſhop of Clogher, viſited this part of the world about the year 1723, he expreſſed the greateſt deſire to have the matter concerning this Written Mountain or Mountains aſcertained, as noticed under Mount Sinai, p. 135. But the very exiſtence of the mountains is teſtified only by the ſuperior of a convent at Cairo, who gave the account mentioned in the beginning of this article. Until that part of the world, therefore, become more acceſſible to travellers, there is but little hope that we can come to any certainty in the matter.

MOUNTAIN LAN'D, *ſ.* in agriculture, a term applied to ſuch land as lies on the ſides of hills, and which is often of a poor barren nature.

MOUNTAIN LE'ATHER. See vol. xv. p. 445.

MOUNTAINS OF THE LI'ONS, a chain of mountains in Africa, which divide Nigritia from Guinea, and extend as far as Ethiopia. They were ſtyled by the ancients *the Mountains of God*, on account of their being greatly ſubject to thunder and lightning.

MOUNTAIN ME'AL. Fabbroni has lately diſcovered a bed of a peculiar kind of earthy matter at Santa Fiora, between Tuſcany and the papal dominions, capable of forming bricks ſo light as to ſwim in water. This mineral has been admitted into ſyſtematic books of mineralogy under the name of mountain-meal; and, from the quantity of ſilica it contains, we ſuppoſe it will be conſidered as a ſpecies of Pyromachus, or flint. Klaproth lately analyſed it, and found its conſtituents as follows: In 99 parts, it contained of ſilica 79, alumina 5, oxyd of iron 3, and water 12.

MOUNTAINS IN THE MOO'N. See the article Astronomy, vol. ii. p. 380.

MOUNTAINS OF THE MOO'N. See Moon, vol. xv. p. 753.

MOUNTAIN PAR'SLEY. See Athamanta.

MOUNTAIN RO'SE-BAY. See Rhododendron.

MOUNTAIN-SPRING BA'Y, a bay on the north coaſt of Jamaica. Lat. 18. 31. N. lon. 77. 29. W.

MOUNTAINEE'R, or Mou'ntainer, an inhabitant of the mountains.—A few *mountainers* may eſcape, enough to continue human race; and yet, being illiterate ruſticks (as *mountainers* always are), they can preſerve no memoirs of former times. *Bentley's Serm.*

Amiternian troops, of mighty fame,
And *mountaineers* that from Severus came. *Dryden's Æn.*

A ſavage; a free booter; a ruſtic.—Through all Turkie, eſpecially in places deſert, there are many *mountainers*, or outlaws, like the wild Iriſh, who live upon ſpoil. *Blunt's Voyage into the Levant.*

No ſavage, fierce bandit, or *mountaineer*,
Will dare to ſoil her virgin purity. *Milton's Comus.*

MOU'NTAINET, *ſ.* A hillock; a ſmall mount. *Elegant, but not in uſe.*—Her breaſts ſweetly roſe up like two fair *mountainets* in the pleaſant vale of Tempè. *Sidney.*

MOU'NTAINOUS, *adj.* Hilly; full of mountains.—The aſcent of the land from the ſea to the foot of the mountains, and the height of the mountains from the bottom to the top, are to be computed, when you meaſure the height of a mountain, or of a *mountainous* land, in reſpect to the ſea. *Burnet's Theory of the Earth.*—Large as mountains; huge; bulky:

On earth, in air, amidſt the ſeas and ſkies,
Mountainous heaps of wonders riſe;
Whoſe towering ſtrength will ne'er ſubmit
To reaſon's batteries, or the mines of wit. *Prior.*

Inhabiting mountains.—In deſtructions by deluge and earthquake, the remnant which hap to be reſerved are ignorant and *mountainous* people, that can give no account of the time paſt. *Bacon's Eſſays.*

MOU'NTAINOUSNESS, *ſ.* State of being full of mountains.—Armenia is ſo called from the *mountainouſneſs* of it. *Brerewood.*

MOU'NTANT, *adj.* [*montant*, Fr.] Riſing on high:

Hold up, you ſluts,
Your aprons *mountant;* you're not oathable,
Although, I know, you'll ſwear. *Shakeſpeare's Timon.*

MOU'NTEBANK, *ſ.* [*monta in banco*, Ital.] A doctor that mounts a bench in the market, and boaſts his infallible remedies and cures.—It looks like a *mountebank* to boaſt infallible cures. *Baker.*

I bought an unction of a *mountebank*,
So mortal, that but dip a knife in it,
Where it draws blood, no cataplaſm ſo rare
Can ſave the thing from death. *Shakeſpeare's Hamlet.*

She, like a *mountebank*, did wound
And ſtab herſelf with doubts profound,
Only to ſhew with how ſmall pain
The ſores of faith are cur'd again. *Hudibras.*

But Æſchylus, ſays Horace in ſome page,
Was the firſt *mountebank* that trod the ſtage. *Dryden.*

Any boaſtful and falſe pretender.—There are *mountebanks* and ſmatterers in ſtate. *L'Eſtrange.*—Nothing ſo impoſſible in nature but *mountebanks* will undertake. *Arbuthnot's Hiſt. of J. Bull.*

It is uncertain at what period this vagrant dealer in phyſic made his appearance in England: it is clear, however, that he figured away with much ſucceſs in this country during the two laſt centuries. He called to his aſſiſtance ſome of the performances practiſed by the jugglers; and the bourdour, or merry-andrew, ſeems to have been his inſeparable companion; hence it is ſaid in an old ballad, entitled Sundry Trades and Callings,

A mountebank without his fool
Is in a ſorrowful caſe.

The mountebanks uſually preface the vending of their medicines with pompous orations, in which they pay as little regard to truth, as to propriety. Shakeſpeare ſpeaks of theſe wandering empirics in very diſreſpectful terms:

As nimble jugglers, that deceive the eye,
Diſtinguiſhed cheaters, prating *mountebanks*,
And many ſuch-like libertines of ſin.

In the reign of James the Second, Hans Buling, a Dutchman, was well known in London as a mountebank. He was, ſays Granger, an odd figure of a man, and extremely fantaſtical in his dreſs; he was attended by a monkey, which he had trained to act the part of a jack-pudding, a part which he had formerly acted himſelf, and which was more natural to him than that of a profeſſor of phyſic. The ignorance and the impudence of the mountebanks are ridiculed in the Spectator, and eſpecially in that paper which concludes with an anecdote of one who exhibited at Hammerſmith: he told his audience, that he had been "born and bred there; and, having a ſpecial regard for the place of his nativity, he was determined to make a preſent of five ſhillings to as many as would accept it. The whole crowd ſtood agape, and ready to take the doctor at his word; when, putting his hand into a long bag, as every one was expecting his crown-piece, he drew out a handful of little packets, each of which, he informed the ſpectators, was conſtantly ſold for five ſhillings and ſix-pence, but that he would bate the odd five ſhillings to every inhabitant of that place. The whole aſſembly immediately cloſed with this generous offer, and took off all his phyſic, after the doctor had made them vouch that there were no foreigners among them, but that they were all Hammerſmith men." Vol. viii. N° 572. See alſo vol. vi. N° 444.

To MOU'NTEBANK, *v. a.* To cheat by falſe boaſts or pretences:

> I'll *mountebank* their loves,
> Cog their hearts from them. *Shakeſpeare's Coriol.*

MOU'NTEBANKERY, *ſ.* Boaſtful and falſe pretence; quackery.—Mere empirical ſtate-*mountebankery.* *Hammond's Works,* iv. 509.

MOU'NTEE, *ſ.* [in old records.] A ſudden call to go on ſome warlike expedition.

MOU'NTENAUNCE, *ſ.* Amount of a thing in ſpace. *Obſolete.*

> This ſaid, they both a furlong's *mountenaunce*
> Retir'd their ſteeds, to runne in even race. *Spenſer.*

MOU'NTER, *ſ.* One that mounts.—Few bankers will to heav'n be *mounters.* *Swift.*

> Though they to the earth were thrown,
> Yet quickly they regain'd their own,
> Such nimbleneſs was never ſhown;
> They were two gallant *mounters.* *Drayton's Nymphid.*

MOU'NTFORT (William), an Engliſh dramatic writer and eminent actor, born in the year 1659, but of what family no particulars are extant, farther than that they were of Staffordſhire. It is probable that he went early upon the ſtage, as it is certain that he died young; and Jacob informs us that, after his attaining that degree of excellence which ſhowed itſelf in his performance of the characters of Tallboy and Sir Courtly Nice, he was entertained for ſome time in the family of the lord-chancellor Jefferies, who, ſays ſir John Rereſby, "at an entertainment of the lord-mayor and court of aldermen in the year 1685, called for Mr. Mountfort to divert the company (as his lordſhip was pleaſed to term it): he being an excellent mimic, my lord made him plead before him in a feigned cauſe, in which he aped all the great lawyers of the age in their tone of voice, and in their action and geſture of body, to the very great ridicule not only of the lawyers, but of the law itſelf; which to me (ſays the hiſtorian) did not ſeem altogether prudent in a man of his lofty ſtation in the law: diverting it certainly was; but prudent in the lord high chancellor, I ſhall never think it." After the fall of Jefferies, our author again returned to the ſtage, in which profeſſion he continued till his death, which happened in 1692.

Colley Cibber, who has, in his Apology, ſhown great candour and warmth in beſtowing all due commendations on his contemporaries, has drawn one of the moſt amiable portraits of Mountfort as an actor. He tells us that he was tall, well made, fair, and of an agreeable aſpect: his voice clear, full, and melodious; a moſt affecting lover in tragedy, and in comedy he gave the trueſt life to the real character of a fine gentleman. In ſcenes of gaiety, he never broke into that reſpect that was due to the preſence of equal or ſuperior characters, though inferior actors played them, nor ſought to acquire any advantage over other performers by fineſſe or ſtage-tricks, but only by ſurpaſſing them in true and maſterly touches of nature. He had in himſelf a ſufficient ſhare of wit, and a pleaſantry of humour that gave new life to the more ſprightly characters which he appeared in; and ſo much decency did he preſerve even in the more diſſolute parts in comedy, that queen Mary II. who was remarkable for her ſolicitude in the cauſe of virtue, and diſcouragement of even the appearance of vice, did, on ſeeing Mrs. Behn's comedy of the Rover performed, at the ſame time that ſhe expreſſed her diſapprobation of the piece itſelf, make a very juſt diſtinction between the author and actor, and allowed a due praiſe to the admirable performance of Mr. Mountfort in the character. He had, beſides this, ſuch an amazing variety in his manner, as very few actors have been able to attain; and was ſo excellent in the caſt of fops and petit-maitres, that Cibber, who was himſelf in high eſteem in that manner of playing, not only acknowledges that he was greatly indebted to his obſervation of this gentleman for his own ſucceſs afterwards, but even confeſſes a great inferiority to him, more eſpecially in perſonal advantage; and ſays moreover that, had Mr. Mountfort been remembered when he firſt attempted them, his defects would have been more eaſily diſcovered, and conſequently his favourable reception in them very much and very juſtly abated.

Such were the excellencies of this great performer, who did not, however, in all probability, reach that ſummit of perfection which he might have arrived at, had he not been untimely cut off by the hands of a baſe aſſaſſin, in the thirty-third year of his age. As the affair was in itſelf of an extraordinary nature, we make no apology for giving a ſhort detail of it in this place, collected from the circumſtances which appeared on the trial of the murderer's accomplice. Lord Mohun, who was a man of looſe morals, and of a turbulent and rancorous ſpirit, had, from a kind of ſympathy of diſpoſition, contracted the cloſeſt intimacy with one captain Hill, whom nature, by withholding from him every valuable quality, ſeemed to have intended for a cut-throat. Hill had long entertained a paſſion for that celebrated actreſs Mrs. Bracegirdle, which that lady had rejected with the contemptuous diſdain which his character juſtly deſerved. Fired with reſentment for this treatment, Hill's vanity would not ſuffer him to attribute it to any other cauſe than a pre-engagement of her affections in favour of ſome other lover. Mountfort's agreeable perſon, his frequently performing the counter-parts in love-ſcenes with Mrs. Bracegirdle, and the reſpect which he uſed always to pay her, induced Hill to fix on him, though a married man, as the ſuppoſed bar to his own ſucceſs. Grown deſperate then of ſucceeding by fair means, he determined to attempt force; and, communicating his deſign to lord Mohun, whoſe attachment to him was ſo great as to render him the accomplice in all his ſchemes, and the promoter of even his moſt criminal pleaſures, they determined on a plan for carrying her away from the play-houſe; but, not finding her there, they got intelligence where ſhe was to ſup, and, having hired a number of ſoldiers and a coach for the purpoſe, waited near the door for her coming out, and, on her ſo doing, the ruffians actually ſeized her, and were going to force her into the coach; but her mother, and the gentleman whoſe houſe ſhe came out of, interpoſing till further aſſiſtance could come up, ſhe was reſcued from them, and ſafely eſcorted to her own houſe. Lord Mohun and captain Hill, however, enraged at their diſappointment in this attempt, immediately reſolved on one of another kind, and with violent imprecations, openly vowed revenge on Mr. Mountfort. Mrs. Bracegirdle's mother, and a gentleman, who were ear-witneſſes to their threats, immediately ſent to inform Mrs. Mountfort of her huſband's danger, with their opinion that ſhe ſhould warn him of it, and adviſe him not to come home that night; but, unfortunately, no meſſenger Mrs. Mountfort ſent was able to find him. In the mean time his lordſhip and the captain paraded the ſtreets with their ſwords drawn till about midnight; when Mr. Mountfort, on his return home, was met and ſaluted in a friendly manner by lord Mohun; but, while that ſcandal to the rank and title which he bore was treacherouſly holding him in a converſation which he could form no ſuſpicion from, the aſſaſſin Hill, being at his back, firſt gave him a deſperate blow on the head with his left hand, and immediately afterwards, before Mountfort had time to draw and ſtand on his defence, he, with the ſword he held ready in his right, ran him through the body. This laſt circumſtance Mr. Mountfort declared, as a dying man, to Mr. Bancroft, the ſurgeon who attended him. Hill immediately made his eſcape; but lord Mohun was ſeized, and ſtood his trial; but, as it did not appear that he immediately aſſiſted Hill in perpetrating this aſſaſſination, and that, although lord Mohun had joined with the captain in his threats of revenge, yet the actual mention of murder could not be proved, his lordſhip was acquitted by his peers. He afterwards, however, himſelf loſt his life in a duel with the duke of Hamilton, in which it has been hinted that ſome of the ſame kind of treachery, of which he had been an abettor in the above-mentioned affair, was put in practice againſt himſelf. Mr. Mountfort's death happened in Norfolk-ſtreet, in the Strand, in the winter of 1692. His body was interred in the church-yard of St. Clement Danes. He left behind him ſix dramatic pieces, the titles of which may be ſeen in the Biographia Dramatica, from which this article is taken.

MOU'NTING, *ſ.* Aſcent.—From this the beholder deſcending many ſteps, was afterwards conveyed again by ſeveral *mountings* to various entertainments of his ſcent and ſight. *Wotton on Architecture.*—The ornaments that raiſe and ſet off a work; as, the *mounting* of a ſnuff-box, of a fan, &c.—Preparation for a warlike expedition or purſuit:

There was *mounting* 'mongſt Græmes of the Netherby clan;
Forſters, Fenwicks, and Muſgraves, they rode and they ran. *Scott's Marmion.*

MOU'NTINGLY, *adv.* By aſcent:

I leap'd for joy,
So *mountingly*, I touch'd the ſtars, methought. *Maſſinger.*

MOUNTMEL'LICK, a town of Ireland, in Queen's County, ſituated on a ſmall river, which ſoon after runs into the Barrow: five miles north of Maryborough, and forty-two weſt-ſouth-weſt of Dublin.

MOUNTRATH', a town of Ireland, in Queen's County. Iron forges and furnaces have been long erected in the neighbourhood of this town, but from the ſcarcity of charcoal have not been in regular uſe; the woollen manufacture is carried on, and forms the principal trade. It is ſix miles weſt-ſouth-weſt of Maryborough, and twenty-three north of Kilkenny.

MOU'NTY, *ſ.* [*montée*, Fr.] The riſe of a hawk.—The ſport which Baſilius would ſhew to Zelmane, was the *mounty* at a heron, which, getting up on his waggling wings with pain, as though the air next to the earth were not fit to fly through, now diminiſhed the ſight of himſelf. *Sidney.*

MOUR, a town of Nubia, ſo called from a ſpring of bitter water: 180 miles weſt of Syene.

MOUR, a town of Hindooſtan, in Dowlatabad: ten miles weſt of Beder.—A town of Hindooſtan, in Oude: ſix miles ſouth-ſouth-eaſt of Manickpour.

MOU'RA, a town of Portugal, in Alentejo. It contains two pariſh-churches, an hoſpital, ſeveral convents, and about 4000 inhabitants. It is thirty-ſeven miles ſouth-ſouth-eaſt of Evora, and eighty-two eaſt-ſouth-eaſt of Liſbon. Lat. 38. 7. N. lon. 7. 21. W.

MOU'RA, a town of Africa, on the Gold Coaſt: five miles north-eaſt of Cape Coaſt Caſtle.

MOURA'O, a town of Portugal, in the province of Alentejo, on the Guadiana. It is defended by a caſtle, and contains about 1400 inhabitants: ninety miles eaſt-ſouth-eaſt of Liſbon, and twenty-eight eaſt of Evora. Lat. 58. 20. N. lon. 7. 8. W.

MOURE'RA, *ſ.* in botany. See Lacis.

MOU'RGUES (Michael), a celebrated French philoſopher and mathematician, born in ſome part of the province of Auvergne, about the year 1643. He taught rhetoric and the mathematics in different houſes belonging to his order, and afterwards filled for many years the chair of profeſſor-royal in thoſe ſciences at the univerſity of Toulouſe, with very great ſucceſs and reputation. He died at that city in the year 1713, about the age of ſeventy, a ſacrifice to his exertions in the cauſe of humanity and religion, during a peſtilential diſorder which then ravaged Toulouſe. To profound erudition he united the moſt poliſhed and amiable manners, which made his acquaintance much ſought for by men of letters; and his piety and probity rendered him no leſs dear to all good men, than reſpectable to libertines themſelves, to whoſe reformation his labours were zealouſly directed. So fertile was his pen, that almoſt every year he produced ſome piece of poetry, and a treatiſe on a moral or ſcientific ſubject. The beſt known and eſteemed of his productions are, 1. New Elements of Geometry, according to a particular Method, compriſed in leſs than fifty Propoſitions, 12mo. 2. A Parallel between Chriſtian Morality and that of the ancient Philoſophers, deſigned to ſhow the Superiority of our ſacred Maxims to thoſe of human Wiſdom, 1702, 12mo. accompanied with a tranſlation of the Manual of Epictetus; and the Greek paraphraſe on that manual by an ancient ſolitary; a Life of Epictetus; and a tranſlation of the Letter of Arrian to Lucius Gellius. 3. An explanation of the Theology of the Pythagoreans, and of the other learned Sects in Greece, for the Purpoſe of illuſtrating the polemical Writings of the Fathers againſt the Pagans, 1712; 2 vols. 8vo. accompanied with a French verſion of the Therapeutics of Theodoret, and Two Diſſertations, one On the Reign of Semiramis, and the other On the Ancient Oracles. 4. A Treatiſe on French Poetry, 1684, 12mo. reprinted at Paris in 1724, by father Brumoy, with the addition of obſervations on the different kinds of poetry. 5. Collection of Bons-mots, in French Verſe, &c. &c. *Moreri.*

MOU'RI, a town of Africa, in Foota. Lat. 10. 43. N. lon. 11. 5. W.

MOURICOU', *ſ.* in botany. See Erythrina.

MOURI'RI. See Petaloma.

MOURMOIRON', a town of France, in the department of the Vaucluſe: ſeventeen miles north-eaſt of Avignon.

To MO'URN, *v. n.* [*mournan*, Goth. muꞃnan, Sax. *morner*, old Fr.] To grieve; to be ſorrowful.—They rejoice at the preſence of the ſun, and *mourn* at the abſence thereof. *Bacon's Nat. Hiſt.*

He *mourn'd* in earneſt, when the captive ark
Maim'd his brute image, head and hands lopt off. *Milton.*

To wear the habit of ſorrow.—We *mourn* in black; why *mourn* we not in blood? *Shakeſpeare.*

Friends in ſable weeds appear,
Grieve for an hour, perhaps then *mourn* a year;
And bear about the mockery of woe
To midnight dances. *Pope.*

To MO'URN, *v. a.* To grieve for; to lament.—The muſe that *mourns* him now his happy triumph ſung. *Dryden.*

As comfortleſs as when a father *mourns*
His children all in view deſtroy'd at once. *Milton.*

Portius himſelf oft falls in tears before me,
As if he *mourn'd* his rival's ill ſucceſs. *Addiſon's Cato.*

To utter in a ſorrowful manner:

The love-lorn nightingale,
Nightly to thee her ſad ſong *mourneth* well. *Milton's Comus.*

MOU'RNAND, a town of France, in the department of the Rhône and Loire: twelve miles ſouth-weſt of Lyons.

MO'URNE, *ſ.* [*morne*, Fr.] The round end of a ſtaff; the part of a lance to which the ſteel part is fixed, or where it is taken off.—He carried his lances, which, though ſtrong to give a lancely blow indeed, yet ſo were they coloured with hooks near the *mourne*, that they prettily repreſented ſheep-hooks. *Sidney.*

MOU'RNE, a river of Ireland, which riſes from a lake of the ſame name, and runs into the Foyle, at Lifford.

MOU'RNE, a barony of the county of Down, Ireland, which is almoſt covered with a large maſs of very high mountains, generally called the Mourne Mountains, of which Sliebh-Donard is the chief. Theſe are primitive mountains, conſiſting chiefly of granite. The town of Newry is ſituated at the baſe of them.

MO'URNER, *ſ.* One that mourns; one that grieves.—Indeed I am no *mourner* for that news. *Shakeſpeare.*

From noiſe and riot he devoutly kept,
Sigh'd with the ſick, and with the *mourner* wept. *Harte.*

One who follows a funeral in black.—A woman that had two daughters buried one, and *mourners* were provided to attend the funeral. *L'Eſtrange.*

He lives to be chief *mourner* for his ſon;
Before his face his wife and brother burn. *Dryden.*

MO'URNER, *adj.* Uſed at funerals.—The *mourner* eugh, and builder oak were there. *Dryden.*

MO'URNFUL, *adj.* Having the appearance of ſorrow.

No funeral rites, nor man in *mournful* weeds,
Nor mournful bell ſhall ring her burial. *Shakeſpeare.*

The winds within the quivering branches play'd,
And dancing trees a *mournful* muſic made. *Dryden.*

Cauſing ſorrow:

Upon his tomb
Shall be engrav'd the ſack of Orleans;
The treacherous manner of his *mournful* death. *Shakeſp.*

Sorrowful; feeling ſorrow:

The *mournful* fair,
Oft as the rolling years return,
With fragrant wreaths and flowing hair,
Shall viſit her diſtinguiſh'd urn. *Prior.*

Betokening ſorrow; expreſſive of grief.—No *mournful* bell ſhall ring her burial. *Shakeſpeare.*

On your family's old monument
Hang *mournful* epitaphs. *Shakeſpeare.*

MO'URNFULLY, *adv.* Sorrowfully; with ſorrow.—Beat the drum, that it ſpeak *mournfully.* *Shakeſpeare.*

MO'URNFULNESS, *ſ.* Sorrow; grief. Show of grief; appearance of ſorrow.

MO'URNING, *ſ.* [Sax. muꞃnung.] Lamentation; ſorrow.—Wo is me, who will deliver me in thoſe days? the beginning of ſorrows and great *mournings.* 2 *Eſdr.* xvi. 18.—The dreſs of ſorrow:

They through the maſter-ſtreet the corpſe convey'd,
The houſes to their tops with black were ſpread,
And ev'n the pavements were with *mourning* hid. *Dryden.*

The modes of mourning are various in various countries; as alſo are the colours that obtain for that end. In Europe, the ordinary colour for mourning is black; in China, it is white; in Turkey, blue or violet; in Egypt, yellow; in Ethiopia, brown. White obtained formerly in Caſtile on the death of their princes: Herrera obſerves, that the laſt time it was uſed was in 1498, at the death of prince John. The Gentleman's Magazine (April 1731) ſays, "Yellow ſatin was the court-mourning in the days of Harry the 8th: ſcarlet continued to be ſo till within our remembrance." For every colour, people pretend to have their reaſons: thus, white is ſuppoſed to denote purity; yellow, that death is the end of human hopes, in regard that leaves when they fall, and flowers when they fade, become yellow; brown denotes the earth, whither the dead return; black, the privation of life, as being the privation of light; blue expreſſes the happineſs which it is hoped the deceaſed does enjoy; and purple or violet, ſorrow on the one ſide, and hope on the other, as being a mixture of black and blue.

Mourning among the ancients, was expreſſed various ways.

Amongſt the Jews, on the death of their relations or intimate friends, grief or mourning was ſignified by weeping, tearing their clothes, ſmiting their breaſts, or tearing them with their nails, pulling or cutting off their hair and beards, *walking ſoftly*, i. e. barefoot, lying upon the ground, faſting, or eating upon the ground. They kept themſelves cloſe ſhut up in their houſes, covered their faces, and abſtained from all work, even reading the law, and ſaying their uſual prayers. They neither dreſſed themſelves, nor made their beds, nor ſhaved themſelves, nor cut their nails, nor went into the bath, nor ſaluted any body: ſo that ſulkineſs ſeems to have been an indication of ſorrow; and dirtineſs, of diſtreſs. The time of mourning among the Jews was generally ſeven days; though this was lengthened or ſhortened according to circumſtances; but thirty days were thought ſufficient upon the ſevereſt occaſions. The different periods of the time of mourning required different degrees of grief, and different tokens of it.

The Greeks, on the death of friends, ſhowed their ſorrow by ſecluding themſelves from all gaiety, entertainments, games, public ſolemnities, the enjoyment of wine, and the delights of muſic. They ſat in gloomy and ſolitary places, ſtripped themſelves of all external ornaments, put on a coarſe black ſtuff by way of mourning, tore their hair, ſhaved their heads, rolled themſelves in the duſt and mire, ſprinkled aſhes on their heads, ſmote their breaſts with their palms, tore their faces, and frequently cried out with a lamentable voice and drawling tone, reiterating the interjection E, E, E; hence funeral lamentations were called Ελεγοι. If they appeared in public during the time of mourning, they had a veil thrown over their faces and heads. During the funeral proceſſion, certain perſons called εξαρχοι θρηνων marched before, and ſang melancholy ſtrains, thrice during the proceſſion round the pile and round the grave. Flutes were alſo uſed to heighten the ſolemnity.

The tokens of private grief among the Romans were nearly the ſame as among the Greeks. Black or dark brown were the colours of the mourning habits worn by the men; they were alſo common to the women. The mourning of the emperors at firſt was black. In the time of Auguſtus, the women wore white veils, and the reſt of their dreſs black. From the time of Domitian they wore nothing but white habits, without any ornaments of gold, jewels, or pearls. The men let their hair and beards grow, and wore no wreaths of flowers on their heads while the days of mourning continued. The longeſt time of mourning was ten months: this was Numa's eſtabliſhment, and took in his whole year. For a widow to marry during this time was infamous. Mourning was not uſed for children who died under three years of age. From this age to ten they mourned as many months as the child was years old. A remarkable victory, or other happy event, occaſioned the ſhortening of the time of mourning; the birth of a child, or the attainment of any remarkable honour in the family, certain feaſts in honour of the gods, or the conſecration of a temple, had the ſame effect. After the battle of Cannæ, the commonwealth decreed that mourning ſhould not be worn for more than thirty days, that the loſs might be forgotten as ſoon as poſſible. When public magiſtrates died, or perſons of great note, alſo when any remarkable calamity happened, all public meetings were intermitted, the ſchools of exerciſe, baths, ſhops, temples, and all places of concourſe, were ſhut up, and the whole city put on a face of ſorrow; the ſenators laid aſide the *laticlave*, and the conſuls ſat in a lower ſeat than ordinary. This was the cuſtom of Athens alſo, and was obſerved upon the death of Socrates not long after he had been ſentenced to death by their judges.

The ancients had a remarkable way of mourning for ſoldiers ſlain in battle. The whole army attended the funeral ſolemnities, with their arms reverſed; it being cuſtomary for mourners, in moſt of their actions, to behave themſelves in a manner contrary to what was uſual at other times. In thoſe places where it was the faſhion to wear long hair, mourners were ſhaved; and, where others ſhaved, mourners wore long hair. The conjecture of thoſe, therefore, is frivolous, who imagine that the ſoldiers turned the heads of their ſhields downwards, leſt the gods, whoſe images were engraved upon them, ſhould be polluted with the ſight of a corpſe; ſince not the gods only, but any other figures, were frequently repreſented on ſhields; and not only the few near the corpſe, but the whole company, held their ſhields in the ſame poſition; not to mention that other arms were alſo pointed downwards. *Potter's Archæol. Græc.* tom. ii.

The mournings of the Eaſtern nations of Indians are much more cloſely followed, though of much ſhorter duration than ours. After the death of a near relation, they mourn fifteen days, during which time they eat nothing but rice and water; they are not to chew betel, or to uſe the common waſhings in this time; but they are to do acts of charity, ſuch as diſtributing food to the poor; and prayers are ſaid, intreating the Almighty to forgive the ſins of the dead perſon, and aſſign him a good place in the other world. On the ſixteenth day, that is, the day after the finiſhing of the time of mourning, they make a ſolemn feaſt according to their abilities, and invite to it all their friends and neighbours. After this, they annually, on this day, give food to the poor, and renew their prayers for the happineſs of the dead perſon. *Phil. Tranſ.* N° 243.

MO'URNING, *adj.* Appertaining to grief, or to the appearance of grief.—Feign thyſelf to be a mourner, and put on *mourning* apparel. 2 *Sam.* xiv. 2.

Publiſh it that ſhe is dead;
Maintain a *mourning* oſtentation,
Hang mournful epitaphs. *Shakeſpeare's Much Ado.*

MO'URNINGLY, *adv.* With the appearance of ſorrowing.—The king ſpoke of him admiringly and *mourningly.* *Shakeſpeare.*

MOURO'N, a town of France, in the department of the Seine and Marne: three miles weſt of Coulommiers.

MOURO'N, a mountain of Thibet. Lat. 30. 20. N. lon. 83. 14. E.

MOROU-CON'GHE, a town of Thibet: ſeventy-ſix miles eaſt-north-eaſt of Laſſa.

MOUROUCO'A, *ſ.* in botany, a climbing ſhrub of the natural order of Convolvuli, found by Aublet in the extenſive foreſts of Guiana, where it aſcends to the ſummits of the loftieſt trees. He calls it M. violacea. The root is perennial; leaves alternate, ſtalked, elliptical, acute, entire, firm, ſmooth, ſix inches long and three broad. Flowers in axillary tufts, large, and ſalver-ſhaped; calyx in five deep rounded ſegments, two of them concealing the reſt, violet-coloured, permanent; corolla blue, flat, monopetalous, with a ſhort funnel-ſhaped tube, and broad limb, in five deep rounded ſegments; ſtamens five, inſerted into the tube, ſhorter than the limb, and oppoſite to each of its lobes; antheræ incumbent; capſule oval, pointed, with a fibrous coat, of two cells, one of the three which exiſt in the germen being abortive; ſeeds ſolitary, reddiſh, poliſhed, long, convex on the outſide, flat on the inner, almoſt an inch and a half thick.

This plant is perhaps juſtly referred to *Convolvulus* by Willdenow. He calls it Convolvulus macroſpermus.

MOURTE'AH, a town of Kemaoon: twenty-five miles eaſt-ſouth-eaſt of Kerigar.

MOU'RZOUK, a city of Africa, and capital of the kingdom of Fezzan, ſituated on the banks of a ſmall river, and well ſupplied with water by a multitude of wells and ſprings. It is ſurrounded by a high wall, which not only furniſhes the means of defence, but affords to the government an opportunity of collecting, at its three gates, a tax on all goods (proviſions excepted) that are brought in. Being formerly built with ſtone, it ſtill retains the appellation of a Chriſtian town; and the medley which it preſents to the eye, of the vaſt ruins of ancient buildings, and of the humble cottages of earth and ſand, that form the dwellings of its preſent Arab inhabitants, is ſingularly groteſque and ſtrange. It is 262 miles ſouth of Meſurata, and 940 north-eaſt of Tombuctou. Lat. 27. 28. N. lon. 15. 35. E.

MOU'SA, a ſmall iſland among the Shetlands. Lat. 60. 24. N. lon. 1. 20. W.

MOUSANAGUR', a town of Hindooſtan, in Oude: eighteen miles weſt-north-weſt of Corah.

MOU'SAR, a town of Perſia, in Lariſtan: forty-eight miles north-weſt of Lar.

MOU'SE, *ſ.* plural *mice;* [muꞅ, Sax. *mus,* Lat.] The ſmalleſt of all beaſts; a little animal haunting houſes and corn-fields, deſtroyed by cats. See the article Mus.—This ſtructure of hair I have obſerved in the hair of cats, rats, and *mice.* *Derham's Phyſico-Theol.*

The eagle England being in prey,
To her unguarded neſt the weaſel Scot
Comes ſneaking, and ſo ſucks her princely eggs;
Playing the *mouſe* in abſence of the cat. *Shakeſpeare.*

Where *mice* and rats devour poetic bread,
And with heroic verſe luxuriouſly were fed. *Dryden.*

Formerly a word of endearment.—Why, *mouſe,* thy mind is nibbling at ſomething. *Mid. and Dek. Roaring Girl.*

Then part they all, each one unto their houſe;
And who had mark'd the pretty looks that paſt
From privy friend unto his pretty *mouſe,*
Would ſay with me at twelve o'clock at night,
It was a party, truſt me, worth the ſight. *Breton.*

A term applied to part of a leg of beef; the *mouſe*-buttock: [*muys,* Teut. a fleſhy part.]

Mouse, in ſea-language, is a ſort of knob uſually in the ſhape of a pear, wrought on the outſide of a rope, by means of ſpun-yarn, parſling, &c. and uſed to confine ſome other ſecurely to the former, and prevent it from ſliding along its ſurface.

Dor-Mouse. See Myoxus.

Shrew-Mouse. See Sorex.

To MOUSE, *v. n.* To catch mice:

A falcon tow'ring, in his pride of place
Was by a *mouſing* owl hawk'd at and kill'd. *Shakeſpeare.*

It is ſuppoſed to mean, in the following paſſage, ſly; inſidious, or predatory; rapacious; intereſted.—A whole aſſembly of *mouſing* ſaints, under the maſk of zeal and good nature, lay many kingdoms in blood. *L'Eſtrange.*

To MOUSE, *v. a.* To tear in pieces, as a cat devours a mouſe.—Well *mouſed,* lion! *Shakeſpeare's Midſummer N. Dream.*

It had been worſe to have been priſoner
To ſuch a beaſt; who, though he doth not bear
A mouſe's heart, might have *mouz'd* me. *Fanſhaw.*

MOUSE (Eaſt), a ſmall iſland on the north coaſt of the iſland of Angleſea: three miles weſt of Hilary Point.

MOUSE (Middle), a ſmall iſland near the north coaſt of the iſland of Angleſea: ſeven miles weſt of Hilary Point.

MOUSE (Weſt), a ſmall iſland near the north coaſt of the iſland of Angleſea: twelve miles weſt of Hilary Point.

MOU'SE-EAR, *ſ.* A plant. See Hieracium and Myosotis.

To him that hath a flux, of ſhepherds-purſe he gives,
And *mouſe-ear* unto him whom ſome ſharp rupture grieves. *Drayton.*

MOUSE-EAR CHICK'WEED. See Cerastium.

MOUSE HAR'BOUR, a harbour on the eaſt coaſt of the iſland of St. John, in the Gulf of St. Lawrence.

MOU'SE-HAWK, ſ. A hawk that devours mice.

MOUSE-HOLD HILL', an eminence near the city of Norwich, where Ket harangued his followers.

MOU'SE-HOLE, ſ. Small hole; hole at which a mouſe only may run in.—He can creep in at a *mouſe-hole*, but he ſoon grows too big ever to get out again. *Stillingfleet.*

MOU'SE-HOLE, a village in Cornwall, on the weſt ſide of Mount's Bay, 200 miles from London; a harbour for fiſhing-boats, called in the Britiſh tongue *Port Inis*, or the Port of the Iſland, becauſe there is a little iſland before it, called St. Clement's. This town, with ſome adjacent villages, was burnt by the Spaniards, anno 1595.

MOU'SE-HUNT, ſ. Mouſer; a kind of weaſel.—The ferrets and *mouſe-hunts* of an index. *Milton.*

You have been a *mouſe-hunt* in your time,
But I will watch you. *Shakeſpeare's Romeo and Juliet.*

MOUSE RAY', a town of Africa, in the country of Foulis, on Lake Cayar. Lat. 17. 36. N. lon. 14. 21. W.

MOU'SE-TAIL, ſ. An herb. See MYOSURUS.

MOU'SE-TRAP, ſ. A ſnare or gin in which mice are taken.—Many analogical motions in animals, I have reaſon to conclude, in their principles are not ſimply mechanical, although a *mouſe-trap*, or Architas dove, moved mechanically. *Hale.*

MOU'SER, ſ. One that catches mice.—When you have fowl in the larder, leave the door open, in pity to the cat, if ſhe be a good *mouſer*. *Swift.*

MOU'SH, a town of Turkiſh Armenia, on a river which runs into the Euphrates: eighty-four miles ſouth-ſouth-eaſt of Erzerum, and 104 north-eaſt of Diarbekir. Lat. 38. 48. N. lon. 41. 40. E.

MOU'SSY, a river of Hindooſtan, which croſſes Golconda, and runs into the Kiſtnah on the borders of the circar of Palnaud.

MOUSTIE'R (Charles-Albert de), a dramatic and miſcellaneous writer, born in 1761, at Villiers-Coterets, was educated at the college of Liſieux, and for ſome time followed the profeſſion of an advocate. This he deſerted in order to devote himſelf entirely to literature, and indulge his taſte for rural retirement. He publiſhed in 1790, "Lettres à Emilie ſur la Mythologie," 6 vols. 18mo. a lively and ingenious work, written partly in proſe and partly in verſe, for the purpoſe of inſtructing the fair-ſex in fabulous hiſtory. His pen was, however, chiefly employed for the theatres; and he wrote the comedies of Le Conciliateur, Les Femmes, Les Trois Fils, Le Tolérant, and Alceſte à la Campagne, which were acted with applauſe on the ſtage, as well as ſeveral which proved leſs ſucceſsful. He likewiſe compoſed a grand opera, entitled Apelles et Campaſpe, which was favourably received; and ſome poems. He died in 1800 of a conſumptive diſorder, in the arms of his mother, with whom he lived on the moſt affectionate terms, leaving behind him ſeveral compoſitions in manuſcript. He was a member of the National Inſtitute, and was greatly beloved in ſociety. *Nouv. Dict. Hiſt.*

MOUSTIE'RS, a town of France, in the department of the Lower Alps: fifteen miles ſouth of Digne, and twelve weſt of Caſtellane.

MOUSTIE'RS. See MONSTIERS.

MOU'SUL. See MOSUL.

MOU'TA, a town of Portugal, in Eſtramadura, on the left bank of the Tagus: five miles ſouth of Liſbon.

MOUTABE'A, ſ. in botany. See CRYPTOSTOMUM.

MOUTAHO'RA, a ſmall lofty iſland in the Pacific Ocean, near the eaſt coaſt of New Zealand. Lat. 37. 59. N. lon. 193. 7. W.

MOU'TH, ſ. [*munth*, Goth. whence the Sax. muð, ſinking as in ſome other words the *n*. The German is *mund;* and the word has long ſince been derived from the Lat. *mando*, to eat. Mr. Tooke has given *matjith*, that which eateth, from *matjan*, metian, to eat, as the root. Wachter prefers *meinen*, to expreſs meaning, the more noble office of the mouth, as the original. We have the vulgar expreſſion *muns* for *mouth;* and in Scotland it is *munds*.] The aperture in the head of any animal at which the food is received.—The dove came in; and lo, in her *mouth* was an olive-leaf. *Gen.* viii. 11.—The opening; that at which any thing enters; the entrance; the part of a veſſel by which it is filled and emptied.—Set a candle lighted in the bottom of a baſon of water, and turn the *mouth* of a glaſs over the candle, and it will make the water riſe. *Bacon's Nat. Hiſt.*—The navigation of the Arabick gulf being more dangerous toward the bottom than the *mouth*, Ptolemy built Berenice at the entry of the gulf. *Arbuthnot on Coins.*—The inſtrument of ſpeaking.—There is a certain ſentence got into every man's *mouth*, that God accepts the will for the deed. *South.*

Either our hiſtory ſhall with full *mouth*
Speak freely of our acts; or elſe our grave,
Like Turkiſh mute, ſhall have a tongueleſs *mouth*,
Not worſhipp'd with a waxen epitaph. *Shakeſpeare.*

A ſpeaker; a rhetorician; the principal orator. *In burleſque language.*—Every coffee-houſe has ſome particular ſtateſman belonging to it, who is the *mouth* of the ſtreet where he lives. *Addiſon.*—Cry; voice:

Coward dogs
Moſt ſpend their *mouths*, when what they ſeem to threaten
Runs far before them. *Shakeſpeare's Hen. V.*

Diſtortion of the mouth; wry face, in this ſenſe, is ſaid to *make mouths*.—Why they ſhould keep running aſſes at Coleſhill, or how making *mouths* turns to account in Warwickſhire, more than any other parts of England, I cannot comprehend. *Addiſon.*

Perſevere, counterfeit ſad looks,
Make *mouths* upon me when I turn my back. *Shakeſpeare.*

Down in the MOUTH. Dejected; clouded in the countenance.—But, upon bringing the net aſhore, it proved to be only one great ſtone, and a few little fiſhes: upon this diſappointment they were *down in the mouth*. *L'Eſtrange.*

Dr. Derham obſerves, that the mouth in the ſeveral ſpecies of animals is nicely adapted to the uſes of ſuch a part, and well ſized and ſhaped for the formation of ſpeech, the gathering and receiving of food, the catching of prey, &c. In ſome creatures it is wide and large, in others little and narrow; in ſome it is formed with a deep inciſure into the head, for the better catching and holding of prey, and more eaſy comminution of hard, large, and troubleſome, food; and in others with a ſhorter inciſure, for the gathering and holding of herbaceous food. In birds it is neatly ſhaped for piercing the air; hard and horny, to ſupply the want of teeth; hooked, in the rapacious kind, to catch and hold their prey; long and ſlender in thoſe that have their food to grope for in mooriſh places; and broad and long in thoſe that ſearch for it in the mud. Nor is the mouth leſs remarkable in inſects; in ſome it is forcipated, to catch, hold, and tear, the prey; in others aculeated, to pierce and wound animals, and ſuck their blood; in others, ſtrongly rigid, with jaws and teeth, to gnaw and ſcrape out their food, carry burdens, perforate the earth, nay the hardeſt wood, and even ſtones themſelves, for houſes and neſts for their young.

To MOU'TH, ſ. To ſpeak big; to ſpeak in a ſtrong and loud voice; to vociferate:

I'll bellow out for Rome, and for my country,
And *mouth* at Cæſar till I ſhake the ſenate. *Addiſon.*

To MOU'TH, *v. a.* To utter with a voice affectedly big; to roll in the mouth with tumult.—Speak the ſpeech as I pronounced it, trippingly on the tongue; but, if you *mouth* it, I had as lieve the town-crier had ſpoke my lines. *Shakeſpeare's Hamlet.*

Twitch'd by the ſleeve, he *mouths* it more and more,
Till with white froth his gown is ſlaver'd o'er. *Dryden.*

To chew; to eat; to grind in the mouth:

Corne carried, let ſuch as be poore go and glean,
And after thy cattel to *mouth* it up clean. *Tuſſer's Huſb.*

Death lines his dead chaps with ſteel;
The ſwords of ſoldiers are his teeth, his phangs;
And now he feaſts, *mouthing* the fleſh of men. *Shakeſpeare.*

To ſeize in the mouth.—He keeps them, like an apple, in the corner of his jaw; firſt *mouth'd* to be laſt ſwallowed. *Shakeſpeare's Hamlet.*

Mutius and Lupus both by name he brought;
He *mouth'd* them, and betwixt his grinders caught. *Dryd.*

To form by the mouth.—In regard the cub comes forth involved in the chorion, a thick membrane obſcuring the formation, and which the dam doth after tear aſunder; the beholder at firſt ſight imputes the enſuing form to the *mouthing* of the dam. *Brown.*—To inſult; to attack with reproachful language:

If, when men died, at once they ceas'd to be,
Returning to the barren womb of nothing,
Whence firſt they ſprung; then might the debauchee
Untrembling *mouth* the heavens. *Blair's Grave.*

MOU'TH-FRIEND, *ſ.* One who profeſſes friendſhip without intending it:

May you a better feaſt never behold,
You knot of *mouth-friends:* ſmoke and lukewarm water
Is your perfection. *Shakeſpeare.*

MOU'TH-HONOUR, *ſ.* Civility outwardly expreſſed without ſincerity:

Honour or love, obedience, troops of friends,
I muſt not look to have; but, in their ſtead,
Curſes not loud but deep, *mouth-honour*, breath. *Shakeſp.*

MOU'TH-MADE, *adj.* Expreſſed by the mouth without any intention of the heart. *Shakeſpeare.*

MOU'TH-PIECE, *ſ.* The little piece of a trumpet, or other wind-inſtrument, to which the mouth is applied; and which is taken off from the inſtrument when not blown. In colloquial language, one who delivers the ſentiments of others aſſociated in the ſame deſign: as, He was the *mouth-piece* of the meeting.

MOU'THE, a town of France, in the department of the Doubs: eighteen miles ſouth-eaſt of Salins, and thirteen ſouth-weſt of Pontarlier.

MOU'THED, *adj.* Furniſhed with a mouth:

One tragick ſentence if I dare deride,
Which Betterton's grave action dignify'd,
Or well-*mouth'd* Booth with emphaſis proclaims. *Pope.*

In compoſition, foul-*mouthed* is contumelious; and a hard-*mouthed* horſe is a horſe not obedient to the bit. See MEALY-MOUTHED.

MOU'THFUL, *ſ.* What the mouth contains at once. Any proverbially ſmall quantity.—A goat, going out for a *mouthful* of freſh graſs, charged her kid not to open the door till ſhe came back. *L'Eſtrange.*

You to your own Aquinum ſhall repair,
To take a *mouthful* of ſweet country air. *Dryden's Juv.*

MOU'THLESS, *adj.* Being without a mouth.

MOUTIE'R, a town of France, in the department of the Upper Rhine, and chief place of a canton, in the diſtrict of Délémont. The place contains 467, and the canton 3977, inhabitants.

MOUTIE'R D'AHUN', a town of France, in the department of the Creuſe: nine miles ſouth-eaſt of Gueret, and nine north-weſt of Aubuſſon.

MOUTIE'R ST. JEAN', a town of France, in the department of the Côte d'Or: three miles north of Semur en Auxois.

MOUTIE'RS, a town of Swiſſerland, divided into the northern and ſouthern parts: the former contains 1470 inhabitants, the latter has 1535 inhabitants.

MOUTIE'RS, or MUN'STER, a town of Germany: twenty miles ſouth-ſouth-weſt of Bâle, and fourteen ſouth-eaſt of Porentrui.

MOUTIE'RS (Trois), a town of France, in the department of the Vienne, and chief place of a canton, in the diſtrict of Loudun. The place contains 1257, and the canton 7599, inhabitants, in 16 communes.

MOUTIE'RS LES BAIN'S, a town of France, in the department of the Allier: two miles weſt of Cuſſet, and ten eaſt of Gannat.

MOUTIERS-LES-MAUXFAI'TS, a town of France, in the department of the Vendée, and chief place of a canton, in the diſtrict of Les Sables d'Olonne: fourteen miles eaſt of it, and ten weſt of Luçon. The place contains 349, and the canton 10,634, inhabitants.

MOUTO'N (Jean), a great muſician, who flouriſhed in the time of Louis XII. and Francis I. to both which princes he was maeſtro di capella. Several of his maſſes in four parts appear among the firſt that were printed with types, under a patent granted by Leo X. and ſigned by cardinal Bembo, his prime miniſter. Glareanus calls him a Frenchman; but Lud. Guicciardini claims him as a native of the Netherlands. Wherever he was born, it is certain that he ſpent the chief part of his life in the ſervice of the French court, during the reigns of Louis XII. and Francis I. He was a diſciple of Joſquin, and maſter of Adrian Willaert, not his ſcholar, as Printz, and others after him, have aſſerted.

Notwithſtanding the rapture with which Glareanus ſpeaks of this compoſer's maſſes, they ſeem to us inferior in melody, rhythm, and deſign, to thoſe of Joſquin, de la Rue, and Fevin. His motets, however, if not more nervous and elaborate than thoſe of his contemporaries, are more ſmooth and poliſhed; but he lived in a court. His motet, "Non nobis, Domine," is not only pleaſing, but maſterly. It was compoſed in 1509, for the birth of Renée, the ſecond daughter of Louis XII. by Anne of Bretagne, as appears in the body of the motet; and this is ſufficient to confute the opinion of Mouton having been the ſcholar of Adrian Willaert, who, according to his own account, went into Italy very young, during the pontificate of Leo X. He compoſed another motet in 1514, on the death of queen Anne de Bretagne; but the beſt of his compoſitions that we have ſeen, is the motet, "Quam pulchra es, amica mea," from the Song of Solomon. It is compoſed for three tenors and a baſe; the ſubjects of fugue are pleaſing, and treated with uncommon clearneſs and abilities, for ſo early a period of counterpoint. The time of his death is not known.

MOUTON D'O'R, *ſ.* The name of an old French coin.

MOUTOU'CHIA, *ſ.* in botany. See PTEROCARPUS.

MOU'Y, a town of France, in the department of the Oiſe: ſix miles ſouth-ſouth-weſt of Clermont, and twelve ſouth-eaſt of Beauvais.

MOU'ZA, a town of Italy, near Milan, ſituated on a little iſland in the river Lambro. In this town was formerly kept a golden crown, formed with an internal hoop of iron, and therefore called the *iron crown*, with which the German emperors, in former times, were crowned as kings of Lombardy.

MOUZANBA'NO, a town of Italy, on the Veroneſe: fourteen miles ſouth-weſt of Verona.

MOU'ZIN, or MOSYN (Michael), a Dutch engraver, was born at Amſterdam in the year 1636. In the execution of his plates he united the point and the graver, but not ſucceſsfully; for his ſtyle is heavy and laboured, and his drawing incorrect. The following of his works are moſt worthy of notice: Admiral Van Waſſenaer, of Holland, in 4to. oval; Admiral Ruyter, in folio; Cornelius de Witt, large folio; John Van Galen; a Dutch admiral, large folio; a Couchant Venus; the Four Elements under the Empire of Venus, large folio; Children dancing to a Tambourin and Triangle, played by a Woman and a

Satyr; another group of Three Children dancing; and a Satyr preſenting a Bunch of Grapes to a Female and Child: all after Holſtein, in folio.

MOUZON', a town of France, in the department of the Ardennes, on the Meuſe. This town was the capital of a ſmall territory belonging to the archbiſhop of Rheims, who alienated it to Charles V. in the year 1379. It has often been taken and retaken in the wars between France and the empire, and continued fortified till the year 1671, when Louis XIV. ordered the fortifications to be deſtroyed. Here is a manufacture of ſerges. It is nine miles ſouth-eaſt of Sedan, and twelve north-weſt of Montmedy. Lat. 49. 36. N. lon. 5. 9. E.

MOUZON', a river of France, which runs into the Meuſe at Neufchâtel, in the department of the Voſges.

MOW, a town of Hindooſtan, in the country of Allahabad: ſix miles north-weſt of Chatterpour, and ſixty eaſt-north-eaſt of Chanderee. A town of Hindooſtan, in Oude: twenty miles ſouth-eaſt of Azimgur.—A town of Hindooſtan, in the circar of Chanderee: eight miles ſouth-eaſt of Seronge.—A town of Hindooſtan, in Oude: ſixteen miles north-north-eaſt of Furruckabad.—A town of Hindooſtan, in Bogilcund: thirty miles eaſt of Rewah.—A town of Hindooſtan, in Bahar: twelve miles north-eaſt of Hajypour. Lat. 25. 49. N. lon. 85. 36. E.—A town of Hindooſtan, in Oude: eighteen miles eaſt-north-eaſt of Fyzabad.—A town of Hindooſtan, in Allahabad: twenty miles north of Allahabad. Lat. 25. 57. N. lon. 83. 48. E.—A town of Hindooſtan, in Allahabad: eight miles north-weſt of Chatterpour. Lat. 25. 3. N. lon. 79. 53. E.

MOW', *ſ.* [mope, Sax. a heap.] A heap of corn or hay; when laid up in a houſe, ſaid to be in *mow*; when heaped together in a field, in *rick*.—Beans when moiſt give in the *mow*. *Mortimer's Huſbandry.*

Where'er I gad, I Blouzelind ſhall view,
Woods, dairy, barn, and *mows*, our paſſion knew. *Gay.*

To MOW', *v. n.* To put in a mow.

To MO'W, *v. a* preter. *mowed*, part. *mown*; [mapan, Sax. *Mow* the noun, and *mow* the verb, meaning to put in a *mow*, is pronounced as *now*; *mow* to *cut*, as *mo*.] To cut with a ſcythe.—Beat, roll, and *mow*, carpet-walks and cammomile. *Evelyn.*

Of all the ſeed that in my youth was ſowne,
Was nought but brakes and brambles to be *mown*. *Spenſer.*

To cut down with ſpeed and violence.—He will *mow* down all before him, and leave his paſſage poll'd. *Shakeſpeare's Coriolanus.*

What valiant foemen, like to autumn's corn,
Have we *mow'd* down. *Shakeſpeare's Hen. VI.*

Thou and I, marching before our troops,
May taſte fate to 'em; *mow* 'em out a paſſage,
Begin the noble harveſt of the field. *Dryden.*

Stands o'er the proſtrate wretch, and as he lay,
Vain tales inventing, and prepar'd to pray,
Mows off his head. *Dryden's Æneis.*

To MO'W, *v. n.* To gather the harveſt:

Ours is the harveſt where the Indians *mow*;
We plough the deep, and reap what others ſow. *Waller.*

MOW', *ſ.* [probably corrupted from *mouth*; *moüe*, Fr.] Wry mouth; diſtorted face. *Out of uſe, except in Scotland.*—Thoſe that would make *mowes* at him while my father lived, give twenty ducats a-piece for his picture in little. *Shakeſpeare.*

Apes and monkeys,
'Twixt two ſuch ſhe's, would chatter this way, and
Contemn with *mows* the other. *Shakeſpeare.*

To MOW', *v. n.* To make mouths; to diſtort the face.—Make them to lye and *mowe* like an ape. *Parfre's Myſtery of Candlemas-Day*, 1512.

For every trifle are they ſet upon me;
Sometimes like apes, that *mow* and chatter at me,
And after bite me. *Shakeſpeare's Tempeſt.*

MOW'AH, a town of Hindooſtan, in Bahár: thirty-two miles eaſt of Hajypour. Lat. 25. 34. N. lon. 86. E.—A town of Hindooſtan, in Oude: twenty miles eaſt of Fyzabad.

To MOW'BURN, *v. n.* To ferment and heat in the mow for want of being dry.—Houſe it not green, leſt it *mowburn*. *Mortimer's Huſbandry.*

MOW'E, MOUEN, or MOUN, *v. n.* and *aux.* pret. *mought*. To be able.—Many ſeken to entre, and they ſchulen not *mowe*. *Wicliffe's Luke* xiii.—Whethir faith ſchal *mowe* ſave him? *Wicliffe's James* ii.—Which thou ſhalt not *mowe* ſuffer. *Chaucer's Tale of Melibeus.*—Muſt. So *mun* is uſed to this day in the north of England: "I *mun* go."—As long tyme as they han the ſpouſe with them, they *moun* not faſte. *Wicliffe's Mark* ii.—May.—We *mowen* not, although we had it ſworne. *Chaucer's Chan. Yeom. Prol.*—We *moun* wel maken chere. *Chaucer's Shipm. Tale.*

MOWE'E, a town of Hindooſtan, in Guzerat: forty miles north-eaſt of Noanagur.

MOWE'E, one of the Sandwich-iſlands, next in ſize and neareſt in ſituation to Owhyhee; lying at the diſtance of eight leagues north-north-weſt from it, and 140 geographical miles in circumference. This iſland is divided by a low iſthmus into two circular peninſulas, of which that to the eaſt is called Whamadooa, and is double the ſize of the weſtern peninſula, called Owhyrookoo. The mountains in both riſe to a great height, being ſeen at the diſtance of upwards of thirty leagues. The northern ſhores, like thoſe of Owhyhee, afford no ſoundings; but the country preſents the ſame appearance of verdure and fertility. To the ſouth-eaſt, between this and the adjacent iſles, there are regular ſoundings of 150 fathoms, with a ſandy bottom. From the weſt point, which is low, runs a ſhoal, ſtretching out toward Ranai to a conſiderable diſtance; and to the ſouthward of this is a fine ſpacious bay, with a ſandy beach, ſhaded with cocoa-nut trees. The country behind preſents a very romantic appearance. The hills riſe almoſt perpendicularly in a variety of peaked forms, and their ſteep ſides, with the deep chaſms between them, are covered with trees, among which thoſe of the bread-fruit abounded. When La Perouſe, in 1786, came within ſight of this iſland, two hundred canoes came out to meet him, laden with pigs, fruit, and freſh vegetables, which the inhabitants ſent on-board, and forced him to accept, without any ſtipulation on their part. The inhabitants appeared to bear ſome reſemblance to thoſe of Eaſter-iſland, and indicated a more robuſt conſtitution; but it had been impaired by diſeaſe. Their common height is about five feet three inches; their habit of body ſpare, their features coarſe, their eye-brows thick, their eyes black, their aſpect determined though not ferocious, their cheek-bones high, and their noſtrils rather wide; their lips thick, their mouth large, as well as their teeth, which, however, were fine and regular. Some of them had loſt one or more of their teeth, which, as a modern navigator ſuppoſes, they had pulled out when mourning for their relations or friends. Theſe people are more muſcular, their beard more buſhy, and their bodies more covered with hair, than thoſe of the Eaſter-iſland. Their hair, which is black, is cut into the ſhape of a helmet; and the part which they ſuffered to grow, repreſenting the plume, was red at the extremity, having probably been coloured with the juice of ſome vegetable. The women are much ſmaller than the men, and are in general ill-made, with coarſe features, a gloomy countenance, and rude awkward manners. The inhabitants in general are gentle and prepoſſeſſing, and, in their manner, polite to ſtrangers. They paint themſelves, tattoo their ſkin, and pierce their ears and the cartilage of the noſe, in which they wear rings by way of ornament. The dreſs of both ſexes conſiſts of a piece of cloth covering thoſe parts which are commonly concealed, and then wrapped round their bodies. Theſe cloths, made from the paper-mulberry, are ſometimes variegated, or painted, with great taſte. Their houſes, collected into villages, are built in the manner of thoſe in Eaſter-iſland, but their form is ſquare. With regard to their government, it was obſerved that they were arranged into various tribes, each of which was under the controul of its reſpective chief. The excellence of the climate and the fertility of the ſoil would afford the inhabitants every means of happineſs, did not leproſy and ſyphilis rage among them, very generally and with great violence. The inhabitants of this iſland appeared in 1793 to be in a very diſtreſſed ſtate, having ſuffered much by a war of eleven years' continuance with their neighbours of Owhyhee. Lat. 20. 34. N. lon. 203. 40. E. *Cook's Third Voyage*, vol. iii. *Perouſe's Voyage*, vol. ii.

MO'WER, *ſ.* [from *mow;* ſounded as *mo-er.*] One who cuts with a ſcythe.—*Mowers* and reapers, who ſpend the moſt part of the hot ſummer-days expoſed to the ſun, have the ſkin of their hands of a darker colour than before. *Boyle.*

The ſtrawy Greeks, ripe for his edge,
Fall down before him like the *mower*'s ſwath. *Shakeſpeare.*

MOWGUN'GE, a town of Hindooſtan, in Oude: twenty-ſeven miles eaſt of Rewah.

MOWILGON'GA, a river of Ceylon, which runs into the ſea at Trincomalee.

MO'WING, *ſ.* [from the verb *to mōw.*] The act of cutting with a ſcythe.—It was the latter growth after the king's *mowings*. *Amos* vii. 1.

MOW'ING, *ſ.* [from *mouth.*] Grimace; mockery. *Sherwood.*—Some Smithfield ruffian takes up ſome new *mowing* with the mouth, ſome wrenching with the ſhoulder, ſome freſh new oath, that will run round in the mouth. *Aſcham.*—Ability.—Without whiche *mowyng* the wretched wyl ſhoulde languiſhe without effecte. *Chaucer's Beoth.*—The act of putting into a *mow'*, or heap.

MOW'LAY, a town of Hindooſtan, in Baglana: thirty-two miles north-eaſt of Baſſeen.

MOWRRUD', a town of Candahar: twelve miles ſouth-eaſt of Candahar.

MOWLAHO'RA. See MOUTAHORA.

MOX'A, *ſ.* A Japaneſe word, denoting a ſoft lanuginous ſubſtance, prepared from the young leaves of mugwort, employed by ſurgeons on the continent as a means of forming an eſchar, which is uſually made in this country with cauſtic. A little cone of the moxa is laid on the part which has been previouſly moiſtened, and it is then ignited at the top, when it burns down with a temperate glowing heat, and produces a dark-coloured ſpot, the exulceration of which is ſaid to be promoted by the application of a ſmall quantity of garlic. The ulcer is kept open, or healed, according as the indications of the caſe require. The moxa is famous in the Eaſt for curing ſeveral diſeaſes, and the French are in the habit of uſing it; but, whenever Engliſh ſurgeons wiſh to produce a ſlough, they prefer cauſtics to actual fire. See ARTEMISIA vulgaris, vol. ii.

MOX'BOROUGH, a village of England, in the county of York, anciently called *Maizebell*, where a battle was fought between the Saxons and the Britons, in which the former were defeated: ſeven miles ſouth-weſt of Doncaſter.

MOX'ES, or MO'JOS, a province of South America, in the viceroyalty of Buenos Ayres, ſituated between the biſhopric of Cuſco and the country belonging to the Portugueſe, on each ſide of the Marmora or Madeira; of conſiderable extent, inhabited by Indian nations, and little known.

MOXVA'O, a town of Portugal, in the province of Beira: forty miles north-eaſt of Bragança Nova.

MOY, a circar of Bengal, bounded on the north-eaſt by Ghidore, on the ſouth-eaſt by Curruckdeah, and on the weſt by Ramgur and Bahar.

MOY, a town of France, in the department of the Aiſne, on the Oiſe: nine miles ſouth-eaſt of St. Quentin.

MOY, a river of Ireland, which runs into Killala-bay about two miles to the eaſt of Killala.

MOY, a town of Scotland, in the county of Inverneſs: nine miles ſouth-eaſt of Inverneſs.

MOY'A, a town of Spain, in New Caſtile: thirty-ſeven miles eaſt of Cuença.

MOY'A, a town of Spain, in the province of Catalonia: eight miles eaſt-north-eaſt of Manreſa.

MOYANG', a town of China, of the third rank, in Kiang-nan: thirty miles ſouth-weſt of Haitcheou.

MOYAR'D, MOYART, or MOOYAERT (Claas, or Nicholas), a Dutch engraver, contemporary with Wieringen, about the commencement of the ſeventeenth century, was the happy imitator of Elſhiemer, and the inſtructor of Berghem, Vander Does, Koningh, and Weenix. The name of this artiſt has been variouſly ſpelled, and his hiſtory is obſcure; Baſſan firſt calls him Nicholas Moojaert of Amſterdam, and afterward Claas Moyard, a Dutch painter. He etched ſeveral plates in a ſtyle bearing ſome reſemblance to that of Rembrandt; and, as far as is known, worked entirely from his own compoſitions. Among his beſt prints are a ſet of ſix plates of animals, etched in apparent imitation of Swaneveldt; Lot and his Daughters, in that of Elſhiemer; and a landſcape with cows and ſheep: of various quarto dimenſions.

MOYAR'T (Chriſtian Louis), a native of the Netherlands, the time and place of whoſe birth are not known, but who was reſiding and practiſing engraving in the city of Amſterdam in the year 1630. Among a few other works of no very extraordinary merit, he produced a ſet of monſtrous allegorical compliments, of folio dimenſions, wherein Hercules and Minerva appear quite out of their element, and which is intitled "An emblematical Hiſtory of Queen Mary de Medicis." Moyart marked his plates with a monogram which will be found at the lower part of our Plate entitled MOTION, p. 108.

MOYAT'TA, a river of Ireland, which runs into Bantry-bay two miles north of Bantry.

MOYAU'X, a town of France, in the department of the Calvados: five miles north-eaſt of Liſieux, and eight ſouth-eaſt of Pont l'Evêque.

MOY'E (La), a ſmall iſland near the weſt coaſt of Jerſey: four miles weſt of Noirmont Point.

MOYEN VIC', a town of France, in the department of the Meurte. Here is a conſiderable ſalt-ſpring, from whence the water is conveyed by ſubterraneous channels to Dieuze: two miles eaſt of Vic, and three ſouth-eaſt of Château Salins.

MOYENVIL'LE, a town of France, in the department of the Somme: four miles ſouth-ſouth-weſt of Abbeville.

MOYE'VRE (Grand), a town of France, in the department of the Moſelle: eight miles north-weſt of Metz.

MOY'LE, *ſ.* See MOIL, vol. xv. p. 620.

MOY'LE, a river of Ireland, which joins the Mourne five miles ſouth of Strabane.

MOY'LE (Walter), a learned writer, ſon of ſir Walter Moyle, of Cornwall, was born in 1672 at Bake, the family-ſeat, near Looe. He diſtinguiſhed himſelf at ſchool by his proficiency in claſſical ſtudies; and, after an academical courſe in the univerſity of Oxford, was placed in the Temple for the ſtudy of law. This, however, he never meant to purſue profeſſionally, as his fortune enabled him to devote his time to polite and general literature; and he cultivated an acquaintance with Congreve, Wycherley, and other wits of the time, by whom he was much eſteemed. When a deſign was ſet on foot, about 1695, of tranſlating the works of Lucian, he undertook to furniſh a verſion of four of that author's pieces, which he executed with ſpirit and correctneſs. Being warmly attached to the cauſe of liberty, he was diſſatisfied with the conduct and principles of the clergy in king William's reign, and conceived a diſlike of that order, of which he gave occaſional tokens in his writings. He ſat in parliament for the borough of Saltaſh in 1695; but, finding in himſelf no diſpoſition for public buſineſs, he appears to have declined any attempts to renew his ſeat. Reſuming his private ſtudies, he tranſlated, at the inſtance of Dr. Charles Davenant, Xenophon's Diſcourſe upon improving the Revenues of Athens, which was prefixed to that writer's work upon the Trade and Revenues of England, publiſhed in 1697. In this piece, he gave an example of his talents for hiſtorical criticiſm, by correcting the date of Xenophon's death, given by Diogenes Laertius. His intimacy with that eminent whig writer, Mr. Trenchard, led him to appear as his coadjutor in "An Argument againſt a Standing Army," the great object at that time of the jealouſy of the friends of liberty. In ſupport of the ſame cauſe, Mr. Moyle publiſhed, in 1691, "An Eſſay on the Lacedemonian Government;" and, in 1699, "An Eſſay upon the Conſtitution of the Roman Government." In both theſe he expoſed the ſlaviſh and intolerant tenets of the eſtabliſhed clergy, and argued in favour of univerſal toleration. His learning and critical ſagacity were afterwards exerciſed in "A Diſſertation upon the Age of Philopatris, commonly attributed to Lucian," in which he introduced ſeveral curious hiſtorical and chronological reſearches; and, finding occaſion to advert to the life of the emperor Marcus Antoninus, he digreſſed to a conſideration of the ſuppoſed miracle of the thundering legion. In a maſterly diſcuſſion of this ſubject, he gave ſuch a refutation of this legendary ſtory as ſeems to have ſatisfied all unprejudiced enquirers. See LEGION, vol. xii. p. 451. His eccleſiaſtical ſtudies alſo engaged him in a cloſe examination of Dr. Prideaux's Connection of the Old and New Teſtament; and, ſoon after the appearance of that work, he entered into a correſpondence with the author, who was his relation, in which he corrected ſome miſtakes that he had obſerved in it, and received the doctor's thanks for his attention.

Another literary correſpondence in which he engaged was with Dr. Muſgrave of Exeter, a learned phyſician and antiquary, relative to his treatiſe entitled "Belgium Britannicum," towards which he contributed ſeveral curious particulars. He alſo extended his enquiries into the departments of natural hiſtory, and collected ſome curious birds for the cabinet of Dr. Tancred Robinſon, and ſome rare plants for the herbarium of Dr. Sherard. But a delicate ſtate of health prevented him from indulging his inclination in theſe purſuits, and confined him to indoor ſtudies, in which he never remitted his aſſiduity. He died in 1721, in the fiftieth year of his age. His poſthumous and unpubliſhed works were given to the world in 2 vols. 8vo. in 1726, by Thomas Serjeant, eſq. They compriſe the Eſſay on the Roman Conſtitution, the Diſſertation on Philopatris, Letters to Dr. Muſgrave, and to and from other perſons, Remarks on Prideaux's Connection, the Examination of the Miracle of the Thundering Legion, and other pieces. In order to render his works complete, his friend Anthony Hammond publiſhed, in 1727, a third volume, containing his writings printed during his lifetime. They rank him among the moſt liberal and learned ſcholars of his age. *Biog. Britan. Gen. Biog.*

MOY'NALTY, a ſmall poſt-town of Ireland, in the county of Meath. It is ſituated on the river Borora, and is thirty-five miles north by weſt from Dublin, and four north from Kells.

MOY'NE, a river of Ireland, which joins the river Clare ſix miles ſouth of Tuam.

MOYOBAM'BA, a town of South America, on a river of the ſame name, which runs into the Guallagua 300 miles north of Lima. Lat. 7. S. lon. 76. 56. W.

MOYOM'BO, a town of Africa, in Congo: ten miles ſouth-weſt of Bombi.

MOYOW'LA, a river of Ireland, which runs into Lough Neagh two miles eaſt from Magherafelt, in the county of Londonderry.

MOY'RANS, a town of France, in the department of the Jura: ſix miles north-weſt of St. Claude.

MOYRA'ZES, a town of France, in the department of the Aveiron: nine miles weſt of Rhodez.

MOYS, a river of Auſtria, which runs into the Danube two miles above Korn Neuburg.

MOYSICIEWIC'ZE, a town of Lithuania, in the palatine of Minſk: ſixty miles north-eaſt of Minſk.

MOZAI'SK, a town of Ruſſia, in the government of Moſcow: fifty-ſix miles weſt of Moſcow. Lat. 56. 36. N. lon. 35. 44. E.

MOZAMBI'QUE, or MOSAMBICO, a kingdom of Africa, on the eaſt coaſt, and in that part of the Indian Sea which paſſes between the continent and the iſland of Madagaſcar. It takes its name from the capital, ſituated on an iſland, chief of three iſlands which form a part of the kingdom. The celebrated Vaſco de Gama was the firſt European we know of who diſcovered and came to an anchor near it, after doubling the Cape of Good Hope: here it was, that he informed himſelf about the main deſign of his voyage, the finding out a way into India by ſea, and concerning the people who lived on this coaſt; and here he was appriſed of the vaſt commerce carried on by them from one kingdom and ſeaport to another. Among other particulars, he learned that this iſland, ſubject to the king of Quiloa, was one of the moſt conſiderable marts on all the eaſtern coaſt; that it ſent ſhips to Arabia, and many other parts of the world, and was reſorted to by merchants from thence, who imported a variety of the richeſt commodities in great quantities. The iſland of Moſambico, though the largeſt of the three, is nevertheleſs very ſmall, not being above a quarter of a mile in breadth, and about two miles and a half in length. The bay is about three miles in circuit, ſo that the points of land on each ſide advance into the ſea. The other two, of St. George and St. James, lie on each ſide of it, facing the continent, in a direct line with it. Over againſt that of St. George, and about a mile from it, is the cape called by the Portugueſe *Cabo Ceiro*, which is a peninſula, joined to the continent by a ſmall neck of land, covered with the ſea at high, but fordable at low, water.

The ſoil of the iſland is nothing but a white barren ſand; yet have the richer ſort found means to procure an artificial mould on ſeveral parts of the iſland, on which grow very fine citrons, oranges, ananas, figs, and other fruits, notwithſtanding the great ſcarcity of water; but the far greater part of their pulſe, roots, and other eſculents, are brought hither from the continent. It is far otherwiſe at land, where the ground is fat, and fertile in rice, millet, variety of roots, pulſe, fruits, and plants. They likewiſe breed vaſt quantities of cattle, large and ſmall, particularly ſheep with large tails. They ſwarm with wild beaſts of various kinds, as ſtags and wild boars, but eſpecially elephants, which are ſo fierce and deſtructive, that the inhabitants are obliged to kindle large fires round their ſown fields, to prevent their being devoured by them. Neither dare they ſtir far from their homes without lighted torches or fire-brands in their hands to frighten them away; and even with theſe they have much ado to ſave themſelves from being deſtroyed, eſpecially by thoſe of the females which have young. The country hath likewiſe rich mines of gold, which is waſhed down by the rivers in great quantities, and makes a chief part of its commerce. Ivory, ebony, ſlaves, and cattle, are likewiſe exchanged for European goods, ſuch as little bells, knives, ſciſſars, and razors. Theſe laſt were ſo valued among them, that they would give fifteen cows for one of them. The Portugueſe, of whom they ſtand in awe, are the only Europeans admitted into ſome of their ſea-ports, whence they export, beſides the commodities already mentioned, ſilver, copper, wax, rice, and other proviſions; but to all other Europeans they refuſe every kind of acceſs on any pretence. Lat. 15. 5. S. lon. 41. 8. E.

Mr. Salt, in his late travels in Africa, viſited Mozambique in the year 1809. On the 25th of Auguſt he arrived at the harbour. His reception by the Portugueſe commandant of that ſettlement was ſuch as we might reaſonably ſuppoſe would be given to an envoy of the Britiſh king, ſupported by the recommendation of lord Caledon, the governor of the Cape; and he was not deficient in availing himſelf of theſe favourable circumſtances, during the three weeks which he paſſed on the iſland and on the adjacent continent, to collect much curious and valuable information reſpecting this portion of the African coaſt, of the actual ſituation of which we have hitherto known ſo little.

The town of Mozambique occupies the central part of the iſland. On the day ſubſequent to that of his landing in the iſland, Mr. S. obtained an order from the hoſpitable and intelligent governor, Don Antonio Manoel de Mello Caſtro e Mendoça, to viſit the fort; and the appearance of that bulwark of the Portugueſe empire in eaſtern Africa, as he has deſcribed it, was not calculated to inſpire him with much awe or reſpect. "The commandant received us at the gateway, and went round the works with us. They contained about eighty pieces of cannon mounted, and plenty of balls piled near them, which ſeemed to have reſted long undiſturbed, if a judgment might be formed by the ruſty coat of antiquity which adhered to them. Some of the cannon were marked 1660, Alonzo II. others were of Dutch extraction; and there was a very large howitzer made to caſt ſtones of 100lbs. weight, which might probably boaſt a Turkiſh origin. The ſituation of the fort is judiciouſly choſen; and, if the cannon were well ſerved, would moſt effectually command the entrance into the harbour, as upwards of thirty of its guns would bear on any ſhip attempting to force the paſſage. There did not, at this time, appear much note of preparation: a few ſentries, ſome confined felons, and two or three old women with cakes to ſell, ſeemed to conſtitute the whole of the garriſon."

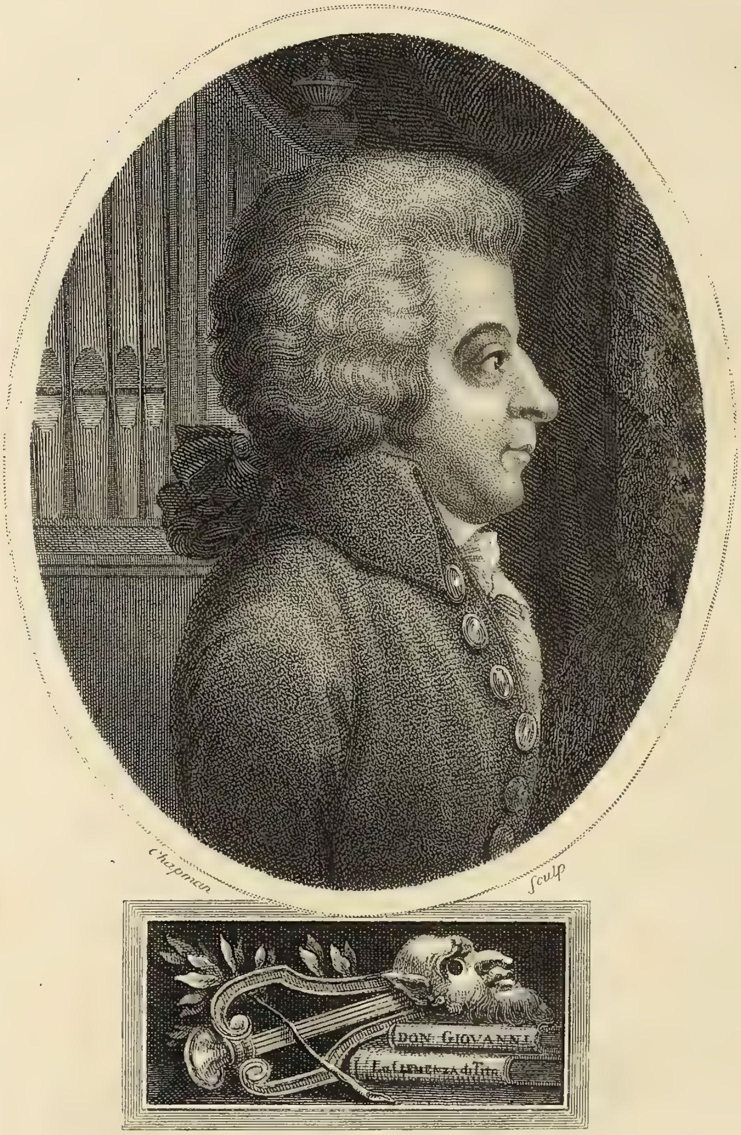
To thoſe who might conceive any hopes of eſſential diſcoveries being effected in the interior of Africa by expeditions up the country from theſe parts, the converſation of the governor with Mr. Salt, as here reported, holds out but little encouragement. It has been long, it ſeems, the anxious deſire of the Portugueſe government to form a communication between their eaſtern and weſtern ſettlements; but Don Antonio added that all their efforts to accompliſh it had failed; and he reported two inſtances of ſuch failures as having occurred within theſe few years, though neither of them appears to be very concluſive. Farther information, indeed, ſeems requiſite to bring us to any ſatisfactory reſult on this intereſting ſubject.

On the peninſula, called the Great Caboceiro, are the town and fort of Meſuril. Mr. Salt, on his viſit to this place, fell in with a party of negro-traders, of a nation called *Monjou*, who had come down with a cafila of ſlaves, (chiefly female,) together with gold and elephants' teeth, for ſale. The country inhabited by this people was deſcribed by the Portugueſe as "being nearly half way acroſs the continent;" though Mr. Salt adds that, from inquiries ſubſequently made, he had reaſon to ſuſpect a miſtake in this reckoning. The length of time at which they ſeverally ſtated their abſence from home did not, on an average, exceed two months; which, reckoning their progreſs at fifteen miles in a day, gives only 900 miles, and this he therefore conſiders as the utmoſt limit of the ſpace which they had traverſed. They moreover informed him, "that they were acquainted with other traders, called Eveezi and Maravi, who had travelled far enough inland to ſee large waters, white people, (this muſt be taken comparatively,) and horſes." He deſcribes them as "negroes of the uglieſt deſcription, having high cheek-bones, thick lips, ſmall knots of woolly hair like pepper-corns on their heads, and ſkins of a deep ſhining black;" and, from ſome circumſtances which he mentions relative to their national cuſtoms, he eſteems it probable that there may have been a remote connexion between them and a tribe of Nuba ſeen by Mr. Bruce in the neighbourhood of Sennaar. The ſlaves whom they brought were, as Mr. Salt ſays, *permitted* to diſplay their activity by dancing; and the mention of this circumſtance draws from him ſome remarks which are too creditable to his feelings, and involve conſiderations at the preſent epoch too deeply intereſting to humanity, to be paſſed over in ſilence: "I ſubſequently ſaw ſeveral dances of the ſame kind in the ſlave-yards on the iſland of Mozambique; but on theſe occaſions it appeared to me that the ſlaves were *compelled* to dance. I ſhall never forget the expreſſion of one woman's countenance, who had lately, I underſtood, been brought from the interior. She was young, and appeared to have been a mother; and, when conſtrained to move in the circle, the ſolemn gloom that prevaded her features ſpoke more forcibly than any language the miſery of her forlorn condition. If there be ſtill a ſceptic who heſitates to approve of the abolition of the ſlave-trade, let him viſit one of theſe African ſlave-yards a ſhort time before a cargo of theſe wretched beings is exported; and, if he have a ſpark of humanity left, it will ſurely ſtrike conviction to his mind. On this day, ſeven Portugueſe veſſels left the harbour of Mozambique for Goa, having on-board, beſides a large quantity of gold and ivory, about five hundred ſlaves, who were bought at this place at the price of ten, fifteen, and twenty, dollars a-head; that is, women and children at about the rate of three and four pounds a piece, and able-bodied men at the price of five pounds! I feel happy in thinking that ſo nefarious a traffic has in this quarter already received a check from Britiſh interference ſince the taking of the Iſles of France, (vide laſt Report of the African Inſtitution;) and I truſt it will ultimately be put an entire ſtop to. At all events, immediate ſteps ought to be taken to prevent ſlaves from being imported into thoſe parts of India over which any influence is poſſeſſed by the Britiſh government. Five ſhips loaded with ſlaves went this year to the Braſils, each veſſel carrying from three to four hundred: it is conſidered a lucky voyage if not more than ſixty die in each ſhip." For farther information relative to the African tribes in the neighbourhood of Mozambique, ſee Makooa, vol. xiv. p. 174, 5. *Salt's Voyage to Abyſſinia*, 4to. 1814.

MOZAMBI'QUE (Straits of), that part of the Indian Ocean which divides the iſland of Madagaſcar from the continent of Africa.

MOZA'RT (Leopold), vice chapel-maſter to the prince-archbiſhop of Salzburg, and director of his band, was born at Augſburg in 1719, and acquired this appointment in 1743. He was intended for the law; but his paſſion for the ſtudy of muſic was predominant, and he became early in life an uſeful muſician, as author, in 1757, of a treatiſe on the art of playing the violin, and a compoſer; but, what did him moſt honour, and will endear his name to future times, is the being father of ſuch an incomparable ſon as the ſubject of the next article, and educating him with ſuch care. In 1764 he ſet out on a trading voyage with his children, a ſon and a daughter; viſited France, England, and Italy. During his travels with his children to the principal capitals in Europe, he uſed to accompany them on the violin, the daughter when ſhe ſang, and the ſon when he played on the clavichord or harpſichord. The daughter was the eldeſt; and, when ſhe ſang, ſhe was not only accompanied on the violin by her father, but by her brother on the harpſichord, which he was able to do in a maſterly manner at ſeven or eight years old. When this excellent father returned to Salzburg, after travelling with his children, he was appointed principal concert-maſter to the archbiſhop, and became a voluminous compoſer; a liſt of his works is given in Gerber. This worthy profeſſor died at Salzburg in 1778.

MOZA'RT (John Chryſoſtom Wolfgang Gotlieb), ſon of the preceding, was born at Salzburg in January 1756. As this ſon and a daughter were the only ſurvivors of ſeven children, their father gave up teaching, as well as compoſition,



MOZART.

Engraved for the Encyclopædia Londinensis 1817.

compoſition, and devoted his whole time to their muſical education. When young Mozart was about three years of age, the father began to give his daughter, who was three years older, inſtruction on the harpſichord; and the ſon at this early period paid ſo much attention to the ſounds of the inſtrument, and exhibited ſuch proofs of extraordinary talents, that he was taught ſome minuets and airs, which he learned with wonderful facility; half an hour being ſufficient for a minuet, and an hour for the other pieces. All theſe he could execute with the utmoſt preciſion and delicacy of touch; and his progreſs was ſo rapid, that in his fifth year he compoſed ſome ſmall pieces, which he performed before his father, and which the latter thought worthy of being written down. He now loſt all taſte for childiſh amuſements; or, if he ever indulged in them, it was neceſſary that they ſhould be accompanied with muſic. At the age of ſix he had attained to ſo much expertneſs in this art as excited univerſal aſtoniſhment; and his father, conceiving that he might turn to advantage the talents of his children, repaired with his family, conſiſting of his wife, daughter, and ſon, to Munich, where the children performed before the elector, and gave a public ſpecimen of the great proficiency which they had made. On their return to Salzburg they improved themſelves ſtill farther in muſic; and in 1762 the whole family went to Vienna, where the children were preſented to the imperial court. Young Mozart ſoon after learned to play the violin; and, though daily complimented on his great muſical genius, he became neither proud nor capricious, but continued tractable and obedient to the commands of his father. In the year 1763, Mozart's family again paid a viſit to Munich, where the ſon performed a concerto on the violin before the electoral court; after which they proceeded to Augſburg, Manheim, Mentz, Frankfort, Coblentz, Cologne, Aix-la-Chapelle, and Bruſſels, in all which places young Mozart played with great approbation at public concerts or at the houſes of the principal nobility. In the month of November they arrived at Paris, where they remained twenty-one weeks; during which the brother and ſiſter performed before the royal family at Verſailles, and the former played the organ in the chapel-royal. They gave alſo two grand public concerts; and, as might be expected, were heard with the moſt rapturous admiration. So much were the public intereſted by this muſical family, that a print was publiſhed of the father and his two children; and wherever they went they were treated with every mark of reſpect. At Paris young Mozart compoſed his two firſt works, one of which was dedicated to madame Victoire, the king's ſecond daughter, and the other to the counteſs of Teſſé: at this time he was only ſeven years of age.

On leaving Paris, in April 1764, the family came over to England, where they continued more than a year. Young Mozart and his ſiſter had the honour of performing before the royal family. In London they had a benefit-concert, all the ſymphonies of which were compoſed by young Mozart; and they performed at another which was given for the benefit of the Lying-in hoſpital. The Hon. Daines Barrington, F.R.S. who, during the time of Mozart's reſidence here, was witneſs of his moſt extraordinary abilities, both at public concerts, and by having been with him for a conſiderable time at his father's houſe, gives the following account, amazing and incredible almoſt as it may appear, and which is printed in the Phil. Tranſ. vol. lx. p. 54. He carried to him a manuſcript duet, which was compoſed by an Engliſh gentleman to ſome favourite words in Metaſtaſio's opera of Demofoonte. The whole ſcore was in five parts, viz. accompaniments for a firſt and ſecond violin, the two vocal parts, and a baſe. Mr. B.'s intention in carrying with him this manuſcript compoſition, was to have an irrefragable proof of his abilities as a player at ſight, it being abſolutely impoſſible that he could ever have ſeen the muſic before. The ſcore was no ſooner put upon his deſk, than he began to play the ſymphony in a moſt maſterly manner, as well as in the time and ſtyle which correſponded with the intention of the compoſer. The ſymphony ended, he began to ſing the upper part, leaving the under one to his father. His voice in the tone of it was thin and infantine, but nothing could exceed the maſterly manner in which he ſang. His father, who took the under part in this duet, was once or twice out, though the paſſages were not more difficult than thoſe in the upper one; on which occaſion the ſon looked back with ſome anger, pointing out to him his miſtakes, and ſetting him right. He not only however did complete juſtice to the duet, by ſinging his own part in the trueſt taſte, and with the greateſt preciſion; but alſo threw in the accompaniments of the two violins, wherever they were moſt neceſſary, and produced the beſt effects. It is well known that none but the moſt capital muſicians are capable of accompanying in this ſtyle. When he had finiſhed the duet, he expreſſed himſelf highly in its approbation, aſking with ſome eagerneſs whether Mr. B. had brought any more ſuch muſic. Having been informed, however, that he was often viſited with muſical ideas, to which, even in the midſt of the night, he would give utterance on his harpſichord; Mr. B. told his father that he ſhould be glad to hear ſome of his extemporary compoſitions. The father ſhook his head at this, ſaying, that it depended entirely on his being as it were muſically inſpired, but that Mr. B. might aſk him whether he was in humour for ſuch a compoſition. Happening to know that little Mozart was much taken notice of by Manzoli, the famous ſinger, who came over to England in 1764, Mr. B. ſaid to the boy, that he ſhould be glad to hear an extempore love-ſong, ſuch as his friend Manzoli might chooſe in an opera. The boy on this, who continued to ſit at his harpſichord, looked back with much archneſs, and immediately began five or ſix lines of a jargon recitative proper to introduce a love-ſong. He then played a ſymphony which might correſpond with an air compoſed to the ſingle word *Affetto*. It had a firſt and ſecond part, which, together with the ſymphonies, was of the length that opera-ſongs generally laſt: if this extemporary compoſition was not amazingly capital, yet it was really above mediocrity, and ſhowed moſt extraordinary readineſs of invention. Finding that he was in humour, and as it were inſpired, Mr. B. then deſired him to compoſe a ſong of rage, ſuch as might be proper for the opera-ſtage. The boy again looked back with much archneſs, and began five or ſix lines of a jargon recitative proper to precede a ſong of anger. This laſted alſo about the ſame time with the ſong of love; and in the middle of it, he had worked himſelf up to ſuch a pitch, that he beat his harpſichord like a perſon poſſeſſed, riſing ſometimes in his chair. The word he pitched on for this ſecond extemporary compoſition was, ***Perfido***. After this he played a difficult leſſon, which he had finiſhed a day or two before: his execution was amazing, conſidering that his little fingers could ſcarcely reach a fifth on the harpſichord. His aſtoniſhing readineſs however did not ariſe merely from great practice; he had a thorough knowledge of the fundamental principles of compoſition, as, on producing a treble, he immediately wrote a baſe under it, which, when tried, had a very good effect. He was alſo a great maſter of modulation, and his tranſitions from one key to another were very natural and judicious; he practiſed in this manner for a conſiderable time with a handkerchief over the keys of the harpſichord. Theſe facts Mr. B. was an eye-witneſs of; to which he adds, that he had been informed by two or three able muſicians, when Bach the celebrated compoſer had begun a fugue, and left off abruptly, that little Mozart has immediately taken it up, and worked it after a moſt maſterly manner. Before he left London, he publiſhed Six Sonatas for the Harpſichord, with an Accompaniment for the Violin or German Flute, ſold by R. Bremner, in the Strand, and intitled, *Oeuvre Troiſieme*. His two firſt works we have mentioned above. He is ſaid in the title-page to have been only eight years of age when he compoſed theſe Sonatas. The dedication is to the queen, and is dated at London, Jan. 8, 1765. He ſubſcribes himſelf "tres humble, et tres obeiſſant *petit* ſerviteur." Theſe leſſons are compoſed in a very original ſtyle, and ſome of them are maſterly.

In July 1765, this muſical family returned to the continent, and then travelled through Flanders, where young Mozart often played the organ in the churches of the convents and in the cathedrals. They paſſed ſome time in Holland, and then returned through France and Germany to Salzburg, after an abſence of three years. In 1768 Mozart and his ſiſter performed at Vienna, where the emperor Joſeph cauſed young Mozart to ſet an opera buffa, called *La Finta ſemplice*, which obtained the approbation of Haſſe, the director of the imperial band, and of the poet Metaſtaſio. Mozart here preſented to his ſon (in the preſence of Haſſe, Metaſtaſio, the duke of Braganza, and prince Kaunitz) ſeveral Italian airs, which the child immediately ſet to muſic, with all the accompaniments. At the conſecration of the Orphan-houſe church he was employed to ſet the *offertorium*, together with a trumpet-concerto; and on this occaſion, though only twelve years of age, he had the direction of the whole muſic. In 1769 they returned to Salzburg; and, ſoon after, the father and ſon made a tour to Italy, where young Mozart acquired great honour by different compoſitions which he executed, and particularly at Milan. At Bologna he found an enthuſiaſtic admirer in father Martini, a celebrated maſter of counterpoint; at Florence he was no leſs favourably received by marcheſe Ligneville, a very great proficient in the ſame branch; and there alſo he formed an acquaintance with Mr. Thomas Linley, who was then nearly of the ſame age. When Mozart and his ſon arrived at Rome, they went to the Seſtini chapel to hear the celebrated *Miſerere*, which the pope's muſicians are prohibited, it is ſaid, from ſuffering to be copied, under pain of ſevere puniſhment. Young Mozart, however, when he returned to his lodging, ſat down to write it out; and, the next time it was performed, he put the manuſcript in his hat, in order that he might enlarge and correct it. When this circumſtance was known at Rome, it made ſo much noiſe, that he was requeſted to ſing it with an accompaniment on the harpſichord, at a concert at which Chriſtopheri, who had ſung it in church, was preſent, and who by his aſtoniſhment rendered young Mozart's triumph complete. After a ſhort tour to Naples, he returned to Rome, where his holineſs expreſſed a deſire to ſee him, and where he was inveſted by the pontiff with the croſs and inſignia as a knight of the golden ſpur. At Bologna he was unanimouſly elected a member of the Academia Filarmonica; and on his return to Milan, about the end of October 1770, he compoſed, in his fourteenth year, the ſerious opera of Mithridates, which was repreſented on the 26th of December, and ſucceſſively repeated more than twenty times with the utmoſt applauſe. Being at Salzburg in 1771, he was requeſted by count Firmian of Milan, in the name of the empreſs Maria Thereſa, to compoſe a grand theatrical ſerenata for the marriage of the archduke Ferdinand: and this taſk he executed to the full ſatisfaction of his employers. On the election of a new archbiſhop of Salzburg, in 1772, he compoſed the ſerenata *Il Sogno di Scipione;* ſpent the following winter with his father at Milan, where he wrote the ſerious opera of *Lucio Silla*, for the carnival of 1773; and in the ſpring of 1774 returned to Salzburg. Some tours which he undertook in this and the following year to Vienna and Munich with his father, gave him an opportunity of compoſing ſome excellent pieces, as, *La Finta Giardiniera*, an opera buffa, two grand maſſes for the electoral chapel at Munich, &c. and in the year 1775, when the archduke Maximilian was at Salzburg, he ſet to muſic *Il Rè Paſtore*. He had now attained (though only nineteen years of age) to the ſummit of his art; his fame was already diffuſed throughout every country of Europe, and wherever he appeared his uncommon merit excited univerſal admiration; and his progreſs in talents and fame, contrary to all experience, continued to keep pace with the expectations of the public to the end of his life.

On the death of his father, in 1778, he was called to Salzburg, and appointed principal concert-maſter to the prince archbiſhop, in his ſtead; but he reſigned this office in 1780, and went to Vienna, where he ſettled, and was admired and patronized by the court and city; and in 1788 he was appointed chapel-maſter to the emperor Joſeph.

It was not till the year 1782, that he began to compoſe at Vienna for the national theatre; at firſt chiefly inſtrumental muſic; but, on its being diſcovered how well he could write for the voice, he was engaged by the nobility and gentry to compoſe comic operas, ſometimes to German words, and ſometimes Italian. His firſt opera at Vienna was *Die Entſichrung aus dern Serail*, or the Rape of the Seraglio, in 1782, to German words. The ſecond, *Le Nozze di Figaro*, in four acts. The third, the *Schauſpiel Director*, or the Manager at the Playhouſe, in 1786. *Don Giovanni*, in 1787. *La Clemenza di Tito*, a ſerious opera. *Coſi fan tutti*, comic. *Die Zauber Flute*, the Magic Flute. *Idomeneo*, a ſerious opera, &c. There is a chronological liſt of his latter vocal compoſitions till the year 1790, in Gerber's Muſical Lexicon.

It is lamentable (obſerves one of his biographers) that premature genius too rarely enjoys a long career. The acceleration of nature in the mental powers ſeems to hurry the progreſs of the animal economy, and to anticipate the regular cloſe of temporal exiſtence. The health of Mozart began rapidly to decline. However he was not idle; for, in the few laſt months of his life he compoſed thoſe three great works, the Magic Flute, the Clemency of Titus, and the Requiem. Some have called theſe his chef-d'œuvres. Nothing ever had a greater run than the firſt of theſe. It was performed at Vienna one hundred nights in leſs than twelve months, and on the hundredth night the theatre overflowed as much as on the firſt. The ſecond was compoſed, at the deſire of the Bohemian States, for the coronation of Leopold. It was begun in his carriage in the road to Prague, and finiſhed in eighteen days. The hiſtory of the laſt is ſingular. A ſtranger called on him, and requeſted he would compoſe, as ſpeedy as poſſible, a *Requiem* for a catholic prince, in order to ſooth his mind, and to prepare it for his approaching diſſolution. Mozart demanded two hundred ducats; and the ſtranger, in order to promote diſpatch, depoſited four hundred. The compoſer began the work, in the progreſs of which he felt his mind unuſually raiſed and agitated. He employed not only the day, but much of the night, in the compoſition of it, with which he ſeemed to be infatuated. He told his wife he was compoſing it for *himſelf;* and ſhe prevailed upon him to give her the ſcore, and endeavour to cheer his ſpirits. Upon his appearing more tranquil, ſhe returned it, but he ſoon relapſed into deſpondency; and, having finiſhed it on the day of his death, he again reminded her that he had previouſly informed her it would be compoſed for himſelf. In the year 1791, and in the thirty-ſixth year of his age, juſt after he had received the appointment of maeſtro di capella in the church of St. Peter, he departed this life; leaving the world to admire the brilliancy of his powers, and to lament the ſhortneſs of the period allotted to their diſplay.

Mozart was of ſmall ſtature, meagre and pale, and in his countenance diſplayed no marks of extraordinary genius. He had a certain awkwardneſs in his manners, and his feet and hands ſeemed to be in a continual ſtate of motion. He was fond of billiards, and had in his houſe a billiard-table, at which he was accuſtomed to amuſe himſelf *alone*. Though poſſeſſed of great muſical talents, he was in other reſpects a mere child; and, by his want of economy and the abuſe of money, he evidently ſhowed that he was deſtitute of that prudence which is ſo neceſſary to prevent men from being led into the moſt diſagreeable ſituations. His income for ſeveral years had been very great; yet he left nothing to his children except the celebrity of his name. But, however thoughtleſs in regard to the common concerns of life, as ſoon as he ſat down to the harpſichord he appeared quite a different being. His attention was then directed to his favourite object; and ſo much was his hand unfitted for its uſual offices by frequent practice on this inſtrument, that it was with the greateſt difficulty he was able to cut his meat at table. As muſic was the principal occupation of his life, it formed alſo his moſt agreeable amuſement. Solicitation was never neceſſary to induce him to play; on the contrary, his friends had often reaſon to apprehend that he would hurt his health by too cloſe application. He was fondeſt of playing in the evening; and, if he ſat down to his harpſichord at nine, he never gave over till midnight, and even then he quitted it with reluctance. It is a curious fact, that no compoſer could leſs endure liberties to be taken with his works than Mozart. There is a ſtory told of him in Mr. Gardiner's tranſlation of the Life of Haydn, which ſtrongly illuſtrates this: When Mozart went to Berlin, he arrived in the evening. Scarcely had he alighted, when he aſked the waiter of the inn whether there was any opera that evening, and was informed that one of his own operas was to be acted. He immediately ſet out for the theatre, and placed himſelf at the entrance of the pit, that he might liſten without being obſerved; but ſometimes he was ſo pleaſed with the execution of certain paſſages, and at others ſo diſſatisfied with the manner or the time in which they performed, or with the embelliſhments added by the ſingers, that, continually expreſſing either pleaſure or diſapprobation, he inſenſibly got up to the orcheſtra. The manager had taken the liberty of making ſome alteration in one of the airs. When they came to it, Mozart, unable to reſtrain himſelf any longer, called out aloud to the band in what way it ought to be played. Every body turned to look at the man in a great coat who was making all this noiſe, and expecting he would ſoon be ſilenced or turned out. At length ſome perſons recognized Mozart; and in an inſtant the muſicians, actors, and audience, were informed that he was in the theatre; and in conſequence the opera and its compoſer were vociferouſly applauded.

Mozart's viſit to England, in his early youth, ſeemed to have been forgotten; and during his greateſt celebrity we knew nothing of his ſtudies or productions, but from his harpſichord-leſſons, which occaſionally came over from Vienna; and in theſe he ſeems to have been trying experiments. They were full of new paſſages, and new effects; but were wild, capricious, and not always pleaſing. We were wholly unacquainted with his vocal muſic till after his deceaſe, though it is manifeſt that by compoſing for the voice he firſt refined his taſte, and gave way to his feelings, as in his latter compoſitions for the piano-forte and other inſtruments his melody is exquiſite, and cheriſhed and enforced by the moſt judicious accompaniments, equally free from pedantry and caprice.

The *Requiem*, of which we have given a brief hiſtory, was performed at Covent-garden during the oratorio-ſeaſon of 1801; and was well received. But the fame of Mozart, in this country, ſeems to reſt, *at preſent*, on his *Don Giovanni*, though we believe the beſt judges of muſic prefer the Clemenza di Tito to all his other works. Don Giovanni had, indeed, been very indifferently received at Prague and at Vienna when firſt repreſented in 1787, and at Paris in 1794; and only a few years ago, when it was performed at the Académie de Muſique, its character was ſo imperfectly comprehended, either on the ſtage or in the orcheſtra, that Garat, the celebrated ſinger, obſerved, *Don Juan a paru incognito à l'Opéra.* Moreover the ſtory had been repreſented, as a melo-drama, or tragic pantomime, at the Royalty-theatre, under the title of Don Juan, or the Libertine deſtroyed, as long ago (1787) as the firſt appearance of Don Giovanni at Prague; and it was turned into a pantomime-ballet at Drury-lane in 1790. Theſe two pieces, however, are ſaid in the Biographia Dramatica, to have been taken from Shadwell's tragedy of the Libertine, firſt acted in 1696; and in all theſe the ſpectre is on foot. At length, on the 12th of April, 1817, Don Giovanni, or the Spectre on Horſeback, was brought out at the opera-houſe in the Haymarket, and ran through the whole ſeaſon with the greateſt applauſe, proving the moſt profitable ſpeculation that houſe had entered into for many years. This circumſtance, having made Mozart and his works a general theme of converſation and admiration, has induced us to enter more at large into the particulars of his life than we ſhould otherwiſe have done, and alſo to preſent our readers with a portrait of him. We cannot refrain from ſubjoining a ſhort account of this piece, and of its reception, from the dramatic reporters of the day.

This opera is at once (ſays the Morning Chronicle) the greateſt work of Mozart, and the fineſt ſpecimen that exiſts of dramatic muſic. Its effect upon the ſtage, which is inconceivable to thoſe who have not witneſſed it, is ſufficient to ſhow the power of harmony in expreſſing paſſion and exciting ſympathy. There is ſomething of ſo high an intellectual nature in the whole of its formation, that the author by this compoſition has placed his art in a more exalted ſphere than it ever reached before. The ſcene is in Spain, and the ſtory is well known in this country. Don Giovanni is a profligate young nobleman, who endeavours to ſeduce every female that he ſees. He kills Don Pedro, who had flown to the aid of his daughter. The moſt ſtriking ſcenes in the drama are thoſe in which the ſtatue of the murdered Pedro ſpeaks. In the firſt of theſe, Giovanni invites, with audacious courage, the ſtone effigy to ſup with him, and the figure ſays Yes. In the laſt, the ſtatue performs his promiſe, and enters the ſaloon where Don Giovanni is at ſupper. Here he exhorts him to repentance; but the reprobate is bold and obſtinate, and finally is carried to the infernal regions by furies. From a work like this, where nothing but excellence is to be found, it is not eaſy to ſelect parts for diſtinct praiſe. The firſt trio between Don Giovanni, Leporello, and Don Pedro, where the latter is mortally wounded, is in the higheſt degree pathetic; and the duet that ſoon ſucceeds, for Donna Anna and Don Octavio, is equally well calculated for dramatic effect, and at the ſame time is one of the fineſt muſical compoſitions known. The paſtoral duet, *Giovinette*, ſo ſimply elegant and full of melody, was encored; ſo was alſo the duet, which all amateurs know and admire, *La ci darem.* An air for Zerlina, *Vedrai carino*, and one for Don Giovanni, *Finche dal vino*, were repeated; and we are perſuaded that, but for the length of the opera, more than half the pieces would have been called for over again. The extremely difficult ſeſtett, *Sola, ſola*, was performed with an aſtoniſhing degree of accuracy. It is not in the power of words to deſcribe the merit of this beautiful and elaborate compoſition. The finale to the firſt act, in which there is ſo much variety, went off *à merveille.* In this are introduced three different ſpecies of dances, performing at the ſame moment; and alſo three diſtinct orcheſtras, each playing a different piece of muſic, and all in oppoſing meaſures. The two airs ſung by Octavio are exquiſitely beautiful; and the laſt bravura by Donna Anna combines the two qualities ſo ſeldom united, of the pleaſing and the ſurpriſing. The muſic in the ſcenes where the ſtatue ſpeaks, is quite marvellous. Mozart, who knew well the power of aſſociation, has, in the firſt of theſe, imitated the chant of the catholic church, and the effect is ſolemnly ſublime. In the laſt ſcene, the burſt of the whole orcheſtra upon the entrance of the ſtone figure is tremendous; which, with the wind-inſtruments aſcending the muſical ſcale in various keys, in myſterious progreſſions and wailing ſounds, renders the effect almoſt petrifying. The whole of the performers executed their arduous taſk with the utmoſt accuracy. The ſcenery was chiefly new, and bore honourable teſtimony to the liberal expenſe which the proprietor had beſtowed upon this opera. The moonlight view of a cemetery, with the equeſtrian figure of Don Pedro, was the fineſt thing ever ſeen upon the ſtage. The dreſſes, decorations, &c. were all in the ſame good ſtyle, altogether rendering this the moſt complete opera ever produced at the King's Theatre.

For the firſt repreſentation of this opera at Prague, the *overture*, which is on all hands admitted to be a maſterpiece of genius and ſcience, was begun and finiſhed in one night. The ſongs, finales, in ſhort all the vocal pieces of the work, had been finiſhed, ſtudied by the ſingers, and rehearſed; nay, the laſt grand rehearſal took place, without the overture being even begun by the compoſer, although the public performance was fixed for the next day. Mozart's friends, his wife, and above all the manager, were in a ſtate of alarm eaſily to be conceived; they repreſented to him the ruinous conſequences, to the theatre as well as to himſelf, which muſt reſult from an eventual diſappointment, and conjured him not to blaſt his greateſt work by ſo wanton a procraſtination. "I ſhall write the overture this afternoon; I have it all in my head;" was the anſwer. The afternoon came; but Mozart, ſeduced by the fineneſs of the weather, took a trip into the country, and made merry, returned in the evening, and ſat down to a bowl of punch with ſome friends, who trembled at the idea of his ſituation. It was midnight before he left this jovial party, in a ſtate ſo little calculated for mental exertion, that he determined to lie down for an hour, at the ſame time charging Mrs. Mozart to call him at the expiration of that time. The fond wife, ſeeing him in the ſweeteſt ſlumber, and conſcious of his powers, ſuffered him to lie two hours, called him up, made a bowl of punch, his favourite beverage, put pen, ink, and muſic-paper, before him, ſat down by his ſide, and, while filling the glaſs, entertained the compoſer with a number of laughable ſtories, in the telling of which ſhe poſſeſſed a peculiar talent. Mozart liſtened with the greateſt glee. All at once the divine ſpark within him brightened into radiant flame; he exclaimed, "Now is the time, Conſtantia; now we are in trim for it." Showers of crotchets and quavers then guſhed from the rapid pen. At times, however, and in the midſt of writing, nature would aſſert her ſway, and cauſe the compoſer to nod. The ſomnolent fits, however, ſoon gave way to the cheerful converſe of Conſtantia, and the excellent punch which formed its accompaniment. The overture was completed before breakfaſt, and the copyiſts ſcarcely had time to write out the ſcore. A rehearſal being thus out of the queſtion, the orcheſtra played it at the public repreſentation in the evening without previous trial; and it is no ſmall eulogium on their talents to add, that the execution electrified the audience, who with thunders of applauſe called for a repetition.

MOZ'DOK, a town of Ruſſia, in the government of Caucaſus, on the Malka: eight miles eaſt of Ekaterinograd.

MOZE', a town of France, in the department of the Mayne and Loire: fifteen miles weſt-ſouth-weſt of Angers, and ten eaſt of Ancenis.

MOZUN', a town of France, in the department of the Puy de Dôme: four miles eaſt-ſouth-eaſt of Billom.

MOZY'R, a town of Lithuania, in the palatinate of Minſk: 112 miles ſouth-ſouth-eaſt of Minſk, and 196 ſouth-ſouth-eaſt of Wilna.

MOZZANI'CA, a town of Italy: twelve miles north-north-eaſt of Lodi, and twenty-two eaſt of Milan.

MOZZOLI'NO (Silveſter), a celebrated Italian dominican monk, better known by the name of *Silveſter de Prierio*, a village in the territory of Aſti, where he was born, about the year 1460. He entered the order when he was fifteen years of age, and became one of its greateſt ornaments. He filled the chair of theological profeſſor in the principal univerſities of Italy; was frequently elected prior; and was once appointed vicar-general of the congregation of Lombardy. Afterwards he was called to Rome, where he was promoted to the high poſt of maſter of the ſacred palace, and made general of his order. He died of the plague in 1520, when he was about ſixty years of age. Notwithſtanding his numerous avocations, he devoted a conſiderable ſhare of his time to ſtudy, and produced ſeveral works which met with a very favourable reception from the public. The principal of them are, 1. Summa, generally called *the Sylveſtrine*, containing a collection of caſes of conſcience, which was firſt publiſhed in 1516, and afterwards reprinted in a greatly enlarged form in 1519, 4to. 2. The Golden Roſe; or, an Expoſition of the Goſpels throughout the Year; which firſt appeared in 1503, 4to. and ſince that time has undergone numerous impreſſions. 3. De Strigi Magarum Dæmonumque Præſtigiis, printed after his death in 1521, 4to. But he claims our notice more particularly, from the circumſtance of his having been the firſt Italian writer who took up his pen againſt Luther. When the Theſes of that reformer were brought to Rome, he endeavoured to refute them in a "Dialogue," which appears to have been publiſhed in the year 1517, and dedicated to pope Leo X. He alſo publiſhed, in 1519, a treatiſe entitled, "Tractatus quidam ſolemnis de arte et modo inquirendi quoſcumque Hæreticos," &c. According to the judgment of catholic critics themſelves, his performances rendered no ſervice to the cauſe of which he was the advocate; and pope Leo thought it prudent to prohibit him from writing any thing more in the Lutheran controverſy. The treatiſe laſt mentioned was originally publiſhed in the name of a jacobin monk, and dedicated to Sylveſter; but in the year 1653, it was reprinted by the inquiſition at Rome, and aſcribed to its proper author. *Gen. Biog.*

MRAK'OTIN, a town of Moravia, in the circle of Iglau: twenty miles ſouth-ſouth-weſt of Iglau.

MRATSCH, a town of Bohemia, in the circle of Kaurzim: ten miles ſouth-eaſt of Enle.

MRES'NA, a river of Croatia, which runs into the Korona three miles ſouth of Carlſtadt.

MRI, a town of Egypt, on the weſt branch of the Nile: ſeven miles ſouth of Faoua.

MRI'TU, or Mrityu, in Hindoo mythology, a perſonification of Death, and a name of Yama, the Pluto of the Hindoos; applied alſo to Kal, or Time, and to Siva, the deſtructive power of the deity.

MRZEC, a river of Poland, which runs into the Niemen four miles north-weſt of Grodno.

MSCHNO, a town of Bohemia, in the circle of Boleſlaw: ten miles weſt of Jung Bruntzel.

MSHET, anciently the capital of Georgia, in Aſiatic Ruſſia, is finely ſituated at the confluence of the Kur (the Cyprus of the Greeks) and the Aragna. The ſite was taſtefully choſen by Mſhet, one of Noah's grandſons, who founded this city, which was alſo the favourite reſidence of Shem, Farſis, Tangamos, and Kartlos. This ſeat of the patriarchs has dwindled into a ſmall aſſemblage of mean houſes, inhabited by Georgians and Armenians of the pooreſt claſs; and, on viewing it in its preſent condition, it is difficult to believe that it was once thirty verſts in circumference, and that it was defended by eighty thouſand warriors. Mſhet poſſeſſes many veſtiges of its former importance. Near the cathedral are the ruins of the palace of the archbiſhops of Georgia. This building contains the oratory of St. Nono, the ſlave-girl who converted king Mirian and his ſubjects in the time of Conſtantine the Great. When journeying through Georgia on her miſſion, ſhe uſed to bear a croſs formed of vine-branches which ſhe had tied together with locks of her own hair. The relic uſed to be carefully preſerved in the cuſtody of the kings; but, when they were out in the wars, it was depoſited in the cathedral of Mſhet. The croſs of vine-branches was carried to the mountains when the Turks and Perſians invaded Georgia in 1720, and concealed for ſome time in the church of Ananour. Afterwards it was entruſted to the Czarowitch Wachtang, who had fled to Moſcow. In more tranquil times, Wachtang's family refuſed to return the croſs to the Georgians; and it was in vain that Heraclius reclaimed this national relic. Its reſtoration has now been effected, thanks to prince Bakerew, Wachtang's deſcendant, who lately laid the croſs at the feet of the emperor Alexander, whereupon his imperial majeſty deigned to reſtore this precious depoſit to Georgia. There is alſo a ſumptuous ancient monaſtery on the bank of the river Kur. Whilſt Georgia was an independent ſtate, the kings were crowned in the church; and it is alſo their place of burial. The laſt kings of Georgia, Heraclius, and George his ſon, who ceded his dominions to the emperor Paul in 1802, reſt amongſt their predeceſſors, and not unhonoured; for the tombs which cover their remains were erected by the expreſs orders of the preſent emperor. The cupola is ſurmounted by a gilded globe. The Perſian invaders endeavoured to bring it down, by firing at it; and the cupola is pierced in all directions with cannon-balls; but the globe maintains its place. The Perſians thought it was a treaſure or a taliſman. The ſaints in the interior of the building have alſo ſuffered much from the zeal of the Mahometan invaders. On the north of Mſhet are more ruins, the remains of a caſtle built at leaſt two thouſand years ſince by the princes of the Amilarchwerow family. The laſt piece of antiquity which we ſhall notice, is the bridge over the river Kur, one verſt from Mſhet. It is flanked by two ruined towers which once defended the paſſage; and they ſay it was built by Pompey, when he croſſed this country at the head of his army. But it is more probable it was built before Pompey came, by the princes of the Gedewanow family, who then had their eſtates in that neighbourhood. *Lettres ſur le Caucaſe et la Georgie*, Hamb. 1816.

MSLAVL, or MISCIS'LAW, a town of Ruſſia, in the government of Mogilev, on the Sem, formerly the capital of a palatinate of Lithuania, incorporated with Ruſſia in the year 1773: ſixty miles eaſt of Mogilev. Lat. 53. 54. N. lon. 31. E.

MSTA, a river of Ruſſia, in the government of Novgorod, which runs into the Ilmen Lake near Lipinſkoi.

MSTOW, a town of Poland, in the palatinate of Cracow: forty-four miles north-north-weſt of Cracow.

MTZEN'SK, a town of Ruſſia, in the government of Orel: twenty-four miles north of Orel.

MU-KELEN'GU, *ſ.* in botany. See DIOSCOREA.

MUAKI'SIN, a town of Aſiatic Turkey, in the government of Diarbekir, on the Euphrates: ten miles weſt of Kerkiſieh.

MU'AR, a river of Malacca, which runs into the Straits in lat. 2. 6. N. lon. 102. 27. E.

MUAS'SEM, a town of Arabia, in Yemen: twenty miles ſouth of Abu Ariſch.

MUBAD', a town of Hindooſtan, in Oude: eleven miles weſt-north-weſt of Lucknow.

MUCA'RE, a town of Arabia, in the province of Hedſjas: eighty miles ſouth-weſt of Mecca.

MUCA'RES, a ſmall iſland among the Bahamas, ſurrounded with rocks. Lat. 22. 13. N. lon. 77. 20. W.

MUCA'TO, a river of Naples, which runs into the ſea ſix miles ſouth of St. Eufemia.

MUCCAPET', a town of Hindooſtan, in Golconda: thirty-two miles ſouth-ſouth-eaſt of Combamet.

MUCCH'IO, or CASTEL MUSCHIO, a populous town in the late Venetian ſtates, north of the Iſle of Veglia, half a mile from the ſea, having a port rather ſhallow, but capable of containing one hundred galleys. It has 12,400 inhabitants, a rich abbey, and two ſprings of ſweet water, which have probably ſome ſubterraneous connection with the Lake Ieſero, which is at a ſmall diſtance from them. Dobaſnizza, ſouth of this, is an open borough, with 2300 ſouls. It has an harbour for ſmall boats, and is ſituated in the moſt fertile part of the iſland. To the eaſt, and almoſt in the centre of the iſle, lies Caſtel Dobrigno, four miles from Veglia, in a very fruitful country, with 2500 inhabitants, and excellent ſalt-houſes. *Oppenheim's Account of Maritime Auſtria.*

MUCE'DO, *ſ.* in botany. See MUCOR.

MUCH, *adj.* [Su. Goth. *mycken*, great, much; Icel. *mioh*, *mikit*, much: hence the Span. *mucho*, as well as our *much*.] Large in quantity; long in time: oppoſed to *little*.—Thou ſhalt carry *much* ſeed out, and ſhalt gather but little in; for the locuſt ſhall conſume it. *Deut.* xxiv. 38.—I am well ſerved, to take ſo *much* pains for one reſolved to make away with himſelf. *L'Eſtrange.*—Many in number oppoſed to *few*:

Let us know
If 'twill tie up thy diſcontented ſword,
And carry back to Sicily *much* tall youth,
That elſe muſt periſh here. *Shakeſpeare.*

MUCH, *adv.* In a great degree; by far: before ſome word of compariſon.—Excellent ſpeech becometh not a fool, *much* leſs do lying lips a prince. *Prov.* xvii. 17.—We have had fathers of our fleſh which corrected us, and we gave them reverence: ſhall we not *much* rather be in ſubjection unto the Father of Spirits, and live? *Heb.* xii. 9.—If they eſcaped not who refuſed him that ſpoke on earth, *much* more ſhall not we eſcape, if we turn away from him that ſpeaketh from heaven. *Heb.* xii. 25.

Full of doubt I ſtand,
Whether I ſhould repent me now of ſin
By me done or occaſion'd, or rejoice
Much more, that *much* more good thereof ſhall ſpring.
Milton.

To a certain degree.—He charged them that they ſhould tell no man: but the more he charged them, ſo *much* the more a great deal they publiſhed it. *Mark*, vii. 36.

There is, ſaid Michael, if thou well obſerve,
The rule of not too *much*, by temperance taught. *Milton.*

To a great degree.—If his rules of reaſon be not better than his rules for health, he is not like to be *much* follow'd. *Baker on Learning.*

Henceforth I fly not death, nor would prolong
Life *much*, bent rather how I may be quit
Faireſt and eaſieſt of this cumbrous charge. *Milton.*

Somewhat aw'd, I ſhook with holy fear,
Yet not ſo *much* but that I noted well
Who did the moſt in ſong and dance excel. *Dryden.*

Often, or long:

You pine, you languiſh, love to be alone,
Think *much*, ſpeak little, and in ſpeaking, ſigh. *Dryden.*

Homer ſhall laſt, like Alexander, long,
As *much* recorded, and as often ſung. *Granville.*

Nearly.—All left the world *much* as they found it, ever unquiet, ſubject to changes and revolutions. *Temple.*

MUCH, *ſ.* A great deal; multitude in number; abundance in quantity: oppoſed to a *little*.—They have *much* of the poetry of Mecænas, but little of his liberality. *Dryden's Preface to All for Love.*

Nor grudge I thee the *much* the Grecians give,
Nor murm'ring take the little I receive. *Dryden's Iliad.*

More than enough; a heavy ſervice or burthen.—He thought not *much* to clothe his enemies. *Milton.*

This gracious act the ladies all approve,
Who thought it *much* a man ſhould die for love. *Dryden.*

Any aſſignable quantity or degree.—The matter of the univerſe was created before the flood; and, if any more was created, then there muſt be as *much* annihilated to make room for it. *Burnet's Theory.*—Who is there of whom we can with any rational aſſurance, or perhaps ſo *much* as likelihood, affirm, Here is a man whoſe nature is renewed, whoſe heart is changed? *South.*—An uncommon thing; ſomething ſtrange.—It is *much*, if men were from eternity, that they ſhould not find out the way of writing all that long duration which had paſt before that time. *Tillotſon.*

To make MUCH *of.* To treat with regard; to fondle; to pamper.—The king underſtanding of their adventure, ſuddenly falls to take a pride in making *much* of them, extolling them with infinite praiſes. *Sidney.*

When thou cameſt firſt,
Thou ſtroak'dſt and mad'ſt *much* of me; and would'ſt give me
Water with berries in't. *Shakeſpeare's Tempeſt.*

Much *at one.* Nearly of equal value; of equal influence:

Then prayers are vain as curſes, *much at one*
In a ſlave's mouth, againſt a monarch's power. *Dryden.*

Much is often uſed in a kind of compoſition with particles both active and paſſive: when it is joined with a paſſive, as *much loved*, it ſeems to be an adverb; when it is joined with an active, as *much enduring*, it may be more properly conſidered as a noun. *Johnſon.*—We rather conſider the two words as a compound adjective, as they are commonly followed by a ſubſtantive; as *Much-loved* friend; *Much-enduring* man.

MUCH WEN'LOCK. See Wenlock.

MUCHANDERGUR', a town of Hindooſtan, in Viſiapour: ten miles ſouth of Currer.

MUCHAWIEC', a river of Poland, which runs into the Bug at Brzeſc.

MUCH'EL, *adj.* for *muckle* or *mickle;* [mẏcel, Sax.] Much:

He had in arms abroad won *muchel* fame,
And fill'd far lands with glory of his might. *Spenſer.*

MUCH'ELN, or Michelda, a town of Saxony, in Thuringia: thirty-ſeven miles north-eaſt of Erfurt, and ſixteen weſt of Leipſic. Lat. 51. 18. N. lon. 11. 55. E.

MUCH'ELNEY, or Michelney, a village of England, in the county of Somerſet, on an iſland in the river Parret. Here was formerly a monaſtery of black canons: all that remains is converted into a barn: one mile ſouth of Ielcheſter.

MUCHIE'TO, a town of the Iſland of Corſica: one mile north of Cervione.

MUCHI'MA, a town of Benguela, on the Coanza: ſeventy-ſix miles north-north-eaſt of Old Benguela.

MUCH'LI. See Moklia.

MUCH'NESS, *ſ.* Quantity. *Obſolete.*—This ſluggiſh humour is condemned long ago for a miſpender of time. And ſurely it is not alone very dangerous, in regard to the quantity and *muchneſs* of time which it filcheth; but alſo in regard of the quality and goodneſs: for it ordinarily feeds gluttonouſly on the very fat of time; it eats the very flower of the day; and conſumes the firſt fruits of our hours, even the morning ſeaſon. *Whately's Redemption of Time;* 1634.

MUCHO'DER, a town of Arabia, in the province of Yemen, between Taas and Jerim.

MUCHUNDRUM', a town of Hindooſtan, in Myſore: twelve miles eaſt of Bangalore.

MUCH'WHAT, *adv.* Nearly. *Not in uſe.*—The motion being conveyed from the brain of man to the fancy of another, it is there received; and the ſame kind of ſtrings being moved, and *muchwhat* after the ſame manner as in the firſt imaginant. *Glanville's Scepſis.*—If we will diſbelieve every thing, becauſe we cannot know all things, we ſhall do *muchwhat* as wiſely as he who would not uſe his legs becauſe he had no wings to fly. *Locke.*

MU'CID, *adj.* [*mucidus,* Lat.] Slimy; muſty.

MUCIDAN', a town of France, and principal place of a diſtrict, in the department of the Dordogne: eighteen miles ſouth-ſouth-weſt of Perigueux, and twelve north-north-weſt of Bergerac. Lat. 45. 2. N. lon. 0. 27. E.

MU'CIDNESS, *ſ.* Sliminefs; muſtineſs. *Ainſworth.*

MU'CILAGE, *ſ.* A ſlimy or viſcous maſs; a body with moiſture ſufficient to hold it together.—Diſſolution of gum tragacanth, and oil of ſweet almonds, do commingle, the oil remaining on the top till they be ſtirred, and make the *mucilage* ſomewhat more liquid. *Bacon.*—The ingredients improve one another; for the *mucilage* adds to the lubricity of the oil, and the oil preſerves the *mucilage* from inſpiſſation. *Ray on Creation.*

Mucilage in chemiſtry, is a name given to an aqueous ſolution of the vegetable product called gum, and to the mucilaginous matter extracted from ſeveral vegetables, ſuch as the bulbs of the hyacinth, the lichens, and ſeveral others. From theſe ſources it has recently been employed in calico-printing as a ſubſtitute for gum-arabic, to prevent the colours from running. Dr. Thomſon has tried the effect of a number of metallic ſolutions upon a ſolution of gum, few of which appear to produce any change. Nitrat of mercury produces a white coagulum, which, however, diſappears by ſhaking, but returns when the ſolution is much diluted. Pruſſiat of mercury gives to a ſolution of gum a ſlight opaque appearance, but makes no precipitate. He alſo found that potaſh, ammonia, ſolutions of lime, barytic and ſtrontian alum, ſulphat of magneſia and aluminated potaſh, had no effect upon mucilage. Silicated potaſh produced a white flaky precipitate, although the ſolution was much diluted. Dr. Thomſon recommends this ſubſtance as the beſt teſt of the preſence of gum. It muſt be remembered, however, that an acid will produce the ſame effect upon ſilicated potaſh.

Mucilage is uſed by ſome writers to deſignate a peculiar principle diſtinct from gum. Mucilage, ſays M. Chaptal, appears to conſtitute the firſt alteration of the alimentary juices in vegetables. Moſt ſeeds are almoſt totally reſolvable into mucilage, and young plants ſeem to be entirely formed of it. This ſubſtance has the greateſt analogy with the mucous fluid of animals. Like that fluid, it is moſt abundant in the earlier periods of life, and all the other principles appear to be derived from it; and in vegetables, as well as animals, its quantity becomes leſs in proportion as the increaſe of magnitude, or growth of the individual, becomes leſs, or ceaſes. Mucilage is not only the nutritive juice of plants and animals, but, when extracted from either, it becomes the moſt nouriſhing and wholeſome food with which we are acquainted. It is found in different ſtates in plants: ſometimes almoſt alone, as in linſeed, &c. ſometimes combined with ſubſtances inſoluble in water, which it keeps ſuſpended in the form of an emulſion, as in euphorbium, celandine, &c. ſometimes united with an oil and forming the fat oils; and frequently it is united with ſugar, as in the gramineous ſeeds, the ſugar-cane, maize, &c. It is alſo found confounded with the eſſential ſalts, with exceſs of acid, as in barberries, tamarinds, ſorrel, &c. Mucilage ſometimes conſtitutes the permanent ſtate of the plant, as in the tremella, conferva, &c. It is alſo ſeen in this ſtate in ſome animals, ſuch as the meduſa or ſea-nettle, the holothurion, &c. The characters of mucilage are the following: viz. inſipidity, ſolubility in water, inſolubility in alcohol, coagulation by the action of weak acids, and the emiſſion of a conſiderable quantity of carbonic acid, when expoſed to the action of fire; at the ſame time that it becomes converted into coals, without exhibiting any flame. It is likewiſe capable of paſſing to the acid fermentation when diluted with water. The formation of mucilage appears to be almoſt independent of light, for the plants which grow in ſubterraneous places abound with it; but light is required to enable mucilage to paſs into other ſtates, for, without this principle, the ſame plants would ſcarcely obtain any conſiſtence. Of the vegetable mucilages, the principal are gum-arabic, gum-ſenegal, and gum-tragacanth.

Mucilage, in pharmacy, &c. denotes a certain aqueous ſolution, which is very thick and adheſive; ſo called as reſembling the mucus of the noſe. Mucilages are prepared chiefly from roots and ſeeds, pounded in a mortar, and infuſed in hot water, and ſtrained through a cloth; and they are the moſt relaxing, emollient, and ſoftening, remedies in medicine. The roots principally uſed for this purpoſe are thoſe of althæa, mallows, ſymphytum, &c. the ſeeds are thoſe of quinces, fleawort, &c. Mucilages enter the compoſition of ſeveral plaſters. They are ſometimes alſo made of gums and fruits; as figs, quinces, iſinglaſs, tragacanth, &c.

Mucilage, like gum, ſerves to combine reſins and oils with water, for which purpoſe, and alſo to give tenacity to pills, it is much employed in pharmacy. Its properties are the ſame with thoſe of gum: it forms the uſual baſis of demulcent mixtures for allaying the tickling cough that occurs in catarrhs and phthiſis; and, combined with opium and other narcotics, it is uſeful in diarrhœa, dyſentery, calculous affections, and ardor urinæ.

The chemical differences between mucilage and ſugar, as ſtated by Mr. Cruikſhank, are the following: Sugar is ſoluble both in water and alcohol, and cryſtallizable from either ſolution; but mucilage is inſoluble in alcohol, and refuſes to cryſtallize from its watery ſolution: 480 grains of ſugar yielded by diſtillation 120 grains of charcoal, 270 grains of liquid pyromucous acid, 41 ounce-meaſures of carbonic acid gas, and 119 ounce-meaſures of hydro-carbonic gas: the ſame quantity of gum-arabic yielded 96 grains of charcoal, 210 grains of pyromucous acid, 93 meaſures of carbonic acid, and 180 of hydro-carbonat. It alſo gave about 10 grains of lime, and the acid, when ſaturated with lime, gave out a little ammonia; and hence it appears, that lime and azot are ſubſtances that belong to mucilage, and not to ſugar. The habitudes of each ſubſtance with nitric acid differ alſo conſiderably. When gum-arabic is heated with nitrous acid only till nitrous gas begins to be diſengaged, a quantity of white inſoluble matter precipitates, which is the mucous acid, and the reſidue is malic acid, which a farther addition of the nitric converts into oxalic: but ſugar is changed into oxalic, or malic and oxalic, acid, without the production of any mucous acid. The quantity of oxalic acid produced from a given weight of ſugar with nitric acid alſo exceeds that yielded by the ſame weight of mucilage with the ſame proportion of acid. In the ſpontaneous changes, alſo, ſugar and mucilage differ eſſentially: ſugar being the eſſential material of the vinous fermention; but mucilage is incapable of this proceſs when pure, and appears to contribute little to the generation of alcohol, when in combination with fermenting materials.

MUCILAG′INOUS, *adj.* Slimy; viſcous; ſoft with ſome degree of tenacity.—There is a twofold liquor prepared for the inunction and lubrification of the heads or ends of the bones; an oily one, furniſhed by the marrow; and a *mucilaginous*, ſupplied by certain glandules ſeated in the articulations. *Ray on Creation.*—*Mucilaginous* glands are of two ſorts: ſome are ſmall, and in a manner milliary glands; the other ſort are conglomerated, or many glandules collected and planted one upon another. *Quincy.*

MUCILAG′INOUSNESS, *ſ.* Slimineſs; viſcoſity.

MUCILA′GO, *ſ.* in botany. See MUCOR.

MUCIUR′, a town of Aſiatic Turkey, in Caramania: twenty-four miles ſouth-ſouth-eaſt of Kir-ſhehr.

MUCK, a ſmall iſland near the eaſt coaſt of Ireland, in the North Channel. Lat. 54. 51. N. lon. 5. 36. W.

MUCK, or MUKE, one of the ſmaller Hebrides, containing about 1000 acres of land, chiefly arable. Lat. 56. 48. N. lon. 6. 12. W.

MUCK, *ſ.* [meox, Sax. *mock*, Su. Goth.] Dung for manure of grounds.—It is uſual to help the ground with *muck*, and likewiſe recomfort with *muck* put to the roots; but to water it with *muck*-water, which is like to be more forcible, is not practiſed. *Bacon's Nat. Hiſt.*

There are, who
Rich foreign mold on their ill-natur'd land
Induce laborious, and with fattening *muck*
Beſmear the roots. *Phillips.*

Any thing low, mean, and filthy, Dr. Johnſon ſays, citing only the example from Spenſer. The word may be rather intended ſimply for a heap, from the Sax. mucᵹ. *Todd.*

Reward of worldly *muck* doth foully blend,
And low abaſe the high heroick ſpirit
That joys for crowns. *Fairy Queen.*

Your gathering ſires ſo long heap *muck* together,
That their kind ſons, to rid them of their care,
Wiſh them in heaven. *Beaum. and Fletcher's Span. Curate.*

A huge maſs of treaſure—the fatal *muck*
We quarrell'd for. *Beaumont and Fletcher's Sea-Voyage.*

To MUCK, *v. a.* To manure with muck; to dung:

Thy garden-plot, lately wel trenched and *muckt*
Would now be twifallowed. *Tuſſer.*

To run a-MUCK, ſignifies, I know not from what derivation, to run madly, and attack all that we meet. *Dr. Johnſon.*—Tavérnier ſays, Certain Java lords, on a particular occaſion, called the Engliſh traitors; and, drawing their poiſoned daggers, cried, *A-mocca* upon the Engliſh! killing a great number of them, before they had time to put themſelves in a poſture of defence. Again he tells us, that a Bantamois, newly come from Mecca, was upon the deſign of *moqua;* that is, in their language, when the raſcality of the Mahometans return from Mecca, they preſently take their axe in their hand, which is a kind of poniard, the blade whereof is half poiſoned, with which they run through the ſtreets, and kill all thoſe which are not of the Mahometan law, till they be killed themſelves. *Tav. Voy.* vol. ii. 199, 202. *Gent. Mag.* vol. xxxviii. p. 283. —The inhabitants of the iſlands to the eaſtward of Bengal, ſuch as Sumatra, Borneo, Banco, and the coaſt of Malay, are very famous for cock-fighting, in which they carry gaming to a much greater exceſs than the cuſtoms of Europe can admit. They ſtake firſt their property; and, when by repeated loſſes all their money and effects are gone, they ſtake their wives and children. If fortune ſtill frowns, ſo that nothing is left, the loſing gameſter begins to chew or eat what is called *bang*, which I imagine to be the ſame as opium; when it begins to operate, he disfigures himſelf and furniſhes himſelf with ſuch weapons as he can get, the more deadly, the fitter for his purpoſe; and, the effect of the opium increaſing, he at length becomes mad. This madneſs is of the furious kind; and, when it ſeizes him, he ruſhes forth, and kills whatever comes in his way, whether man or beaſt, friend or foe; and commits every outrage which may be expected from a man in ſuch circumſtances. This is what the Indians call *a-muck. Gent. Mag.* vol. xl. p. 564.—*A-mocca*, or *a-muck*, (for ſo the word ſhould be written,) is uſed in the Malay language, adverbially, as one word, and ſignifies, if we may ſo write, *killingly:* "He runs *a-muck;* i. e. he runs with a ſavage intent to kill whomſoever he meets." *Malone's Dryden.*—The phrenzy generally known by the term *muck*, or *amok*, among the ſlaves at Batavia, Samarang, and Sarabaya, in the iſland of Java, is only another form of that fit of deſperation which bears the ſame name among the military, and under the influence of which they ruſh upon the enemy, or attack a battery in the manner of a forlorn hope. The accounts of the wars of the Javans, as well as of the Malayus, abound with inſtances of warriors *running amok;* of combatants, giving up all idea of preſerving their own lives, ruſhing on the enemy, committing indiſcriminate ſlaughter, and never ſurrendering themſelves alive. *Raffles's Hiſt. of Java*, 1817.

Frontleſs and ſatire-proof he ſcow'rs the ſtreets,
And *runs an* Indian *muck* at all he meets. *Dryden.*

Satire's my weapon, but I'm too diſcreet
To *run a-muck* and tilt at all I meet. *Pope's Horace.*

MUCK′-HEAP, *ſ.* A dunghill.—A very midden or *muck-heap* of all the groſſeſt errors and hereſies of the Roman church. *Favour's Antiq. Triumphant over Novelty*, 1619.

MUCK′-HILL, *ſ.* A dunghill.—Old Euclio, as he went from home, ſeeing a crow ſcrat upon the *muck-hill*, returned in all haſte, taking it for an ill ſign his money was digged up. *Burton's Anat. of Mel.*

Hitherto amongſt you I have liv'd,
Like an unſavoury *muck-hill* to myſelf. *B. Jonſon.*

MUCK'-MIDDEN, ſ. A dunghill. *Uſed in the north of England.* See MIDDEN.

MUCK-SWEAT', ſ. [in this low word, *muck* ſignifies wet, moiſt.] Profuſe ſweat. High perſpiration.—By the living jingo, I'm all in a *muck-ſweat*. *Goldſmith's Vicar of Wakefield.*

MUCK'-WEED, ſ. The common name of a troubleſome weed in arable land; the common gooſe-foot. See CHENOPODIUM.

MUCK-WET', *adj.* Wet as muck. *Scott.*

MUCK'-WORM, ſ. A worm that lives in dung.—A miſer; a curmudgeon:

Worms ſuit all conditions;
Miſers are *muck-worms*, ſilk-worms beaus,
And death-watches phyſicians. *Swift's Miſcell.*

MUCK'-WORT, or MUD-WORT. See LIMOSELLA.

MUCKANDGUN'GE, a town of Hindooſtan, in Bahar: fifteen miles north of Ramgur.

MUCKDUMPOU'R, a town of Hindooſtan: thirty miles north-eaſt of Moultan.

MUCK'EARN, a town of Scotland, in the county of Argyle: fourteen miles north of Inverary.

MUCK'ENBERG, a town of Saxony, in the margravate of Meiſſen: twenty-eight miles north of Dreſden, and twenty-two north-eaſt of Meiſſen.

MUCK'ENDER, ſ. [*mouchoir*, Fr. *mocadero*, Span. *muccinium*, low Lat. *Dr. Johnſon.*—It is, in ſome places, called *muckinger;* and in Barret's old dictionary *mucketer*. The root is the Lat. *mucus;* old Fr. *mouc*, whence *moucadou*, an old word for *mouchoir*. *Todd.*] A handkerchief:

Be of good comfort; take my *muckinder*,
And dry thine eyes. *B. Jonſon's Tale of a Tub.*

For thy dull fancy a *muckender* is fit,
To wipe the ſlabberings of thy ſnotty wit. *Dorſet.*

MUCK'ENHAGEN, a town of Pomerelia, on the Motlaw: ſeven miles ſouth-ſouth-eaſt of Dantzic.

MUCK'ENREUT, a town of Germany, in the principality of Culmbach: eight miles north-weſt of Bayreuth.

MUCK'ENSTURM, a town of the grand duchy of Baden: two miles north-eaſt of Raſtadt.

MUCK'ER, a town of Pruſſia, in the palatinate of Culm: ſeventeen miles north-north-eaſt of Culm.

To MUCK'ER, *v. a.* [from *muck*, a heap; mucȝ, Sax. *mucchiare*, Ital. to heap up.] To hoard up; to get or ſave meanly: a word uſed by Chaucer, and ſtill retained in converſation.—That gold, and that money, ſhineth, and yeveth better renowne to them that diſpenden it, than to thilke folke that *muckeren* it. *Chaucer's Boeth.*—Penſe that he can *muckre* and ketche. *Chaucer's Tr. and Creſſ.*

MUCK'ERER, ſ. One that muckers; a miſer; a niggard.—Avarice maketh alwaie *muckerers* to ben hated. *Chaucer.*

MUCK'EROW GAU'T, a mountain of Bahar: twenty-three miles weſt of Saſeram.

MUCK'INESS, ſ. Naſtineſs; filth.

MUCK'ISH, mountains of Ireland, in the county of Donegal: twenty-ſix miles north of Donegal.

MUCK'LE, *adj.* [mẏcel, Sax.] Much.

MUCK'LE WA'TER OF GROI'NARD, a river of Scotland, which runs from Loch Strathnaſkelly to Loch Groinard.

MUCK'LEFORD, a village in Dorſetſhire, near Frampton, in the pariſh of Bradford-Peverel, from whence it is diſtant about a mile weſt on the ſouth bank of the Frome. It had formerly a chapel, only the foundation of which is now viſible.

MUCK'LESTON, a village in Staffordſhire, near Bloreheath, on a riſing ground, from whoſe church Margaret of Anjou, the faithful and ſpirited conſort of Henry VI. ſaw the fatal battle of Bloreheath.

MUCK'LEWICK, a village in Shropſhire; to the north-weſt of Biſhop's Caſtle.

MUCKRA'IZ, a town of Hindooſtan, in the circar of Hindia: ſeventeen miles ſouth-eaſt of Hurda.

MUCK'RIS PO'INT, a cape of Ireland, on the north coaſt of Donegal: ſix miles weſt-ſouth-weſt of Killybegs.

MUCKTERPOU'R, a town in Bengal: thirty-three miles eaſt of Calcutta.

MUCKUNDGUN'GE, a town of Bengal: eighteen miles north of Ramgur. Lat. 23. 57. N. lon. 85. 34. E.

MUCK'Y, *adj.* Naſty; filthy:

Mucky filth his branching arms annoys,
And with uncomely weeds the gentle wave accloys. *Spenſ.*

MUCO'NI, in ancient geography, a people of Africa, in the eaſtern part of Mauritania Cæſarienſis, in the environs of Mount Mampſerus, according to Ptolemy.

MU'COR, ſ. [from *muceo*, Lat. to be muſty or mouldy.] A vegetable diſeaſe, ſignifying a ſort of mould or mildew.

MU'COR, ſ. in botany, a genus of the claſs cryptogamia, order fungi. Eſſential generic character—Seeds naked, or in tranſparent capſules or veſicles at the end of the ſtem. Theſe plants form the laſt genus of the loweſt order of vegetation. They chiefly appear in form of mouldineſs on putrid or putrefying ſubſtances, as rotten wood, fruits, dung, corrupted food, old cheeſe, decayed leaves, and other funguſes, in caverns and arched cellars. Seventeen Britiſh ſpecies are enumerated in the third edition of Withering's Arrangement; to which ſeveral have been added by other botaniſts, ſo that the ſpecies now amount to twenty-five.

1. Mucor aquoſus: a watery globule on a long pellucid ſtem; ſeeds roundiſh. Obſerved by Mr. Dickinſon on putrefying paſte.

2. Mucor minimus: minute, white; head nodding.

3. Mucor mucedo: ſtalks ſimple, crowded; heads blackiſh. This is the moſt common mould, on all ſorts of decayed food, vegetables, fruits, &c. It is at firſt greyiſh, with a ſilvery ſparkling appearance; but in a few hours turns greeniſh, and finally almoſt black, from the copious ripe ſeed, which, being gone, leaves the expanded coat of the head, or receptacle, in a ſtar-like, jagged, flat form. This is repreſented on the preceding Engraving, (p. 108.) at fig. 8, of the natural ſize, and magnified.

4. Mucor glaucus. See MONILIA glaucus, vol. xv.

5. Mucor roridus: ſtem hair-like; head ſpherical, like a dew-drop, with a black dot at the top. Found on horſe-dung in Auguſt and September.

6. Mucor urceolatus: ſoon fading; ſtem above bellying, tranſparent, like a dew-drop; head roundiſh, elaſtic, black. The ſtem is yellowiſh, changing to a pellucid watery blue, bellying upwards. Head ſpherical, but depreſſed, black, ſhining; when ripe, thrown off with an elaſtic force. This plant has the property of ejecting the ſeed-veſſel in the ſame manner as the Lycoperdon carpobolus does; and the head, which is blackiſh grey, appearing to be replete with ſeeds like that, ſhould the former be made a diſtinct genus, this might aſſociate with it. The ſtructure of it is clearly a membrane ſurrounding and incloſing the capſule in form of a round ball at the top of the ſtem, which, when ripe, is exploded to ſome diſtance. This membrane is not fugacious like the other mucors; a ſpecimen, now ſix or ſeven years old, ſtill ſhows the remains of the collapſed membrane, though the capſules are fallen into powder and gone. Stem, after the exploſion of the head, loſes its bellying appearance, becomes cylindrical and crooked, in which ſtate it will remain for years, if kept in a dry place. *Woodward.* Inhabits horſe-dung; to be found early in a morning, in Auguſt chiefly.

7. Mucor embolus: ſtem black, briſtle-ſhaped, ſet with brown woolly hair. On rotten wood.

8. Mucor ceſpitoſus: ſtem branching; fructifications finger-like. Found on rotten vegetables in woods.

9. Mucor cruſtaceus. See MONILIA cruſtaceus.

10. Mucor botrytis: ſtem bearing fructifications in bunches. Height two-10ths of an inch. Fructifications

like bunches of grapes. Diſcovered on a decaying plant of Boletus verſicolor.

11. Mucor entomorhizus: ſimple or branched; heads nearly ſpherical, granular, brown.

12. Mucor caſeus: cruſt leather-like; ſtems very ſhort; heads or ſeeds roundiſh, white, yellow, or ſcarlet. Obſerved by Mr. Relhan on old cheeſe kept in a moiſt cellar, and on decayed leaves in woods.

13. Mucor aurantius: cruſtaceous; ſtems branched, creeping; ſeeds few, roundiſh, ſcattered, very minute, orange-coloured. Of long duration. Found by Mr. Relhan on willows, by the river in Grancheſter-meadow, near Cambridge.

14. Mucor chryſoſpermus: extremely fine, yellow; conſiſting of ſtems ſupporting yellow ſeeds, ſingly or in cluſters. Covering the whole ſurface of the plants on which they grow, and ſtaining the fingers yellow. Theſe plants are the Boleti which grow in ſhady places; generally on the Boletus pellucidus, from Auguſt to September. It has the ſame property of repelling wet that has been obſerved in the ſeeds of the Lycopodium. A ſpecimen now before me is not wetted, though it has been immerſed in a fluid for a year. *Withering*.

15. Mucor lignifragus: growing in ſpots; white or green; ſtems very ſlender, branched, interwoven; ſeeds very minute, roundiſh, ſcattered. At firſt white, then deep green, often but a few together; figure of the ſpots uncertain. Found at Whitewood near Gamlingay.

16. Mucor argenteus: ſpreading, white, conſiſting of extremely-fine woolly filaments ſupporting ſeeds. This ſpecies is ſomewhat hemiſpherical, about an inch or more in diameter; brown and pulpy when young, of a brilliant white when arrived at maturity, diſcharging, by one or more irregular accidental openings, a maſs of rich dark ſnuff-coloured powder: ſoon after, it turns dingy, and from grey waxes brown. In the moſt complete ſpecimens of this ſpecies, the threads grow out of the inferior membrane; they are ſcarce, diſperſed, firm, vertical, and oblique, not much in the arbuſcular form. This ſpecies inhabits the ſtems and large boughs of the oak, the Scotch fir, the birch, &c. and is eaſily met with in ſummer and autumn.

17. Mucor leproſus: briſtle-ſhaped; ſeeds at the root. Found in caverns and arched cellars, from September to April.

18. Mucor eryſiphe: white; heads brown, ſeſſile. Inhabits decaying leaves in Auguſt and September.

19. Mucor granuloſus: cruſtaceous, black; capſules ſeſſile. Grows in circular ſpots of half an inch in diameter on the leaves of the ſycamore, occupying both ſurfaces of the leaf. Obſerved by Mr. Relhan; but Mr. Withering doubts the propriety of placing it under the preſent genus.

20. Mucor flavidus: ſtalk branched; heads yellowiſh, afterwards grey. Found in autumn upon rotten fungi, eſpecially agaricus piperatus, on which it forms little indeterminate patches. At firſt this ſtands nearly upright, and is of a ſhining yellow; afterwards it lies down, and aſſumes the aſpect of a greyiſh aſh-coloured byſſus. The heads are blackiſh when ripe, and appear ſomewhat granulated, from the protruſion of the ſeeds through the burſting coat. The latter are globular and whitiſh.

21. Mucor turbinatum: top-ſhaped, naked, even, pale brown. Furniſhed with a kind of ſhort ſtalk, which gives it a pear-ſhaped figure. Bulliard ſays it is pellucid when young. Found upon rotten wood in autumn.

22. Mucor punctatum: aggregate, globoſe, dotted, greyiſh. Found on rotten wood. Its ſurface dotted all over with minute points.

23. Mucor atrum: black, cuſhion-ſhaped; its powder intermixed with branched arboriform black fibres radiating from a centre. Of this ſpecies there are two very diſtinct varieties.

α. M. pulvinatum. This fungus, which might conſtitute a genus by itſelf, was lately diſcovered by the ingenious botaniſts of Upper Luſatia, Albertini and Schweiniz, who gave it a conſpicuous place in their much-eſteemed *Conſpectus Fungorum*. At firſt ſight, and conſidering eſpecially the capillary ſtructure of the duſt of this plant, the mycologiſts above mentioned were tempted to aſſign it a place by the Trichoderma fuliginoides of Perſoon; but, upon farther conſideration, and finding that its characteriſtics coincided with the Lycogala argenteum, now included in this genus, they prudently abſtained from bringing their firſt intention into a poſitive effect. In general this curious variety lives ſolitary; yet ſometimes a few individuals meet together, and form a cæſpes, or turf, running apparently into each other; (ſee fig. 9.) This however happens but ſeldom, and ariſes from an accidental and cloſe contiguity of the individuals. The form of this fungus is, in general, pretty regular; pulvinated or half depreſſed, and looſely diffuſed on the ground. The diameter between one and two inches, and the thickneſs a third or half of an inch. The whole primitive plant remains ſome time in a ſtate of ſoftneſs, not unuſual to the tribe of trichoſpermous or hair-ſeeded fungi; being at firſt white, and then inclining to yellow; then, from blood-colour turning to cheſnut, it dries up and proclaims its entire maturity; exhibiting by degrees ſeveral curious ſhades of colours, from the brightneſs of white to the dulneſs of dark brown or grey. Having attained its ſtate of perfection, it diſcloſes a membrane placed underneath, ſtrong, tranſparent, aſh-coloured inclining to a ſilver tint, flat and incumbent upon the native wood, as ſhown at *b*. From its centre diverge ſeveral filaments, ſimple and firm, dividing themſelves into numerous ramifications, like a tree in miniature, and ſcattering their generative duſt at random. Theſe filaments, (one of which is ſhown enlarged at *c*,) which become plain to the ſight as ſoon as the pollen is blown off, are not unlike, and ſeem intended by Providence for the ſame purpoſe as, the fibres which connect together the eggs of fiſhes, and are moſt conſpicuous in thoſe of the cancer tribe, viz. the lobſter, prawn, crayfiſh, &c. Every one of the particles, which compoſe this curious and moſt admirable pollen, has a petiole by which it holds to the branch upon which it grows, like the fruit of a tree; and, when we conſider that the ſap muſt circulate through theſe imperceptible hairs, we are filled with awe and aſtoniſhment at the power of nature, and the immenſity of the creation, ſince to the eyes of God the wonderful bulk of the ſun, the ſtars, and the planets, are of equal ſize with the evaneſcent globules which conſtitute the duſt of plants like theſe! The cortex, or bark, which covers this fungus outſide, is ſometimes of a dingy grey, ſometimes black: it forms a ſort of ſcabellus, or ſtool, curiouſly and elegantly wrought, ſmooth in its interſtices, yet thin, tender, and moſt brittle; which, burſting at the leaſt touch, blows off and puffs away its copious, ſubtile, and browniſh, farina.

β. M. pendulum, or hanging. This variety differs from the preceding in bulk and habits. It is but one third of the other in bigneſs, and *hangs* from beams or other pieces of wood horizontally placed. Its form is globoſe and ſubturbinated, ending in a ſort of ſtipes. The heavieſt parts of the ſubſtance, yielding to the laws of gravity, when it is yet in a ſtate of ſoftneſs, deſcend to the bottom, and, gathering around the ramifications of the arbuſculum, allow the ſtem to appear. In this variety the ſurface is often marked with circular lines; and one has been found with white filaments, which ſoon diſappeared. Both varieties inhabit the lofty ſhades of the firs, and are moſt numerous whenever the caterpillar, by its horrid depredations, has made the verdant honours of the pine fall a victim to its voracity. It thrives in April, May, and June; and ſometimes re-appears in October and November.

24. Mucor miniatum, or ſcarlet: aggregate, globoſe; at firſt ſcarlet; then brown, with roſe-coloured powder. Common on the trunks of trees, after rain, in ſummer

and autumn. Its vivid vermilion or ſcarlet hue, when young, is very ſtriking: in decay it turns brown or black. This common ſpecies meaſures, in ſize, an inch and ſometimes more; now and then it is ſhaped ſomewhat like a bean. The filaments grow out of the interior pellicle of the bark: they are ſmall, thin, ramoſe, and thickly ſet.

25. Mucor conicum: ſcattered, conical; at firſt red, then purpliſh-violet. Found, very rarely, on the rotten trunks of trees. About one or two lines high, exactly conical, but obtuſe, clothed with little ſcattered fibrous granulations. Powder of a violet-red. *Perſoon's Synopſis. Albertini & Schweiniz Conſpectus Fungorum. Withering. Gmelin's Linn.*

MU'COUS, *adj.* [*mucoſus*, Lat.] Slimy; viſcous.—The ſalamander, being cold in the fourth and moiſt in the third degree, and having alſo a *mucous* humidity above and under the ſkin, may a while endure the flame. *Brown.*—About theſe the nerves and other veſſels make a fine web, covered over with a *mucous* ſubſtance, to moiſten theſe papillæ pyramidales. *Cheyne's Philoſ. Principles.*

Mucous Acid, a peculiar acid formed by the mutual decompoſition of the nitric acid and gum mucilage. When nitric acid is moderately heated with half its weight of gum arabic, only till nitrous gas begins to be diſengaged, there depoſits on cooling a white powder, which, when collected and waſhed, is the mucous acid. Its feel is granular, and taſte ſlightly ſour. When heated per ſe to decompoſition, it gives a red ſharp-taſted oil, much carbonic acid gas, and a portion of it ſublimes in brown ſcales, ſmelling like the benzoic acid. The dry mucous acid is very ſparingly ſoluble in water. The hot ſaturated ſolution depoſits on cooling brilliant ſcaly cryſtals. It decompoſes the carbonated alkalies at a boiling heat, expelling the carbonic acid, and forming perfectly neutral ſalts.

This acid is found to be the ſame as that diſcovered by Scheele to be produced by the action of nitric acid on ſugar of milk, and called *ſaccholactic acid;* as to which, ſee the article Chemistry, vol. iv. p. 359.

MU'COUSNESS, *ſ.* Slime; viſcoſity.

MU'CRO, *ſ.* [Latin.] A point.—The *mucro*, or point of the heart, inclineth unto the left, by this poſition it giving way unto the aſcenſion of the midriff. *Brown's Vulgar Errors.*

MU'CRONATED, *adj.* Narrowed to a ſharp point.—Gems are here ſhot into cubes conſiſting of ſix ſides, and *mucronated* or terminating in a point. *Woodward.*

MUCU'CHIS, a town of South America, in the viceroyalty of New Grenada: fifteen miles eaſt of Merida.

MU'CULENCE, *ſ.* [from *mucus*, Lat.] Slimineſs; viſcoſity.

MU'CULENT, *adj.* Viſcous; ſlimy.

MUCUL'LAGH ROC'KS, rocks in Tralee Bay, on the weſt coaſt of Ireland: three miles north-north-weſt of Fenit Iſland.

MUCUN'D, a town of Hindooſtan, in Lahore: fourteen miles ſouth of Lahore.

MUCUNDNAU'T, a town of Lamjungh: 180 miles north of Fyzabad. Lat. 29. 27. N. lon. 83. 50. E.

MU'CUS, *ſ.* [Latin.] It is more properly uſed for that which flows from the papillary proceſſes through the os cribriforme into the noſtrils; but it is alſo uſed for any ſlimy liquor or moiſture, as that which daubs over and guards the bowels and all the chief paſſages in the body; and it is ſeparated by the mucilaginous glands. *Quincy.*—In the action of chewing, the *mucus* mixeth with the aliment: the *mucus* is an humour different from the ſpittle, and the great quantity of air which it contains helps to diſſolve the aliment. *Arbuthnot on Aliments.*

Mucus is a ſubſtance obſervable in many animal fluids, reſembling vegetable mucilage in being ſoluble in water, not coagulable by heat, inſoluble in alcohol, inſipid, and giving a ſlimy conſiſtence to the fluids with which it is mixed; and on this account denominated *mucus*. Animal mucus is conſidered by Mr. Hatchett as merely a modification of *gelatin;* but Dr. Boſtock has pointed out a very deciſive difference between the two with regard to the manner in which they are acted upon by Goulard's extract, a preparation of lead produced by ſaturating boiling vinegar with litharge. This liquor, when added to any fluid containing animal mucus, gives a copious white precipitate; whereas it is not rendered ſenſibly turbid by a ſolution of pure jelly. The infuſion of galls or tan, which inſtantly precipitates jelly, has no or ſcarcely any effect on mucus. Neither gelatin nor mucus is altered by the ſolution of corroſive ſublimate, which copiouſly precipitates albumen. Conſequently, albumen, gelatin, and mucus, mixed together, may be ſeparated with tolerable accuracy by the ſucceſſive application of corroſive ſublimate, infuſion of galls, and acetated litharge. Animal mucus is generally combined with gelatin and albumen, and always with ſome ſalts; upon the whole, it is one of the leaſt abundant of the animal fluids.

The following teſts have been given to diſtinguiſh *pus* from mucus, which is of conſiderable importance in caſes where the formation of pus is ſuſpected in the lungs. 1. Pus is ſoluble in ſulphuric acid, and precipitated by water: mucus ſwims. 2. Pus may be diffuſed through water, diluted ſulphuric acid, and brine; but mucus is not. 3. Pus is ſoluble in alkaline ſolutions, and is precipitated by water; but this is not the caſe with mucus.

MUD, *ſ.* [*moder*, Germ. *modd*, Su. Goth.] The ſlime and uliginous matter at the bottom of ſtill water.—Water in *mud* doth putrefy, as not able to preſerve itſelf. *Bacon's Natural Hiſtory.*

The pureſt ſpring is not ſo free from *mud*
As I am clear from treaſon. *Shakeſpeare's Henry VI.*

To MUD, *v. a.* To bury in the ſlime of mud:

Would I were *mudded* in that oozy bed
Where my ſon lies. *Shakeſpeare's Tempeſt.*

To make turbid; to pollute with dirt; to daſh with dirt; to foul by ſtirring up the ſediment.—I ſhall not ſtir in the waters which have been already *mudded* by ſo many contentious enquiries. *Glanville's Scepſis.*

MUD-INGUA'NA. See Muræna ſiren.

MUD I'SLAND, a ſmall fortified iſland of United America, in the river Delaware.

MUD LA'KE, a ſmall lake of New York, a little to the ſouth of Crooked Lake.

MUD'-SUCKER, *ſ.* A ſea fowl.—In all water-fowl, their legs and feet correſpond to that way of life; and in *mud-ſuckers*, two of the toes are ſomewhat joined, that they may not eaſily ſink. *Derham.*

MUD-WA'LL, *ſ.* A wall built without mortar, by throwing up mud and ſuffering it to dry.—If conſcience contract ruſt or ſoil, a man may as well expect to ſee his face in a *mud-wall*, as that ſuch a conſcience ſhould give him a true report of his condition. *South.*

MUD'-WALLED, *adj.* Having a mud-wall:

As folks from *mud-wall'd* tenement
Bring landlords pepper-corn for rent;
Preſent a turkey, or a hen,
To thoſe might better ſpare them ten. *Prior.*

MUD'-WORT, in botany. See Limosella.

MU'DA, a town of Italy, in the Belluneſe: ten miles north-north-weſt of Belluno.

MUDA'NIA, or Mundania, a town of Aſiatic Turkey, in the province of Natolia, ſituated in a gulf, in the ſouth eaſt part of the Sea of Marmora. The inhabitants are chiefly Greeks or Jews, with ſome Turks. The archbiſhop of Burſa has a palace here. The commerce is very conſiderable in grain, ſilk, ſaltpetre, white wine, variety of fruits, and the manufactures of Burſa, which are brought here for exportation. It is fifteen miles north-north-weſt of Burſa. Lat. 40. 14. N. lon. 28. 54. E.

MUDAU', or Mudech, a town of Germany, in the circle of the Lower Rhine: ten miles ſouth of Miltenberg.

MUDBUN'NY, a town of Hindooſtan, in Bahar: thirty miles eaſt-ſouth-eaſt of Bettiah. Lat. 26. 33. N. lon. 85. 16. E.

MUDDA'GO, a town of Africa, in Fittré: thirty miles weſt of Dar Cooka.

MUD'DI, or CHEE'GO MUD'DI, a town of Hindooſtan, in the country of Cutch, at the mouth of the river Caggar: twenty-two miles ſouth-weſt of Boogebooge. Lat. 23. 5. N. lon. 68. 42. E.

MUD'DILY, *adv.* Turbidly; with foul mixture.—Lucilius writ not only looſely and *muddily*, with little art, and much leſs care, but alſo in a time which was not yet ſufficiently purged from barbariſm. *Dryden.*

MUD'DINESS, *ſ.* Turbidneſs; foulneſs cauſed by mud, dregs, or ſediment.—Our next ſtage brought us to the mouth of the Tiber: the ſeaſon of the year, the *muddineſs* of the ſtream, with the many green trees hanging over it, put me in mind of the delightful image that Virgil has given when Æneas took the firſt view of it. *Addiſon on Italy.*

To MUD'DLE, *v. a.* To make turbid; to foul; to make muddy.—The neighbourhood told him, he did ill to *muddle* the water and ſpoil the drink. *L'Eſtrange.*

Yet let the goddeſs ſmile or frown,
Bread we ſhall eat, or white, or brown;
And in a cottage, or a court,
Drink fine champagne, or *muddled* port. *Prior.*

To make half drunk; to cloud or ſtupify.—Epicurus ſeems to have had his brains ſo *muddled* and confounded, that he ſcarce ever kept in the right way, though the main maxim of his philoſophy was to truſt to his ſenſes, and follow his noſe. *Bentley's Sermons.*

To MUD'DLE, *v. n.* To contract filth; to be in a dirty or confuſed ſtate.—He never *muddles* in the dirt. *Swift.*—His ſummum bonum is *muddling* in parchments. *Greville.*

MUD'DLE, *ſ.* A confuſed or turbid ſtate: *a vulgar expreſſion.*

MUD'DY, *adj.* Turbid; foul with mud.—Out of the true fountains of ſcience painters and ſtatuaries are bound to draw, without amuſing themſelves with dipping in ſtreams which are often *muddy*, at leaſt troubled; I mean the manner of their maſters, after whom they creep. *Dryden.*

I ſtrove in vain the infected blood to cure,
Streams will run *muddy* where the ſpring's impure. *Roſcommon.*

Impure; dark; groſs.—If you chuſe, for the compoſition of ſuch ointment, ſuch ingredients as do make the ſpirits a little more groſs or *muddy*, thereby the imagination will fix the better. *Bacon.*

There's not the ſmalleſt orb which thou behold'ſt,
But in his motion like an angel ſings,
Still quiring to the young-ey'd cherubims;
Such harmony is in immortal ſounds;
But, whilſt this *muddy* veſture of decay
Doth groſsly cloſe us in, we cannot hear it. *Shakeſpeare.*

Soiled with mud:

His paſſengers
Expos'd in *muddy* weeds, upon the miry ſhore. *Dryden.*

Dark; not bright:

The black
A more inferior ſtation ſeeks,
Leaving the fiery red behind,
And mingles in her *muddy* cheeks. *Swift's Miſcellanies.*

Cloudy in mind; dull:

Do'ſt think I am ſo *muddy*, ſo unſettled,
To appoint myſelf in this vexation? *Shakeſpeare.*

To MUD'DY, *v. a.* To make muddy; to cloud; to diſturb.—Exceſs, either with an apoplexy, knocks a man on the head; or with a fever, like fire in a ſtrong-water-ſhop, burns him down to the ground; or, if it flames not out, charks him to a coal; *muddies* the beſt wit, and makes it only to flutter and froth high. *Grew's Coſmol. Sacra.*

The people *muddied*,
Thick and unwholeſome in their thoughts and whiſpers. *Shakeſpeare.*

MUDDY CREE'K, a river of Pennſylvania, which runs into the Suſquehanna in lat. 39. 17. N. lon. 76. 20. W.

MUDDY CREE'K, a river of Kentucky, which runs into the Ohio in lat. 36. 44. N. lon. 89. 18. W.

MUDDY CREE'K, or PON'D CREEK, a river of Kentucky, which runs into the Ohio in lat. 37. 19. N. lon. 87. 48. W.

MUDDY-HEAD'ED, *adj.* Having a cloudy underſtanding.—Many boys are *muddy-headed*, till they be clarified with age; and ſuch afterwards prove the beſt. *Fuller's Holy State.*

MUDDY LA'KE, a lake of Upper Canada, between lake George and lake Huron.

MUDDY PO'INT, a cape on the weſt coaſt of Africa. Lat. 11. 40. S.

MUD'DY-METTLED, *adj.* Tardily incenſed.—A dull and *muddy-mettled* raſcal. *Shakeſpeare's Hamlet.*

MU'DEN, a town of Perſia, in Segeſtan: 110 miles north-weſt of Zareng.

MU'DERER, a town of Hindooſtan, in the gulf of Cutch: eighteen miles ſouth-eaſt of Boogebooge.

MUDER'NI, a town of Aſiatic Turkey, in Natolia: twenty-four miles ſouth-weſt of Boli.

MUDGE (John, M.D. F.R.S.) an eminent Engliſh phyſician and practical ſurgeon, and no leſs ſkilled in mechanics, was born at Biddeford, in the county of Devon, in the year 1720, being the ſon of the Rev. Zachariah Mudge, a pious and learned divine. On the promotion of his father to the vicarage of St. Andrew's, Plymouth, our author was articled to a ſurgeon there. In this line his talents were ſoon diſplayed on many occaſions, which procured him the friendſhip and patronage of the celebrated Dr. Huxham, who then practiſed as a phyſician in that town. After returning to Plymouth, from walking the public hoſpitals in London, finding at that period but few ſurgical operations of difficulty were performed weſtward of Exeter, he determined to exhibit the character of his talents by ſome operations of conſequence in the preſence of the faculty. He accordingly ſought out and found a proper ſubject, in a man afflicted with the ſtone. This ſubject he perſuaded, by the aid of pecuniary arguments, to ſubmit to the operation of lithotomy; and the patient was paid, cut, and cured. From this time, till 1784, when Mr. Mudge received a diploma as M.D. and began to practiſe as a phyſician, he continued the profeſſion of ſurgery, and with great ſucceſs. With a capacious mind, aſſiſted by experience and ſound obſervation, Mr. Mudge in the courſe of his life made ſeveral improvements in the art of ſurgery, in which line he was not more eminent than in that of phyſic. His method of extracting the ſtone in the lateral operation, deſcribed in the Phil. Tranſ. as alſo his two publications, one on the ſafety of inoculation, and the other on a certain and ſpeedy cure for a recent catarrhous cough, are proofs of his ſkill and philoſophical judgment. His method of operating in the caſe of the fiſtula in ano, as ſhown in a paper of his publiſhed in the medical journals, might alſo be adduced as an inſtance of the ſame.

The character of a phyſician Dr. Mudge ſuſtained with great reſpectability. He poſſeſſed a liberal enlightened mind; and was diſtinguiſhed not only for learning, ſkill, and diſcernment in his profeſſion, but alſo for knowledge and judgment in general ſcience. His mechanical turn, joined to his inclination for the ſtudy of optics, led him to the improvement of the reflecting teleſcope. In a paper preſented to the Royal Society, and printed in the

67th vol. of the Phil. Tranſ. he ſuggeſted ſome improvements in the compoſition of the metals for that inſtrument, accompanied with a deſcription of a proceſs for grinding, poliſhing, and giving the true parabolic figure to, the great ſpeculum; and for this paper the Royal Society adjudged him the prize of the gold medal. In diſcovering the means of this operation, Dr. M. received, what every well-grounded man muſt receive in the inveſtigations of nature or the product of art, the aſſiſtance of mathematical learning. For he had, at intervals, acquired a very conſiderable knowledge of the mathematics in all its branches; and had written a treatiſe on forces, in great part corrected for publication. It may be further remarked that, for coughs and colds, he was the inventor of the inſtrument called the inhaler, for introducing warm vapour into the lungs. This reſpectable man died March 26, 1792, at ſeventy-two years of age; leaving behind him a moſt excellent character, both as a man and a ſcholar; as alſo a numerous family of ſons and daughters, all of ſingular talents and conduct, reſpectable not only in private, but in public, life; one having diſtinguiſhed himſelf as a naval commander; and another, Col. Mudge, of the royal artillery, as an able director of the preſent national trigonometrical ſurvey of Great Britain; for which honourable office he was ſelected, at a very early age, by the diſcerning judgment of his grace the duke of Richmond, when he ſo ably filled the office of maſter-general of the ordnance. *Phil. Tranſ. abr.*

MUDGE (Thomas), a very eminent and ingenious watch-maker, was born in the ſame year with ſubject of the preceding article, and we believe of the ſame family. He ſerved his apprenticeſhip to the celebrated Graham; and afterwards commenced buſineſs in Fleet-ſtreet, in partnerſhip with Mr. Matthew Dutton, whoſe ſons ſtill continue the buſineſs. Mr. Mudge become a candidate for the rewards offered by the board of longitude for accurate time-meaſurers about the ſame time with Mr. Harriſon, or ſoon after. He received, as we underſtand, about 3000l. at different times, from the parliament, beſides being appointed watch-maker to the king, with a ſalary of 130l. a-year. A full account of his time-keeper, with ſome farther particulars relating to Mr. Mudge, are given under our article Horology, vol. x. p. 352–5.

Mr. Mudge was a man of modeſt and retired habits; and, as he reſided chiefly in the country for the laſt two-and-twenty years of his life, purſuing his experiments and his mechanical ſtudies, ſuch a life would furniſh but ſlender materials for the pen of his biographer. Yet we lament that ſuch an eſtimable character ſhould be ſuffered to ſink as it were into oblivion; and we wiſh that ſome perſon connected with the family would pay a juſt tribute to his memory by publiſhing a more perfect ſketch of his life than we have been able to procure. The circumſtances relative to him, that we conceive would excite moſt intereſt in the public mind, are—his great mechanical talents; his unſhaken integrity, accompanied by a ſuavity and ſimplicity of manner that has hardly ever been exceeded; and the diſtinguiſhed friendſhips which theſe rare endowments procured for him; among which are to be reckoned their preſent majeſties, and the late count Bruhl, the laſt of whom treated him with the affection of a brother, and was ever alive to every thing that might either promote his fortune or his fame. Mr. Mudge died at his ſon's houſe at Walworth, Nov. 14, 1794, at the age of ſeventy-four.

MUDGURR'Y, a town of Hindooſtan, in Bahar: ten miles north-weſt of Burwah.

MUDJE'A, a town of Bengal: twenty-five miles eaſt of Rogonatpour. Lat. 23. 32. N. lon. 87. 16. E.

MUDNAGUR', a town of Hindooſtan, in Oude: fixteen miles eaſt of Bahraitch.

MUDNIS'KA, a town of Ruſſia, in the government of Irkutſk, on the Lena: ninety-two miles north-eaſt of Kirenſk.

MU'DO (Hernandez el), whoſe real name was *Juan Hernandez Navarete*, was a native of Logronno, whoſe ingenuity in the art of painting acquired for him the honourable title of the Spaniſh Titian. Velaſco ſays, that he was born deaf and dumb, and, therefore, had the appellation of El Mudo, by which he was moſt generally known. He made himſelf maſter in the principles of his art by going to Italy, and ſtudying there ſome time the works of the great men who then adorned it, particularly of Titian and the Venetian ſchool. After his return to Madrid, he was in 1568 nominated painter to the king, and was employed by him to paint eight large pictures for the Eſcurial, of which the moſt ſtriking was the Decollation of St. James. He painted alſo for the cities of Valencia, Salamanca, and Eſtrella; but his laſt and beſt work, was of Abraham receiving the three Angels, and which was alſo depoſited at the above-mentioned palace. He died at the age of little more than forty, according to P. Velaſco, in the year 1572.

MUDT, a river of Germany, which runs into the Maine near Miltenberg.

To MUE, *v. a.* [*muer*, Fr.] See *To* Mew. To moult; to change feathers; to change:

Their nakedneſs with ſackcloth let them hide,
And *mue* the veſtments in their ſilken pride. *Quarles.*

To low as a cow; uſually pronounced *moo*, though *mue* ſhould ſeem to be the orthography: [*muir*, old Fr. *muhen*, Germ. *mugio*, Lat.]

MU'EHR, or Mer, a river which riſes in a lake of Salzburg, paſſes by Muehrau, Gratz, &c. in Stiria, and joins the Drave ſix miles ſouth of Caniſcha in Hungary.

MU'EL, a town of Spain, in the kingdom of Arragon: twelve miles ſouth-ſouth-weſt of Saragoſſa.

MUEL SCHA'VI, in botany. See Cacalia.

MUENELU'NA, a town of Mexico, in the province of Guaxaca: ſixty miles ſouth of Nexapa.

MUERAGAU'T, a town of Hindooſtan, in Oude: fifty-four miles weſt-north-weſt of Lucknow.

MUER'TZENSCHLAG, a town of the duchy of Stiria: twenty-three miles eaſt of Pruck, and twelve weſt-north-weſt of Fridberg.

MUEZ'ZIMS, *ſ.* Officers of the moſques among the Muſſulmans, whoſe buſineſs it is to aſcend five times a-day to the minaret, there to proclaim aloud the profeſſion of faith of Mahomet, invite the Muſſulmans to prayer, and ſing, on feſtivals, different hymns. In the little moſques, the muezzims ſweep and arrange the carpets, light the lamps, &c. But this function in the great moſques is reſerved for other young ones, called *cayims*.

MUFF, *ſ.* [Swediſh.] A ſoft cover for the hands in winter.—A child that ſtands in the dark upon his mother's *muff*, ſays he ſtands upon ſomething, he knows not what. *Locke.*

Feel but the difference, ſoft and rough;
This a gantlet, that a *muff*. *Cleaveland.*

MUF'FIN, *ſ.* A kind of light cake.

To MUF'FLE, *v. a.* [from *mouffle*, Fr. a winter glove. *Dr. Johnſon.*—Rather from the old French *mufle*, the muzzle, or lower part of the head of ſome animals. *Lacombe.*—"*Mufle*, ſnout or muzzle." *Cotgrave.*—The original meaning is to conceal part of the face; not to cover from the weather, as Dr. Johnſon has given it. *Todd.*] To conceal part or the whole of the face.—We've caught the woodcock, and will keep him *muffled*. *Shakeſpeare's All's Well.*—You muſt be *muffled* up like ladies. *Dryden.*—The face lies *muffled* up within the garment. *Addiſon.*

Bright Lucifer his form obſcur'd with tears;
And, ſince he was forbid to leave the ſkies,
He *muffled* with a cloud his mournful eyes. *Dryden.*

To wrap; to cover:

Balbutius *muffled* in his ſable cloke,
Like an old druid from his hollow oak. *Young.*

To conceal; to involve; to wrap up.—Our underſtandings lie grovelling in this lower region, *muffled* up in miſts and darkneſs. *Glanville's Scepſis.*

No *muffling* clouds, nor ſhades infernal, can
From his inquiry hide offending man. *Sandys's Paraph.*

To MUF'FLE, or MAFFLE, *v. n.* [*maffelen, moffelen,* Dut.] To ſpeak inwardly; to ſpeak without clear and diſtinct articulation.—The freedom or apertneſs and vigour of pronouncing, as in the Bocca Romana, and giving ſomewhat more of aſpiration; and the cloſeneſs and *muffling*, and lazineſs of ſpeaking, render the ſound of ſpeech different. *Holder.*—He ſo ſtammered, or *maffled*, in his talke, that he was not able to bring forth a readie word. *Barret's Suetonius*, 1580.

MUF'FLE, *ſ.* in chemiſtry, a veſſel employed in ſome metallurgic operations. In figure it repreſents an oblong arch or vault, the hinder part of which is cloſed by a ſemicircular plane, and the lower part or floor of which is a rectangular plane. It is, in ſhort, a little oven that is placed horizontally in the furnace, ſo that its open ſide correſponds with the door of the fire-place. Under this arched oven ſmall cupels or crucibles are placed; and the ſubſtances contained are thus expoſed to intenſe heat without contact of fuel, ſmoke, or aſhes. See CHEMISTRY, Plate I. fig. 20. K. for the moſt uſual form of muffles, though they are occaſionally made of other ſhapes.

As to the height, length, and depth, of muffles, theſe muſt be proportioned to the ſize and number of the veſſels they are intended to cover; and care muſt be taken in this, that all parts of the inner ſurface of thoſe veſſels be within the reach of the aſſayer's eye. The moſt frequent ſize of the muffle, however, is four inches high, ſix or eight inches long, and four or ſix inches broad. The ſegments cut off at the baſes, for the ſmaller holes, muſt be of ſuch a proportioned height, that the leaſt veſſels put under it may not be in the way of coals or aſhes falling into them; for that always hinders the vitrification of lead, and the deſtruction of the other metals and ſemimetals, and will ſometimes entirely reduce them again when already deſtroyed; and the ſcoriæ, ſoftened by aſhes, will often retard the operation. Wooden moulds of a proper ſhape are employed for the making of theſe muffles, and the matter of which they are made is the ſame with that of the German-clay teſts; this is, either a pure native clay, of a condition to bear the fire, which will be known upon the trial; or ſuch clay hardened by a mixture of the powder of ſtones.

But Mr. Edward Turrell, of Goſwell-ſtreet-road, propoſed, in the year 1807, a great improvement in the manufacture of muffles, by forming them upon tin moulds, by which means coarſer and cheaper materials may be uſed than can be employed in the common mode; and which alſo gives them the valuable property of reſiſting a greater degree of heat. Much time will be ſaved alſo by this improved method of manufacturing them; and the certainty of making them without cracks or flaws, and with coarſer materials, will appear obvious, when it is conſidered, that, by this improved method, they are *internally* moulded inſtead of *externally*; by which means the ſtrength of the operator may have its full effect, in firmly compreſſing the compoſition into the mould. With reſpect to ſimplicity, likewiſe, this new mode will be found to poſſeſs a very great advantage, for a boy of twelve years of age may be taught to make them in a very ſhort time. Another advantage in this improvement, and of equal conſideration, is the cheapneſs of the article; the price of which has been reduced nearly one-third to the conſumer; and, when the ſuperior quality of them is taken into conſideration, it may fairly be ſaid to be full one-half; that is, when regard is had to their ſuperior quality; and that the muffles may be uſed over again when broken and ground, with a much leſs proportion of coheſive clay than in the old mode: and this is no inconſiderable advantage; for it is well known, that, when the old muffles or broken crucibles can be uſed without much freſh clay, they are far ſuperior to new materials. Laſtly, the muffles made in the old way are ſeldom of equal thickneſs; whereas thoſe made according to this method will be found to poſſeſs that neceſſary quality in perfection; for, if an hundred are made from the ſame mould, they will be all of the ſame thickneſs.

The uſual compoſition for making muffles is as follows: Two parts pipe-clay and one part ſand, ſuch as is uſed by the bricklayers, ſifted, and mixed together to a proper conſiſtence; this is very expenſive, on account of the high price of pipe-clay, which is about ten ſhillings the hundred-weight; whereas I employ, in my improved mode of making them, (ſays Mr. Turrell,) the coarſer kind of Stourbridge-clay, which can be had at the glaſs-houſes, in the ground ſtate, for ſix ſhillings the hundred-weight; and this I ſift alſo, to ſeparate the finer part, which I employ for making other ſmaller articles neceſſary in my buſineſs; uſing only the groſſer or coarſer part for muffles, to which I add one-eighth part only of pipe-clay, mixing them well together with water, ſo as to form a maſs of a pretty thick conſiſtence. The compoſition of the ſmaller implements, or muffle-bottoms for dial-plates, is made of the finer part of the Stourbridge-clay, with a ſmall proportion of pipe-clay. The whole proceſs of making muffles upon this improved plan, with figures of the implements invented and uſed by Mr. Turrell, may be ſeen in the xxvth volume of the Tranſ. of the Society of Arts; and Mr. T. received ten guineas for the communication.

MUF'FLER, *ſ.* A cover for the face.—Fortune is painted with a *muffler* before her eyes, to ſignify to you that fortune is blind. *Shakeſpeare's Hen. V.*—Mr. Hales has found out the beſt expedients for preventing immediate ſuffocation from tainted air, by breathing through *mufflers*, which imbibe theſe vapours. *Arbuthnot on Air.*—A part of a woman's dreſs, by which the face was partially, or almoſt wholly, covered; a kind of maſk.—There is no woman's gown big enough for him; otherwiſe he might put on a hat, a *muffler*, and a handkerchief, and ſo eſcape. *Shakeſpeare's M. Wives of Windſor.*—The goddeſs Angerona was with a *muffler* upon her mouth placed upon the altar of Volupia, to repreſent, that thoſe perſons who bear their ſickneſſes and ſorrows without murmur, ſhall certainly paſs from ſorrow to pleaſure. *Bp. Taylor's Holy Dying.*—The Lord will take away your tinkling ornaments, chains, bracelets, and *mufflers*. *Iſa.* iii. 19.

MUF'TI, *ſ.* [a Turkiſh word.] The high prieſt of the Mahometans.—The Indians have their brachmans, the Turks their *muftis*. *Featley's Dippers Dipt.*

I tell thee, *mufti*,
Good feaſting is devout; and thou, our head,
Haſt a religious ruddy countenance. *Dryden.*

The authority of the mufti is very great in the Ottoman empire; for even the ſultan himſelf, if he would preſerve any appearance of religion, cannot, without hearing his opinion, put any perſon to death, or ſo much as inflict any corporal puniſhment. Such outward honour is paid to the mufti, that the grand ſignior himſelf riſes up to him, and advances ſeven ſteps to meet him when he comes into his preſence. He alone has the honour of kiſſing the ſultan's left ſhoulder, whilſt the prime vizier kiſſes only the hem of his garment. When the grand ſignior addreſſes any writing to the mufti, he gives him the following titles: "To the ESAD, the Wiſeſt of the Wiſe, Inſtructed in all Knowledge, the Moſt Excellent of Excellents, abſtaining from things unlawful, the Spring of Virtue and of True Science, Heir of the Prophetic Doctrines, Reſolver of the Problems of Faith, Revealer of the Orthodox Articles, Key of the Treaſures of Truth, the Light to the doubtful Allegories, ſtrengthened with the Grace of the ſupreme Legiſlator of Mankind. May the Moſt High God perpetuate thy virtues!"

The mufti is the ſovereign interpreter of the Alcoran; and decides all queſtions of the law: his deciſions are called *fetfas*. The ſultan has recourſe to him in all difficult and intricate caſes; and he promulgates no law, makes no declaration of war, nor eſtabliſhes any impoſt, without having obtained a *fetfa*. The mufti takes place of the baſhaws; and his authority is often terrible to the grand ſignior himſelf. It is he who girds on the ſword to the grand ſignior's ſide on his acceſſion to the throne, which ceremony anſwers to the coronation of our kings; reminding him at the ſame time of the obligation of defending the religion of the prophet, and of propagating his creed. This eminent office might ſerve, without doubt, as a counterpoiſe to the almoſt abſolute and unlimited authority of the ſovereign: it might even frequently paralyſe it, if the ſultan had not the power of appointing the mufti, of depoſing him, of baniſhing him, and even of putting him to death after having depoſed him; and, indeed, it ſeldom happens that a mufti oppoſes the will of the ſultan and his miniſters. His *fetfas* are forced from him by the wiſh of preſerving his place, and by the fear of death; nevertheleſs, more than once, religious zeal and probity have induced ſome to preſent themſelves to the ſultan, and to make to him obſervations and remonſtrances: ſome even, more fanatic and more courageous, braving every danger, have refuſed to condeſcend to his wiſhes. Hiſtory affords various examples of ſultans and vizirs killed or depoſed through the great influence of the muftis on public opinion: but it likewiſe preſents more muftis who have been victims of their zeal for religion, and of their attachment to the intereſts of the people. In public ceremonies, the mufti and the grand vizir are in the ſame line; the grand vizir on the right, and the mufti on the left. When the latter is diſgraced, he is not permitted to remain in the capital. The ſultan fears the influence of a man whom the people are accuſtomed to regard as the oracle of religion. He is baniſhed to ſome iſland of the Archipelago, or to ſome houſe ſituated on the Boſphorus, with a prohibition to ſtir out of it, to receive any of the principal officers of the empire, or to correſpond with them. But we may obſerve, that no great officer in the Turkiſh empire is fated long to ſurvive his diſgrace or depoſition.

MUG, *ſ.* [Skinner derives it from *mwygl*, Welſh, warm; implying that our cup is a *mug* for warming drink. The word is of no great age in our language; and is not enumerated among the many quaint appellations of pots and glaſſes which are to be found in Heywood's Drunkard Opened, 1635. It is a word coined perhaps in ſport. In Young's Deſcription of Drunkenneſſe, 1617, it is ſaid, "I have ſeen a company amongſt the very woods and forreſts drinking for a *muggle*. Sixe determined to trye their ſtrengths who could drink moſt glaſſes for the *muggle*. The firſt drinks a glaſſe of a pint, the ſecond two, the next three, and ſo every one multiplieth till the laſt taketh ſix." What this *muggle* means I know not; and therefore am unable to pronounce *mug* as connected with it. *Todd.*] A cup to drink in:

Ah Bowzybee, why didſt thou ſtay ſo long?
The *mugs* were large, the drink was wond'rous ſtrong. *Gay.*

MUG'-HOUSE, *ſ.* An ale-houſe; a low houſe of entertainment.—He has the confidence to ſay, that there is a *mug-houſe* near Long-Acre, where you may every evening hear an exact account of diſtreſſes of this kind. *Tatler.*

MUG'-HOUSE, *adj.* Frequenting or appertaining to an ale-houſe:

Our ſex has dar'd the *mug-houſe* chiefs to meet,
And purchas'd fame in many a well-fought ſtreet. *Tickell.*

MUG'-WORT, *ſ.* [muᵹƿẏꞃꞇ, Sax. See Artemisia.]—The flowers and fruit of the *mug-wort* are very like thoſe of the wormwood, but grow erect upon the branches. *Miller.*—Some of the moſt common ſimples with us in England are comfry, bugle, betony, and *mug-wort.* *Wiſeman.*

MU'GA, a town of Spain, in the province of Catalonia: twenty-one miles north of Gerona.

MUGALNOO'R, a town of Hindooſtan, in Coimbetore: nine miles eaſt of Daraporum.

MUGAR'DOS, a town of Spain, in Galicia: ſeven miles north of Betanços.

MUGDOOMPOU'R, a town of Hindooſtan, in Bahar: thirty miles north-eaſt of Monghir.

MUGDUMPOU'R, a town of Bengal: twenty-two miles north of Boglipour.

MUGDUMPOU'R, a town of Hindooſtan, in Bahar: thirty-ſeven miles ſouth-ſouth-weſt of Patna.

MU'GELN (New), a town of Saxony, in the circle of Leipſic: twenty-five miles eaſt of Leipſic, and fifteen weſt-north-weſt of Meiſſen. Lat. 51. 15. N. lon. 12. 57. E.

MU'GELN (Old), a town of Saxony: two miles north-weſt of New Mugeln.

MUGE'RES ISLANDS, called alſo *Men-eaters* or *Women-eaters Iſlands*, are iſlands ſituated in the bay of Honduras; ten leagues ſouth of Cape Catoche, on the eaſt coaſt of the peninſula of Yutucan. On one of them to the ſouth, towards the land, is good anchorage in a depth from ſeven to ten fathoms, and clear ground.

MUG'GARD, *adj.* Sullen; diſpleaſed. Exmore dialect. *Groſe.* Probably a corruption of *mugger*, as uſed in hugger-mugger; from *morcker*, Dan. darkneſs.

MUG'GETS, *ſ.* A part of the entrails of a ſheep, or beaſt of the foreſt. *Aſh.*

MUG'GIA. See Muglia.

MUG'GISH. See Muggy.

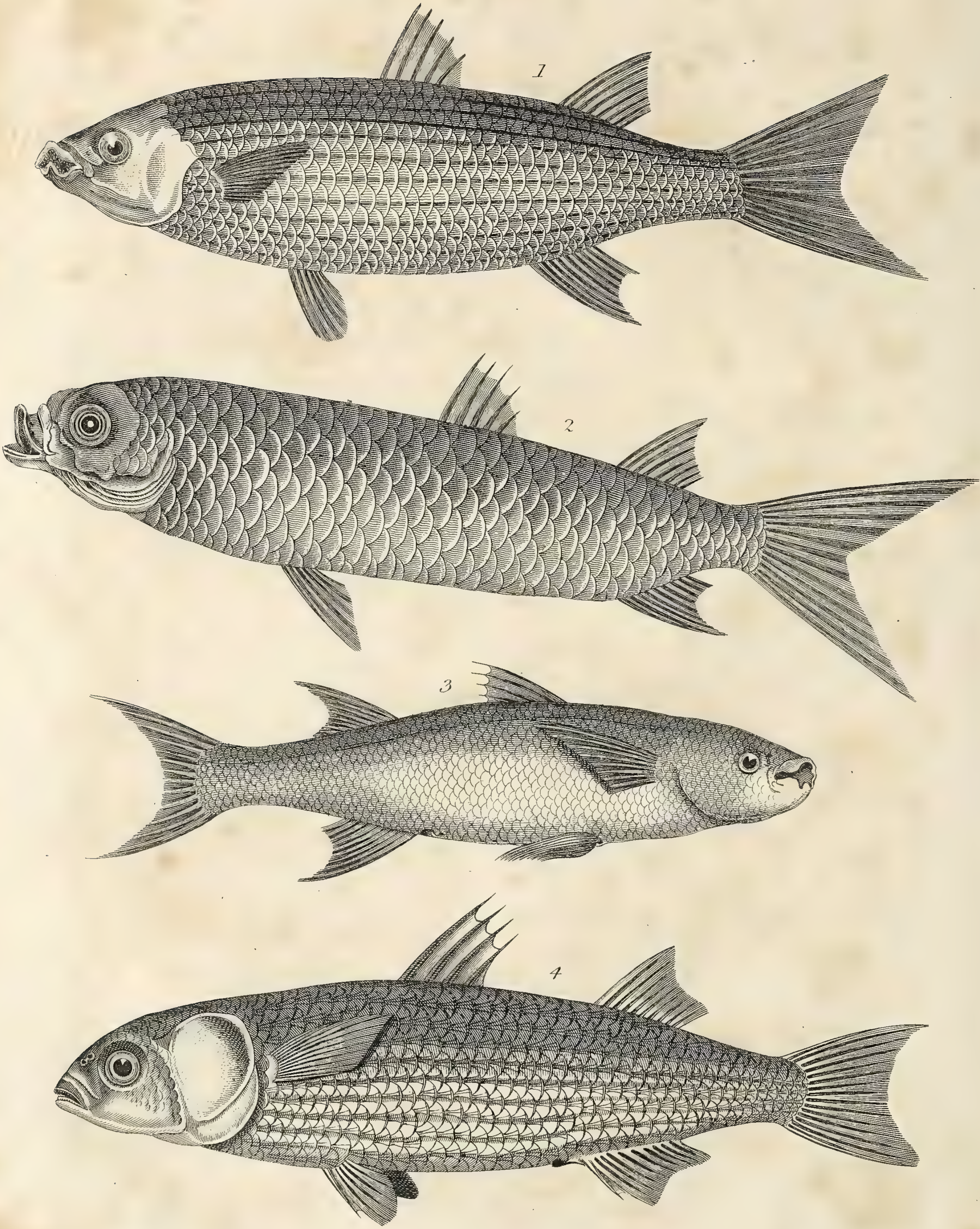
MUG'GLETON (Ludowick), the founder of an Engliſh enthuſiaſtical ſect in the ſeventeenth century, was born in the year 1607. He was bred to the trade of a tailor; and ſeems to have perſuaded himſelf, as well as a number of ignorant followers, that he was divinely inſpired to foretel future events, that he was entruſted with the keys of heaven and of hell, and that none could obtain admittance into heaven unleſs he opened the gates. He maintained that he and one John Reeves were the two witneſſes ſpoken of in Rev. xi. 3; and, though the latter died ſoon afterwards, he ſtill retained his pretenſions to a prophetic character. In a paper which he publiſhed about the year 1650, he aſſerted "that he was the chief judge in the world, in paſſing ſentence of eternal death and damnation upon the ſouls and bodies of men; that, in obedience to his commiſſion, he had already curſed and damned many hundreds to all eternity: that, in doing this, he went by as certain a rule as the judges of the land do when they paſs ſentence according to law; and that no infinite ſpirit of Chriſt, nor any God, could or ſhould be able to deliver from his ſentence and curſe." This paper produced a remonſtrance from the preſs, by Richard Farnſworth, a zealous miniſter among the quakers, on the profaneneſs and criminality of his extravagant claims; but it had no other effect than that of provoking a paper in reply from Muggleton, in which he inſiſted, "that he was as true an ambaſſador of God, and judge of all men's ſpiritual eſtate, as any ever was ſince the creation of the world." He is alſo ſaid to have regarded himſelf as above ordinances of every kind, not excepting prayer and preaching; to have rejected creeds and all church-diſcipline and authority; and to have acknowledged but one perſon in the godhead. At length the magiſtrates took cognizance of his conduct and pretenſions; and he was ſentenced to the pillory and ſix months impriſonment, while his writings were burnt by the common hangman. He died in 1697–8, at the age of ninety. *Sewell's Hiſt. of the Quakers,* vol. ii. *Neal's Hiſt. Purit.* vol. iv.

MUGGLETO'NIAN, *ſ.* One of the ſect of enthuſiaſts juſt mentioned.—The Seekers, a ſect in thoſe times, renounced all ordinances; and ſo did the ſect of the *Muggletonians. Grey's Notes on Hudibras.*

MUG'GUR, a town of Hindooſtan, in Oude: fifteen miles weſt of Gooracpour. Lat. 26. 44. N. lon. 83. 24. E.

MUG'GY, or Muggish, *adj.* [corrupted from *mucky*, for *damp*.] Moiſt; damp; mouldy.—Cover with *muggy* ſtraw to keep it moiſt. *Mortimer.*—Thick; cloſe; miſty: [from *murky*, which ſee.]

MUGIL.



J. Pass sc.

1. The Common Mullet. 2. Bahama Mullet. 3. Notch-lipped Mullet. 4. Tang Mullet.

Engraved for the Encyclopædia Londinensis 1813.

MU'GIA, a town of South America, in the province of Popayan: thirty-ſix miles from Santa Fé de Antioquia.

MU'GIENT, *adj.* [*mugiens*, Lat.] Bellowing.—That a bittern maketh that *mugient* noiſe or bumping, by putting its bill into a reed, or by putting the ſame in water or mud, and after a while retaining the air, but ſuddenly excluding it again, is not eaſily made out. *Brown.*

MU'GIL, *ſ.* [Lat. à muco, piſcis ſuo muco victitans. *Ariſtotle.*] The MULLET; a genus of abdominal fiſhes, of which there are ten ſpecies, only one of which is found in our ſeas.—In common conſtruction, *mugil* is rendered a mullet, which, notwithſtanding, is a different fiſh from the *mugil* deſcribed by authors. *Sir T. Brown's Miſcell.*—It is thought wonderful among the ſeamen, that *mugil*, of all fiſhes the ſwifteſt, is found in the belly of the bret, of all the ſloweſt. *Lily's Campaſpe.*

Generic characters—Lips membranaceous, the lower one carinate inwards; it has no teeth viſible to the naked eye; above the angle of the mouth there is a hard callus; gill-membrane with ſeven curved rays; the covert ſmooth, and rounded; the body is fleſhy, and whitiſh; the ſcales large; the dorſal fins two, and the rays of the firſt are ſpiny. As theſe fiſh are found in all ſeas in the four quarters of the globe, it is probable they were known to the ancient writers; but it is as difficult to ſay how many ſpecies they were acquainted with as it is to determine whether the various kinds deſcribed by later writers be really diſtinct ſpecies or not. Rondeletius has four ſpecies, Jovius ſeven, and Salvianus nine.

1. Mugil cephalus, the common mullet. Black lines in a parallel direction, from head to tail, and 5 rays in the firſt dorſal fin, form the ſpecific character. There are 6 rays in the membrane of the gills, 17 in the pectoral fins, $\frac{1}{6}$ (i. e. one ſpinous and ſix ſoft rays) in the ventrals, $\frac{3}{12}$ in the anal, 16 in the tail, and 9 in the ſecond dorſal. The head is broad at the top, laterally compreſſed, and covered with ſcales. The ſcales are large, eſpecially on the body, and one of the black lines runs along each row of them. The mouth is ſmall; the jaws of equal length, and furniſhed with very ſmall teeth; Pennant and many others deny it to have any teeth; in the middle of the lower jaw there is a kind of wedge, which is received into a cavity in the upper; the lips are fleſhy, the tongue is rough, and there are two rough bones in the throat. The lip-bones are narrow, and terminate in inverted points; theſe were miſtaken by Linnæus and Duhamel for teeth, becauſe in general the lip-bones are broad in this place; and it is plain that theſe authors could only have examined a dried ſpecimen, becauſe this peculiarity is not viſible in a fiſh recently taken. The cranium ends ſerrated, as in the gurnard. This alſo has been miſtaken by ſeveral writers: Gronovius deſcribes it as a ſeparate plate; Duhamel as a diſtinct ſerrated bone; but Pliny very abſurdly relates, that the fiſh, when threatened with danger, runs its head into the mud, and that this bone ſerves as an anchor to ſecure it. The gills have a wide aperture; the membrane is at liberty, and in the inner part of the front operculum there is a half-gill. The anus is much nearer the tail than the head. The back, which is of a dirty green colour, is ſlightly incurvated; while the belly projects more conſiderably, and is of a pure white; the fins are blue.

This ſpecies is found in all parts of the world; it has been lately found at Tranquebar, where it grows about four inches long. It paſſes occaſionally from the ſea into rivers; they are ſeen in ſandy ſhoals and bays, into which there is an inlet of freſh water: in ſuch ſituations, they are found all round the ſhores of Great Britain, where they leave the ſand marked with round holes, the traces of their digging, for they keep conſtantly rooting like hogs among the mud. When ſurrounded by a net, the whole ſhoal frequently eſcapes by leaping over it; one attempting this mode of eſcape, and ſucceeding, is immediately followed by all the reſt. But man will ever be too artful for the moſt cunning of animals; a net has been invented by the fiſhermen of Bauſigues, in France, by means of which the fiſhes leap to their deſtruction: over the common net is attached another, which is ſtretched out in the ſhape of a fruit-baſket; in this the fiſh are ſure to be caught, if they leap out of the lower one; Duhamel has a long deſcription of it in his *Trait. de Pech.* iii. 145. In May, June, and July, theſe fiſh come into the rivers, and, like the ſalmon, they go high up towards their ſource. At the mouth of the Loire there are two kinds, the one much darker in colour than the other; the dark-coloured remain always in the ſea, the others are what come into the rivers. As it is well known that ſome fiſh never aſcend to the rivers except to propagate their kind, it were well worth while to enquire, whether thoſe which remain in the ſea form ſeparate ſpecies, or whether they are ſuch as are not ripe for propagation, or paſt it. Freſh water agrees extremely well with the mullet; the freſh-water mullet is even preferable, becauſe fatter: it might be bred in lakes and ponds with a ſandy bottom. The mullets are in great plenty in the Mediterranean, and along the ſouthern coaſts of France. In a certain lake near Martegues, in the ſouth of France, there are vaſt ſhoals which enter there during ſpring, the ſeaſon of copulation among theſe fiſhes; after impregnation they return to the ſea, but are intercepted by weres of reeds. The food of the mullet is mud, or ſea-weed; it never attempts to devour any fiſh. Its fleſh is palatable, though at preſent not a faſhionable diſh; its flavour greatly depends on the ground where it is fed; if among mud, it conſtantly taſtes and ſmells of that kind of food.

Of the milts and roes of the mullet, the famous *botargo* of the Italians, a kind of caviare, is made up. The materials are taken out entire, and for a few hours covered up with ſalt; afterwards they are preſſed between two boards, dried in the ſun for about a fortnight, when they are fit for uſe.

At Athens, and afterwards at Rome, when an unfortunate gallant was caught in the company of his miſtreſs, the mullet is ſaid to have been employed by the enraged huſband as an inſtrument of a ſhocking puniſhment. Juvenal and Horace both allude to it in mentioning the various modes of revenge which rage dictated to the injured ſpouſe:

——— Necat hic ferro, ſecat ille cruentis
Verberibus; quoſdam mæchos et mugilis intrat. *Juv. Sat.* x.

2. Mugil albula, the Bahama mullet: no ſtripes on the body; 4 rays in the firſt dorſal fin. In the ſecond dorſal fin 9 rays, in the pectorals 17, ventrals $\frac{1}{6}$, anal $\frac{3}{11}$, tail 20. This has been deſcribed and figured by Cateſby of the natural ſize; whence it appears to be about thirteen inches by three. It has been ſaid to reſemble the preceding, and indeed to be only a variety of it: Bloch ſuppoſes it to be the ſame. But the accompanying figure will ſhow a ſufficient ſpecific difference: the mouth is abſolutely without teeth; the ſtrong black lines running through each row of ſcales is wanting; and the firſt dorſal fin has but 4 ſpinous rays. The eye is large and bright; the ſcales large and ſhining. Inhabits the Bahama iſlands; and is good food.

3. Mugil crenabilis, the notch-lipped mullet: 4 flexible pointed rays in the firſt dorſal fin, rays of the ſecond unarmed; lips crenate, and lower doubly carinate. In the pectoral fins 17 rays, ventrals $\frac{1}{6}$, anal $\frac{3}{11}$, tail 16, which is lunate, with pointed lobes; ſecond dorſal, according to Cepede, 9 rays. This inhabits the ſea of Arabia, commonly called the Red Sea, and alſo the great ocean; a foot long; ſcales broad, with a longitudinal brown keel in the middle; looſe ſcales on the top of the head. The lateral line is very evident in this ſpecies, and a little raiſed. The upper lip very flexible. The fins in general clouded with green, blue, and white; a black ſpot at the baſe of the pectorals. There are three varieties.

β. M. ſcheli, with 16 rays in the pectoral fins, and 14 in the tail. This is ſmaller, and the lips are not crenate.

γ. M. öur, with barbles from the lips, and the lower one only ſingly-carinate.

δ. M. tade, with the upper lip very finely ciliate, the lower ſingly-carinate.

4. Mugil tang, the tang-mullet: firſt dorſal fin 4-rayed, no ſcales on the opercula, narrow yellow ſtripes longitudinally. The membrane of the gills has 6 rays, the pectoral fins 12, the ventrals 6, the anal $\frac{1}{11}$, the tail 16, the firſt dorſal 4, the ſecond 9. The head is narrow, with a declining roſtrum; the mouth and bony covering of the head are formed as in the preceding. The noſtrils are double; the pupil of the eye is black, the iris white and yellow. The membrane of the gills is concealed; the aperture wide. A yellow line runs along each row of ſcales. The back is brown, the ſides white, the fins yellowiſh-brown. This ſpecies is from Acara on the Guinea-coaſt; it is fat and well taſted; the natives call it *tang*, which name has been preſerved.

β. M. Tranquebar. This variety differs in the following particulars: the head is ſmaller, the eyes more vertical, the noſtrils farther aſunder, the lip-bones narrower, and the yellow lines narrower; the opercula are not ſo large, and are furniſhed with ſcales; the anal fin has 12 rays. It is ſeldom more than a foot in length, neither is it by any means plentiful; it is good food. Inhabits Tranquebar. Cepede makes it a diſtinct ſpecies.

The above four ſpecies are diſtinguiſhed by their correſponding numbers on the annexed Engraving.

5. Mugil Plumieri, the yellow mullet: firſt dorſal fin 4-rayed; mouth wide; no ſcales on the opercula; no longitudinal ſtripes. There are 12 rays in the pectoral fins, 7 in the ventrals, 10 in the anal, 9 in the tail, 4 in the firſt dorſal, 6 in the ſecond. The head is flat, and ſcaly as far as the opercula; the jaws are of equal length, the teeth ſmall. The pupil of the eye is black, the iris orange-colour. The gills have a wide aperture, and the membrane is only in part concealed. The trunk is thick, fleſhy, and ſcaly; the rays of the dorſal fins are ſingle, of the reſt they are ramified. The principal colour of this fiſh is yellow. Plumier found it in the rivers of the Iſle of St. Vincent; he ſays it is fat and good eating. It is called by the natives *atoubri*, but the French who live there call it the *golden mullet*.

6. Mugil cæruleo-maculatus, the blue-ſpot mullet: 4 rays in the firſt dorſal fin, colour blue and brown, with a blue ſpot at the baſe of each pectoral fin; no longitudinal ſtripes: 5 rays in the membrane of the gills, 9 in the ſecond dorſal fin, 10 in the anal, 16 in each pectoral. Commerſon left a deſcription of this fiſh in his manuſcripts. The ſides are browniſh-blue, the belly as white as ſilver; the dorſal and tail-fins are brown. Native of the Indian ſeas; ſize of the common mullet.

7. Mugil Chilenſis, the Chilian mullet: only one dorſal fin, (whence it is made a diſtinct genus, Mugiloides, by Cepede;) tail entire: 7 rays in the membrane of the gills, $\frac{1}{9}$ in the dorſal fin, 12 in the pectorals, $\frac{1}{6}$ in the ventrals, $\frac{3}{10}$ in the anal, and 16 in the tail. Inhabits the ſea round Chili, and the rivers which empty themſelves into it; about a foot long; in ſhape and ſcales it reſembles M. cephalus.

8. Mugil chanos, the winged mullet: dorſal fin ſingle; tail forked, and furniſhed, towards the middle, with two membranaceous wing-like appendages on each ſide: 4 rays in the membrane of the gills, 14 in the dorſal fin, 16 in the pectorals, 11 in the ventrals, 9 in the anal, 20 in the tail. This, on account of the curious particularity of wings on the tail, is made a ſeparate genus by Cepede, though he notices but one wing on each ſide of the tail. It inhabits the Red Sea, and grows a yard long. Body oblong, ſilvery, with ſoft cirri, but without teeth; ſcales broad, rounded, finely ſtriate. Head narrower than the body; crown flat, glaucous, naked; upper lip longer, notched in the middle; lateral line recurved near the head and afterwards ſtraight, near the back.

β. M. anged, is a variety, which grows ſix feet long. Both were diſcovered by Forſkal.

9. Mugil Malabaricus, the Indian mullet: colour grey, with large ciliated ſcales, and the firſt dorſal and anal fin falcated. It is about two feet long; head ſmall; nape ſinking in a little before the riſe of the back; ſcales large and ciliated, both on the body and gill-coverts; thoſe on the head ſomewhat ſmaller. It is a native of the Indian ſeas. This is added from *Ruſſell's Piſc. Ind.* Pl. 182.

10. Mugil appendiculatus, the Carolina mullet: 34 rays in the membrane of the gills; one dorſal fin 20 of rays, with an appendage to each ray; ſmall protuberances in the mouth, but no teeth: 15 rays in the anal fin, 18 in the pectorals, 15 in the ventrals, 10 in the tail, which is forked. This was communicated to Cepede by citizen Boſc, commercial agent from the French republic to that of America. Cepede has made it a diſtinct genus, and dedicated it to his wife; calling it Mugilomorus Annà Carolina. It inhabits the ſea about Carolina, and is reckoned good food. It is of a ſilvery colour, with a caſt of azure on the back. Length two feet, height four inches, thickneſs two inches and a half; a beautiful fiſh, and of elegant proportions. Head long, compreſſed and flat; a broad longitudinal furrow between the eyes; mouth large, tongue thick, bony, and ſmooth; the eyes are very large, irides golden. All the fins are furniſhed with an adipous membrane, even in the dorſal and anal, uneven in the pectorals and ventrals; the rays of the gill-membrane are equal. *Cepede's Hiſt. des Poiſſons*, tom. v.

MUGI'TUS, *ſ.* [Latin.] The lowing of cattle; an inarticulate ſound of the voice. *Aſh.*

MUGKOV'SKOI, a town Ruſſia, on the river Mezen: 190 miles eaſt of Archangel.

MUGLATO'RE, a town of Hindooſtan, in the circar of Rajamundry: thirty-five miles eaſt-ſouth-eaſt of Rajamundry.

MUGLE'E, a fort of Hindooſtan, in a paſs of the Eaſtern Gauts, between the Carnatic and the Myſore: twelve miles weſt of Chittore, thirty-two miles north-weſt of Arcot.

MU'GLIA, or Mug'gia Nuo'va, a town of Iſtria, with a harbour for barges, on the Gulf of Trieſte: two miles north of Capo d'Iſtria. It contains a cathedral, five monaſteries, and an hoſpital. An annual free fair is holden here in the month of November.

MU'GLIA VEC'CHIA, a town of Iſtria: two miles eaſt of Muglia Nuova. It ſtands on a mountain; and was formerly called *Monticula.*

MUGLIA'NO, a town of Etruria: twenty-four miles north-weſt of Sienna.

MU'GLITZ, or Mohel'nitze, a town of Moravia, in the circle of Olmutz: fifteen miles north-north-weſt of Olmutz, and 104 eaſt of Prague. Lat. 49. 49. N. lon. 16. 46. E.

MUGO'RA, a town of Arabia: thirty-five miles north-north-eaſt of Ghezan.

MU'GRA, a town of Africa, in the kingdom of Algiers: eighty miles ſouth of Algiers.

MU'GRON, a town of France, in the department of the Landes: ſix miles ſouth of Tartas, and ſix weſt of St. Séver.

MUGROO'R, a town of Hindooſtan, in Berar: thirty miles north-weſt of Notchegong.

MU'GUL, a town of Nubia: fifty miles ſouth of Sennaar.

MUG'WET, *ſ.* A hunting term; the membrane that incloſes the red fawn in the hind's belly. *Cole.*

MUHAM'MED, or Moham'med. See Mahomet, vol. xiv.

MU'HES, a town of Sweden, in Eaſt Bothnia, on the Ulea: twenty miles ſouth-eaſt of Ulea.

MUH'KA, a town of Bengal: thirteen miles weſt of Toree.

MUHL, or Mihl, a quarter, or diviſion, of the archduchy of Auſtria.

MUHL GRO'S, a river of Auſtria, which runs into the Danube twelve miles above Lintz.

MUHL KLEI'N, a river of Auſtria, which runs into the Danube ſixteen miles above Lintz.

MUHLAU'. See Mylau.

MUHL'BACH, a river of Saxony, which runs into the Elbe one mile ſouth-eaſt of Belgern.

MUHL'BACH, a river of Germany, which runs into the Neckar two miles north of Sultz.

MUHL'BACH, a river of Germany, which runs into the Lahn near Naſſau.

MUHL'BACH, a river of France, which runs into the Rhine two miles north of Worms.

MUHL'BERG, a town of Germany, in the territory of Erfurt: twelve miles ſouth-weſt of Erfurt.

MUHL'BERG, a town of Saxony, in the margravate of Meiſſen, ſituated on the Elbe: it contains five churches, a caſtle, and a college: nineteen miles north-weſt of Meiſſen, and thirty-two north-weſt of Dreſden. Lat. 51. 25. N. lon. 13. 15. E.

MUHL'BOCK, a town of Sileſia, in the principality of Glogau: four miles ſouth-weſt of Schwibuſin.

MUHL'BURG, a town of the grand duchy of Baden: ſix miles weſt of Durlach.

MUHL'DENSTEIN, a town of Saxony: three miles north of Bitterfeld.

MUHL'DORF, or Mi'elesdore, a town of Saxony, in the Vogtland: eight miles weſt-north-weſt of Plauen, and ſeventy-four weſt-ſouth-weſt of Dreſden. Lat. 50. 27. N. lon. 12. E.

MUHL'DORF, a town of Germany, in the principality of Culmbach: five miles ſouth-ſouth-weſt of Hof.

MU'HLENBACH, a river of Germany, which runs into the Aller eight miles weſt of Zell.

MU'HLENBERG, a county of Kentucky, forty-eight miles long, and thirty-one broad; watered by the Green and Muddy rivers.

MUHLENBER'GIA, *ſ.* [ſo named by Schreber, in honour of the Rev. *Henry Muhlenberg, D. D.* of Lancaſter, in Pennſylvania, who diſcovered the genus in queſtion, and who alſo greatly enriched the Species Muſcorum of Hedwig by his communications. This gentleman is the author of a treatiſe on North-American Willows, in Sims and Konig's Annals of Botany. His name occurs frequently as the contributor and deſcriber of new plants, in Willdenow's Species Plantarum.] In botany, a genus of the claſs triandria, order digynia, natural order gramina, or graſſes. Generic characters—Calyx: glume of one valve, minute, lateral, emarginate. Corolla: of two nearly-equal valves; the outermoſt lanceolate, long, acute, angular, awned, hairy at the baſe, embracing in its cavity the inner one, which is rather ſhorter and narrower, linear, ſharp-pointed; nectary of two ſmall, ovate, gibbous, obliquely-truncated, leaflets. Stamina: filaments three, capillary, ſhorter than the corolla; antheræ linear. Piſtillum: germen ſuperior, ovate; ſtyles two, capillary; ſtigmas feathery. Pericarpium: none, except the corolla, in which the ſeed is encloſed. Seed: ſolitary, oblong, pointed.—*Eſſential Character.* Calyx of one valve, lateral, minute; corolla of two valves. There are two ſpecies.

1. Muhlenbergia diffuſa, or ſpreading muhlenbergia: ſtem diffuſe, branched; leaves linear awl-ſhaped. Root perennial. Stems ſpreading, partly procumbent, much branched, leafy, ſlender, compreſſed, ſmooth, with frequent joints. Leaves ſolitary at every joint, ſlightly ſpreading, linear-lanceolate, or ſomewhat awl-ſhaped, an inch or two long, and a line broad, taper-pointed, flat, entire, minutely downy, very finely ſtriated, furniſhed with one or two lateral ribs at each ſide of the mid-rib; ſheaths about as long as the leaves, cloſe, ſtriated, ſmooth, the lower ones moſt compreſſed. Stipules ſmall, membranous, crowning the contracted orifice of the ſheath, accompanied by a tuft of fine ſhort hairs. Panicles terminal, erect, much branched, cloſe, three or four inches long, pale green; their ſtalks and branches triangular, finely downy. Flowers ſmall, reſembling thoſe of an Agroſtis at firſt ſight, each about half a line long without the awn, which is ſtraight, rough, and about twice the length of the flower. Glumes of the corolla with a few briſtles at the baſe, angular, and ſtrongly keeled; their keels rough. Antheræ dark purple. Native of Pennſylvania.

2. Muhlenbergia erecta, or upright broad-leaved Muhlenbergia: ſtem erect, ſimple; leaves broadly lanceolate, many-ribbed. Native of Pennſylvania; ſent by Dr. Muhlenberg with the foregoing, from which it differs widely in appearance and characters, though there is the ſtricteſt coincidence in the ſtructure and habit of the fructification. Root perennial, tufted, hard, and rather woody, its buds inveſted with imbricated, poliſhed, pale, ſtrongly-ribbed, ſcales. Stems two feet high, erect, ſlender, unbranched, leafy, angular, jointed, ſmooth, except a few denſe deflexed hairs under each joint. Leaves rather ſpreading, three or four inches long, and half an inch or more in breadth, flat, taper-pointed, rounded at the baſe, furniſhed with a mid-rib, and about four ſmaller ribs on each ſide of it, which laſt are finely hairy underneath; the intermediate ſtriæ of the leaf are ſtill more minutely rough or downy. Panicle ſtraight, erect, cloſe, of much fewer flowers than the firſt ſpecies, but thoſe are ten times as large, reſembling ſome Bromus or Feſtuca in habit. Their glumes are hairy at the baſe, ſtrongly fringed, and all the angles are rough. *Schreber Gen.* 44.

MU'HLENDONCK, My'lendonck, or Mil'lendonck, a town of France, in the department of the Roer: ſixteen miles north of Juliers.

MUHL'HAUSEN, a town of Pruſſia, in the province of Oberland: forty-ſix miles ſouth-weſt of Königſberg: and fourteen eaſt of Elbing. Lat. 54. 10. N. lon. 19. 40. E.

MUHL'HAUSEN, or Mulhausen, a city of Saxony, in Thuringia, on the Unſtrutt; free and imperial till 1802, when it was aſſigned to the king of Pruſſia, and by him ceded to the kingdom of Weſtphalia at the peace of Tilſit; but is reſtored to him by the treaty of Vienna, 1815. It is divided into Upper and Lower Town, and contains two Lutheran churches, and a Roman-catholic foundation of Auguſtine nuns. It is fifty miles ſouth of Goſlar, and twenty-four north-north-weſt of Erfurt. Lat. 51. 10. N. lon. 10. 32. E.

MUHL'HAUSEN, a town of France, in the department of the Upper Rhine, on the Ille: ſixteen miles north-weſt Bale, and twenty ſouth of Colmar. Lat. 47. 45. N. lon. 7. 25. E.

MUHL'HAUSEN, a town of Bavaria, in the principality of Aichſtatt: ſeven miles ſouth-eaſt of Aichſtatt.

MUHL'HAUSEN, a town of Bohemia, in the circle of Schlan, on the Muldau: ten miles north of Prague.

MUHL'HAUSEN, or Mileskow, a town of Bohemia, in the circle of Bechin: nine miles north-north-weſt of Bechin, and thirty-eight ſouth of Prague. Lat. 49. 38. N. lon. 14. 13. E.

MUHLRO'SE. See Mulrose.

MU'HOW, a town of Bohemia, in the circle of Leitmeritz: thirteen miles weſt of Leitmeritz.

MUHR, a town of Germany, in the margravate of Anſpach, on the Altmuhl: three miles north-north-weſt of Gunzenhauſen.

MUHR, or Murr, a river of Wurtemberg, which runs into the Neckar a little below Marpach.

MUHRAU'. See Muehrau.

MU'HRECK, a town of the duchy of Stiria, on the Muehr: twelve miles north of Pettau, and nine weſt of Rackeſburg.

MUJA'CO, a kingdom in the interior parts of Africa, ſituated to the north of Anziko, and about 450 miles from the ſea.

MUJAX'AR, or Muxacra, a ſeaport-town of Spain, in the province of Grenada, ſituated on a ſmall bay of the Mediterranean. This town is ſuppoſed to be the ancient *Murgis.* It is thirty-five miles north-eaſt of Almeria, and eighty eaſt of Grenada. Lat. 37. 5. N. lon. 2. 1. W.

MUID, *ſ.* A meaſure formerly in uſe among the French, for dry commodities: as corn, pulſe, ſalt, lime, coals, &c. The muid is no real veſſel uſed as a meaſure; but an eſtimation of ſeveral other meaſures, as the ſeptier, or ſetier, mine, minot, buſhel, &c. At Paris the muid of wheat, pulſe, and the like, is compoſed of 12 ſetiers, each ſetier making 2 mines, the mine 4 minots, the minot 3 buſhels, or boiſſeaux, the buſhel four quarts, or 16 litrons. The muid of oats is double that of wheat, containing 24 ſetiers. The boiſſeau is a cylinder 8 inches $2\frac{1}{2}$ lines in height, and 10 inches in diameter; its contents are, therefore, 644 French cubic inches, or 780 Engliſh: hence 11 ſetiers of Paris = 6 Engliſh quarters, and 11 boiſſeaux = 4 Engliſh buſhels.

Muid is alſo one of the nine caſks, or regular veſſels, uſed in France to put wine and other liquors in. The muid of wine, divided into 2 demi-muids, 4 quarter-muids, and 8 half-quarter-muids, contains 36 ſetiers, each ſetier 8 pintes, Paris meaſure; ſo that the muid contains 288 pintes, but only 280 pintes without the lees. The pinte contains 2 chopines, 4 demi-ſetiers, or 8 poiſſons, in all $47\frac{2}{7}$ French cubic inches, or $57\frac{1}{4}$ Engliſh; hence a French pinte is nearly equal to an Engliſh quart; and a muid of wine contains $71\frac{3}{8}$ Engliſh gallons.

MUIDE, a river of Germany, which runs into the Maine a little below Miltenberg.

MUIR, *ſ.* A term uſed in the northern parts of the kingdom to ſignify moor. It is the common term in Scotland.

MU'IRKIRK, a town of Scotland, in the county of Ayr: here are manufactures of iron and coal-tar: twenty miles eaſt of Ayr.

MU'IS (Simon de), a learned French hebraiſt and biblical critic, was a native of Orleans, where he was born in the year 1587. He became canon and archdeacon of Soiſſons; and in the year 1614, was nominated by Louis XIII. profeſſor-royal of the Hebrew language at Paris. He is conſidered to be one of the ableſt Hebrew ſcholars whom France has produced; and, beſides his profound ſkill in this language, poſſeſſed a ſolid judgment, an intimate knowledge of religion and ſacred hiſtory, and was maſter of a pure, neat, and eaſy, ſtyle. His Commentary on the Pſalms is allowed by the learned to be one of the beſt critical illuſtrations of that portion of the Bible which have been given to the world. He defended the authority of the Hebrew text againſt father Morin, in three treatiſes, in which he attempted to ſupport the credit of the Maſſora. He died in 1644, when about fifty-ſeven years of age; having publiſhed many very learned works, that do honour to his induſtry, talents, and erudition. After his death, in 1650, theſe various pieces were collected together, and publiſhed in a folio volume. *Le Long's Biblioth. Sacra.*

MUI'SENS, a town of France, in the department of the Two Nethes: two miles eaſt of Malines.

MUI'VA, *ſ.* in botany. See Melastoma.

MUKALE'RA, a fortreſs of Arabia, in Yemen: twenty-eight miles ſouth-eaſt of Taas.

MU'KAR, a town of Hindooſtan, in Bahar: thirty-three miles north-eaſt of Chuprah. Lat. 25. 57. N. lon. 85. 13. E.

MUKE. See Muck.

MU'LA, a town of Spain, in Murcia, celebrated for its baths: twenty miles weſt of Murcia.

MULAN'GER, a town of Hindooſtan, in Tollingana: thirty-two miles weſt of Warangole.

MULA'TAS, a cluſter of ſmall iſlands in the Spaniſh Main, near the iſthmus of Darien. Lat. 9. 20. to 9. 35. N. lon. 78. 5. to 78. 30. W.

MULA'TRE PO'INT, a cape of the iſland of Dominica, on the eaſt coaſt. Lat. 15. 25. N. lon. 61. 17. W.

MULAT'TO, *ſ.* [*mulata*, Span. *mulat*, Fr. from *mulus*, Lat.] One begot between a white and a black, as a mule between different ſpecies or animals.—*Mulattos* are not Ethiopians. *Young's Centaur.*

MULATTO PO'INT, the ſouth cape of the port of Ancon, on the weſt coaſt of South America: ſixteen or eighteen miles north of Cadavayllo River.

MULAZ'ZO, a town of Genoa: fifteen miles north of Spezza.

MUL'BACH, a town of France, in the department of the Upper Rhine: twelve miles ſouth-weſt of Colmar.

MUL'BERRY, or Mulberry-Tree, *ſ.* [moꞃbeꞃiᵹ, Sax. *morus*, Lat.] See Morus.—The *mulberry-tree* hath large, rough, roundiſh, leaves; the male flowers, or catkins, which have a calyx conſiſting of four leaves, are ſometimes produced upon ſeparate trees, at other times at remote diſtances from the fruit on the ſame tree: the fruit is compoſed of ſeveral protuberances, to each of which adhere four ſmall leaves; the ſeeds are roundiſh, growing ſingly in each protuberance; it is planted for the delicacy of the fruit. The white *mulberry* is commonly cultivated for its leaves to feed ſilkworms, in France and Italy, though the Perſians always make uſe of the common black *mulberry* for that purpoſe. *Miller.*—Morton, archbiſhop of Canterbury, was content to uſe *mor* upon a *tun*; and ſometimes a *mulberry-tree*, called morus in Latin, out of a tun. *Camden's Remains.*—The fruit of the tree.—A body black, round, with ſmall grain-like tubercles on the ſurface; not very unlike a *mulberry*. *Woodward on Foſſils.*

> The ripeſt *mulberry*,
> That will not hold the handling. *Shakeſpeare's Coriol.*

MUL'BERRY (Baſe). See Rubus.

MUL'BERRY-BLITE. See Blitum.

MUL'BERRY CI'DER, a name given by the people of Devonſhire, and ſome other parts of England, to a ſort of cider rendered very palatable by an admixture of mulberry-juice in the making. They chooſe for this purpoſe the ripeſt and blackeſt mulberries; and, preſſing out their juice, and mixing it with a full-bodied cider at the time of the grinding and preſſing, give juſt ſo much of it as adds a perceptible flavour. It is worthy the attention of people who live in other counties where ſtrong and good cider is made; for this renders it a ſort of wine much more agreeable than any other Engliſh liquor, and might be brought into general uſe, to the great advantage of the dealer. The colour of this liquor reſembles that of the brighteſt red wine, and the flavour of the mulberry never goes off. *Phil. Tranſ.* N° 133.

MULBERRY I'SLAND, a ſmall iſland in James River, Virginia. Lat. 37. 6. N. lon. 76. 32. W.

MULCH, *ſ.* [perhaps a corruption of *mull*.] Rotten or crumbled dung. See Mull.—If *mulch* be uſed, it ſhould be thoroughly rotten, and almoſt reduced to mould. *Adelphi Tranſactions*, xv. 158.

MUL'CIBER, a ſurname of Vulcan, (*a mulcendo ferrum*,) from his occupation. See Vulcan.

MUL'CIBLE, *adj.* [from *mulceo*, Lat. to appeaſe.] Capable of being appeaſed. *Bailey.*

MUL'COM, a town of Sweden, in Warmeland: thirteen miles north-eaſt of Carlſtadt.

MUL'CT, *ſ.* [*mulcta*, Lat.] A fine; a penalty; uſed commonly of pecuniary penalty.—Becauſe this is a great part, and Euſebius hath ſaid nothing, we will, by way of *mulct* or pain, lay it upon him. *Bacon.*

> Look humbly upward: ſee his will diſcloſe
> The forfeit firſt, and then the fine impoſe;
> A *mulct* thy poverty could never pay,
> Had not eternal wiſdom found the way. *Dryden.*

To MUL'CT, *v. a.* To puniſh with fine or forfeiture.—Marriage without conſent of parents they do not make void, but they *mulct* it in the inheritors; for the children of ſuch marriages are not admitted to inherit above a third part of their parents' inheritance. *Bacon's New Atlantis.*

MUL'CTUARY, *adj.* Puniſhing with fine or forfeiture.—He wiſhes fewer laws, ſo they were better obſerved; and for thoſe [that] are *mulctuary*, he underſtands their inſtitution

tion not to be like briers, and ſprings, to catch every thing they lay hold of; but like ſea-marks, to avoid the ſhipwreck of ignorant paſſengers. *Overbury's Charact.* 1627.

MUL'DA, a town of Saxony, in the circle of Erzgebirg: eight miles ſouth-ſouth-eaſt of Freyberg.

MUL'DA, or FREY'BERG MULDA, a river which riſes near Moldau, in Bohemia; paſſes by Freyberg, Noſſen, Rolzwein, Dobeln, &c. and joins the Moldau two miles north of Colditz.

MUL'DA, or WEI'SSE MULDA, a river of Saxony, which paſſes by Zwickau, Glaucau, Penig, Colditz, Wartzen, Eulenburg, &c. and runs into the Elbe near Deſſau.

MULDAU'. See MOLDAU.

MULDAU', or MOLDAU, a river which riſes near the mountains between Bohemia and Bavaria, to the ſouth-weſt of Prachatitz; paſſes by Budweiſs, Teyn, Prague, &c. and joins the Elbe a little above Melnik.

MUL'DENHAMMER, a town of Saxony, in the circle of Erzgebirg: ſix miles weſt of Schwarzenberg.

MUL'DONICK, or DEE'R I'SLAND, one of the ſmall weſtern iſlands of Scotland. Lat. 56. 53. N. lon. 7. 25. W.

MUL'DORF, a town of the archbiſhopric of Salzburg, on the Inn, ceded to Bavaria in 1802: thirty-ſix miles north-weſt of Salzburg, and forty eaſt of Munich. Lat. 48. 12. N. lon. 12. 27. E.

MULD'SCHEN, a town of Pruſſian Lithuania: ſixteen miles ſouth-weſt of Inſterburg.

MU'LE, ſ. [mul, Sax. *mule, mulet,* Fr. *mula,* Lat.] An animal generated between a he-aſs and a mare, or ſometimes between a horſe and a ſhe-aſs.—Thoſe effluvia in the male ſeed have the greateſt ſtroke in generation, as is demonſtrable in a *mule,* which doth more reſemble the parent, that is, the aſs, than the female. *Ray.*

You have among you many a purchas'd ſlave,
Which, like your aſſes, and your dogs, and *mules,*
You uſe in abject and in ſlaviſh part. *Shakeſpeare.*

Five hundred aſſes yearly took the horſe,
Producing *mules* of greater ſpeed and force. *Sandys.*

Buffon recommends to retain the name of *mule* to the animal produced by the jack-aſs and mare; and to that procreated between the horſe and ſhe-aſs, he gives the denomination of *bardeau.*

The former, or *mule* commonly ſo called, is much valued for the ſaddle and for drawing carriages in Spain, Portugal, Italy, and the Eaſt, and in the warmer parts of America. In theſe countries, where great attention is paid to the breed, it is as tall as the horſe, exceedingly well limbed, but not ſo handſome, eſpecially about the head and tail. The animal called the *bardeau* is much ſmaller, and leſs uſeful, as well as leſs common, than the mule, and of a more reddiſh colour: its ears and tail have a ſimilar reſemblance to thoſe of the horſe, but the mane is ſhort like that of the mule: it is, however, little known, being ſeldom cultivated deſignedly, becauſe it is leſs hardy and leſs fitted for the various purpoſes of life, than the horſe, the aſs, or the mule.

Buffon, with a view of diſtinguiſhing the relative influence of males and females in the product of generation, has cloſely inveſtigated the differences which ſubſiſt between the two animals above briefly characteriſed. The *bardeau,* he ſays, is much ſmaller than the *mule,* and ſeems to preſerve the dimenſions of its mother, the ſhe-aſs; and the *mule* retains the dimenſions of the mare. Hence, he concludes, that, in the mixed ſpecies, the ſize of the body appears to depend more upon the mother than the father. Theſe two animals alſo differ in figure. The neck of the bardeau is thinner, the back ſharper, and the crupper more pointed; while the forehead of the mule is better ſhaped, the neck more beautiful, the ſides rounder, and the crupper more plump. Hence both theſe animals retain more of the mother than of the father, not only in magnitude, but in figure of body. But this remark does not apply to the head, limbs, and tail. The head of the bardeau is longer, and not ſo thick in proportion as that of the aſs; and the head of the mule is ſhorter and thicker than that of the horſe: ſo that, in the figure and dimenſions of the head, they have a greater reſemblance to the father than to the mother. The tail of the bardeau is garniſhed with hair nearly in the ſame manner as that of the horſe; and the tail of the mule is almoſt naked, like that of the aſs. In this extreme part of the body, therefore, the ſimilarity to the father predominates. The ears of the mule are larger than thoſe of the horſe; and the ears of the bardeau are ſhorter than thoſe of the aſs. The limbs of the mule are hard and limber, like thoſe of the horſe; and the limbs of the bardeau are more fleſhy. Hence it appears, that theſe two animals, in the form of the head, limbs, and other extremities of the body, have a greater reſemblance to the father than to the mother. From various experiments on the he-goat and ewe, the dog and ſhe-wolf, and the goldfinch and canary-bird, our author infers, as a certain fact, that the number of males, which is always greater than that of females in pure ſpecies, is ſtill greater in mixed ſpecies: and hence he concludes, that the male, in general, has a greater influence in the produce of generation than the female, becauſe he tranſmits his ſex to the greateſt number, and becauſe the number of males is augmented in proportion to the remoteneſs of the ſpecies which intermix. He alſo obſerves, that, in croſſing the remoteſt of different races, we ſhall procure not only the moſt beautiful productions, but the greateſt number of males; and he adds, that croſſing the breed, both in man and in other animals, is the only mode of ennobling and preſerving the perfection of the ſpecies.

Mules have been much employed both in ancient and modern times. The Roman ladies had equipages drawn by mules, as appears from the medals of Julia and Agrippina. And at this day, in Spain, the coaches of the nobility, and even of princes, are uſually drawn by no other than mules. We are aſſured, that M. de Thou, firſt preſident of the parliament, had the fourth coach in France, in 1585, till which time every body rode to court, parliament, &c. on mules.

Theſe animals are very hardy. Savoy produces very large ones; but the fineſt are bred in Spain. Mules are chiefly uſed in countries where there are rocky and ſtony ways, as about the Alps and Pyrenées, &c. Great numbers of them are kept in theſe places: they are uſually black, and are ſtrong, well-limbed, and large, being moſtly bred out of fine Spaniſh mares. Theſe mules are ſometimes fifteen or ſixteen hands high, and the beſt of them are worth forty or fifty pounds apiece. No creatures are ſo proper for large burdens, and none ſo ſure-footed. They are ſtronger for draught than our horſes, and are often as thick-ſet as our dray-horſes, and will travel ſeveral months together, with ſix or eight hundred weight upon their backs. It is a wonder that theſe creatures are not more propagated in England, as they are ſo much hardier and ſtronger than horſes, and are leſs ſubject to diſeaſes, and will live and work to twice the age of a horſe.

Thoſe that are bred in cold countries are more hardy and fit for labour than thoſe bred in hot; and thoſe which are light made are fitter for riding than horſes, as to the walk and trot; but they are apt to gallop rough, though theſe do it much leſs than the ſhort-made ones. They take ſo much after the mare from which they are bred, that they may be procured of any kind, light or ſtrong, as the owner pleaſes. The general complaint we make againſt them is, that they kick, and are ſtubborn; but this is only owing to our neglect in the breeding of them, for they are as gentle as our horſes in countries where they are bred with more care.

Mules generated between the horſe and a ſhe-aſs are the leaſt valuable. They are commonly dull, and take after the aſs, and are not large; the other breed between an aſs and a mare is, therefore, what is propagated chiefly in all countries where mules are uſed. The he-aſs muſt be ſelected for this breed; and in Spain, where mules are greatly eſteemed, they will give fifty or ſixty pounds for a fine he-aſs, only to be kept as a ſtallion. They breed with this creature out of the fineſt and largeſt mares they have, giving the aſs an advantage of height of ground, and putting the mare into a narrow pit, railed on each ſide.

If the aſs deſigned to be bred on is ſuckled by a mare, or the mare ſuckled by an aſs, it makes them much more familiar than they would otherwiſe be; and this may always be done, by taking away the colt that belongs to the dam, and putting the other in its place, keeping them in the dark ten days or a fortnight. However, the ſucceſs in breeding of theſe, as well as moſt other animals, depends in a great degree upon the manner of keeping them while young. In reſpect to the ſhe-aſſes, they ſhould be well fed, and be kept in good order, both before they drop their foals, and afterwards while they ſuckle. And the foals, when weaned, ſhould be carefully fed, and defended from the cold in the winter ſeaſon; ſufficient exerciſe in the open air being allowed every day, when the weather is fine.

It is well known, that in the Weſt Indies much of the labour on the plantations is performed by theſe animals. And Mr. Carpenter remarks, that mules uſed in agriculture on light ſoils, and particularly in ſome ſituations, are very ſerviceable, though not very common in theſe parts. He knows but of two teams in which mules do all the work on the farms: the one belongs to Samuel Skey, eſq. of Spring Grove; the other Mr. Teverel's, near Worceſter, conſiſting of ſeven handſome mules, and bred by the former gentleman, who breeds and keeps a conſiderable number, many of them fifteen or ſixteen hands in height, and ſome of a milk-white colour. The moſt beautiful of the white mules Mr. Skey reſerves for drawing his carriage, for which he has been offered a very high price. They are bred from grey or white mares, and a white and ſpotted foreign aſs, which curious animal he has had poſſeſſion of many years. Mr. Carpenter has very lately ſeen Mr. Teverel's mules at work, and afterwards in the ſtable, where they are fed with good ſtraw; and he was aſſured that ſtraw was their only food, it being then winter. Their hardineſs is certainly a valuable property; as theſe mules, though kept to hard work, looked remarkably ſleek and well. Their longevity is alſo a very conſiderable advantage. Mr. Skey remarked, that two working mules in Shropſhire had arrived to the age of ſeventy years each; and he has been informed, by a perſon who has taken much notice of this breed, that, though they will perform a deal of work when only two or three years of age, they do not arrive to perfection till about thirty. But, when three years old, mules are proper for uſe, or being employed as ſtallions. And in the breeding of theſe animals, mares that are of a very large breed and well made ſhould be employed. They ſhould be young, full of life, large barrelled, but ſmall limbed, with a moderate-ſized head, and a good forehead. It is found of advantage to have the foals, from the time of their being dropped, often handled, to make them gentle: it prevents their hurting themſelves by ſkittiſhneſs and ſudden frights; and they are much eaſier broken at the proper age, and become docile and harmleſs, having nothing of that viciouſneſs which is ſo commonly complained of in theſe animals. They may be broken at three years old, but ſhould never be permitted to do much work till four; as they are thus ſecured from being hurt by hard labour, till they have acquired ſtrength enough to bear it without injury. It was found by an expert breeder of theſe animals, that by feeding them too well while young, though it made them very fat, it was far from being any advantage to them; as it was not only incurring a much larger expenſe than was any ways neceſſary, but alſo made them wonderfully nice and delicate in their appetites ever after, and alſo, by increaſing their weight of fleſh, rendered them more ſubject to ſtrains and hurts in their morning gambols. He therefore contented himſelf with giving them food enough to prevent their loſing fleſh, and to keep up their growth, without palling their appetites with delicacies, or making them over fat. He alſo took care to defend them from the injuries of the weather, by allowing them ſtable-room, and good litter to ſleep on, beſides cauſing them every day to be well rubbed down with a hard wiſp of ſtraw by an active groom. This was ſcarcely ever omitted, particularly in cold, raw, wet, weather, when they were leaſt inclined to exerciſe themſelves in a proper manner.

Mules have been reckoned a kind of monſters; and it has been generally thought that they do not propagate their breed. And yet the ancients mention a ſort of mules that were prolific in Phrygia, Syria, Cappadocia, and Africa. Witneſs Ariſtotle, Hiſt. Animal. lib. vi. cap. 36. Varro de Re Ruſtica, lib. ii. cap. 1. Columella, lib. vii. cap. 36. Theophraſtus, and, after him, Pliny, lib. viii. cap. 44. Steno, examining the teſticles of a mule, found *ova* therein, with a ſort of placenta about them; which perſuaded him, that mules might engender without any miracle. But the obſervation has been thought fanciful, and the concluſion ſeemed unworthy of ſo able a naturaliſt.

Ariſtotle (already cited) ſays, that the mule engenders with the mare, and that the junction produces an animal which the Greeks call *hinnus*, or *ginnus*. He alſo remarks, that the mule eaſily conceives, but ſeldom brings the fœtus to perfection. Of theſe two facts, ſays M. Buffon, the ſecond is more rare than the firſt; and both happen only in warm climates. In ſuch climates, however, facts juſtify the aſſertion, that the female is not only capable of conception, but of bringing the fœtus to full maturity. Such caſes occur in Spain and Italy, but much more frequently in the Weſt Indies. Upon the whole it muſt be admitted as an eſtabliſhed fact, that the he-mule can generate, and the ſhe-mule produce. Like other animals, they have a ſeminal liquor, and all the organs neceſſary to generation. But mongrel animals are always leſs fertile, tho' more hardy, than thoſe of a pure ſpecies. Beſides, mules have never produced in cold climates, ſeldom in warm regions, and ſtill more ſeldom in temperate countries. Hence their barrenneſs, without being abſolute, may be regarded as poſitive; ſince their productions are ſo rare, that few examples only can be collected.

M. de Bory, of the Royal Academy of Sciences, and formerly governor of the American iſlands, communicated to Buffon a fact of this kind, in a letter dated May 7, 1770, of which the following is an extract: "You will perhaps recollect, ſir, that M. d'Alembert read, laſt year, in the Academy of Sciences, a letter, which informed him, that a ſhe-mule in the iſland of St. Domingo had brought forth a foal. I was deſired to write for proper vouchers of the fact; and I have now the honour of ſending you the certificate which I received. My correſpondent is worthy of the higheſt credit. He adds, that he has ſeen mules cover, indiſcriminately, ſhe-mules and mares; and likewiſe ſhe-mules covered by ſtallions and he-mules." This certificate is judicially atteſted, and ſigned by witneſſes of unqueſtionable veracity. The ſubſtance of it is, that on the 14th of May, 1769, M. de Nort, knight of St. Louis, and late major of the Royal Legion of St. Domingo, had a ſhe-mule brought to him, which was ſaid to be ſick; that her belly was remarkably large, and a membrane protruded through the vagina. M. de Nort, believing the animal to be inflated, ſent for a negro farrier, who had been accuſtomed to take care of diſeaſed animals; that this negro, who arrived in the abſence of M. de Nort, had thrown down the mule, in order to give her a draught; that, the moment after the fall, ſhe brought forth a young mule, perfectly formed, and covered with long and very black hair; that the young mule lived an hour; but that, having been both hurt by the fall, the foal died ſoon after birth, and the mother ten hours after; and, in fine, that the young mule was ſkinned, and the ſkin ſent to Dr. Matty, who depoſited it in the Muſeum of the Royal Society in London. Other eye-witneſſes, and particularly M. Cazavant, ſurgeon, add, that the young mule ſeemed to have been mature, and well formed; that, from the appearance of its hair, head, and ears, it had a greater reſemblance to the aſs than common mules; that the paps of the mother were ſwelled, and full of milk; that, when the ignorant negro perceived the feet iſſuing from the vagina, he drew ſo forcibly as to invert the uterus, and lacerate the parts, which occaſioned the death of both mother and foal.

To the above facts we may add, from Mr. Smellie, an inſtance of the prolific powers of a ſhe-mule in the north of Scotland. Having heard that a mule, belonging to Mr. David Tullo, farmer in Auchtertyre, in the county of Forfar, had ſome years ago brought forth a foal, he tranſmitted a few queries to be put to Mr. Tullo; and requeſted that his anſwers might be legally atteſted before a magiſtrate. This requeſt was cheerfully complied with; and the following is an exact copy of the queries, anſwers, and atteſtations:

1. Had you ever a ſhe-mule? At what period? Is it true that the mule had a foal? At what time was ſhe covered; and when did ſhe foal?—Anſwered by Mr. Tullo: That he bought a ſhe-mule about twenty years ago: that ſhe was conſtantly in ſeaſon for a horſe; that ſome years thereafter he gave her a horſe; and that ſhe, thereafter, gave him a foal, about the 10th of June. The mule's price was four pounds five ſhillings ſterling.

2. What was the colour of the foal? Was there any thing particular in its figure?—Anſwer: The foal was exactly the colour of its mother, inclined to black, with a very large head, big ears, and ſmall tail; and, the declarent thinks, had its head been weighed when foaled, it would have weighed nearly as much as its body.

3. How long was the animal allowed to live?—Anſwer: The next day after the mule foaled, it was ſent with its mother, to the Loch of Lundie, in order to let the foal die, as the declarent could not want the mule's work, and the mother ſeemed not fond of the foal: that it was accordingly left; and next day came to Auchtertyre, about two miles diſtance, over a hill, with the cattle of Auchtertyre, that had been grazing near to that place, and was drowned in a ditch the day following.

4. Was its ſkin preſerved, or the head, or any other bones of the ſkeleton? Could any part thereof be ſtill found?—Anſwer: Neither the ſkin nor any part of the ſkeleton was preſerved, nor can now be had; though the declarent has often regretted the not preſerving the foal, as its mother always performed any work that a horſe of fifteen pounds value could do.

5. Is the mother ſtill alive? What is her age?—Anſwer: The mother died, about eight years ago, of an epidemic cold that was raging among the horſes in this country: the mule had little or no milk after foaling, and the foal got ſome cow's milk; and this is all that he remembers of the matter. David Tullo.—Signed and atteſted in the preſence of *J. Watſon*, J. P.

But the word *mule* is extended alſo to deſignate any animal, or even plant, produced by the mixture of two diſtinct. And this is a ſubject which very particularly engaged the attention of that ingenious naturaliſt, M. de Buffon.

In the years 1751 and 1752, (ſays he,) I made two he-goats copulate with ſeveral ewes; and I obtained nine mules, ſeven males and two females. Struck with this difference between the number of males and females, I endeavoured to diſcover whether the number of male mules, produced by the aſs and the mare, predominated in the ſame proportion. The information I received did not aſcertain this point; but I learned that the number of male mules always exceeded that of the females. The marquis de Spontin-Beaufort made a dog intermix with a ſhe-wolf, and produced four mules, three of which were males. In fine, having made inquiries concerning mules which were more eaſily obtained, I learned, that the number of males greatly exceeded that of the females. In canary-birds I remarked, that, of nine young produced between a goldfinch and a canary-bird, there were only three females. Theſe are the only certain facts I could obtain on this ſubject, which merits more attention than it has yet received; for the myſteries of generation by the concourſe of different ſpecies, and the aſcertaining of the proportional effective powers of males and females in every kind of reproduction, can alone be developed by an aſſemblage of ſimilar facts. What is related by different authors, concerning the jumars, appears to be very ſuſpicious. Léger, in his Hiſtory of the Vaudois, tells us, "That, in the valleys of Piedmont, there are mongrel animals, called *jumars;* that, when engendered by a bull and a mare, they are denominated *baf* or *buf*, and, when produced by a bull and a ſhe-aſs, they receive the appellation of *bif;* that theſe jumars have no horns, and are of the ſize of mules; that they are very ſwift; that he mounted one of them, and performed, in a ſingle day, a journey of eighteen leagues, or fifty-four Italian miles; and that they were ſurer and more eaſy than a horſe."

Of the nine mules produced by the he-goat and the ewes, the firſt was brought forth on the 15th day of April. When examined three days after birth, and compared with lambs of the ſame age, it differed from them in the following particulars: the ears, upper part of the head, as well as the diſtance between the eyes, were larger. It had beſides a band of whitiſh-grey hair from the nape of the neck to the extremity of the tail. The four legs, the ſuperior part of the neck, breaſt, and belly, were covered with the ſame white coarſe hair. There was a ſmall quantity of wool upon the flanks only; and even this ſhort curled wool was mixed with a great deal of hair. The legs of this mule were alſo an inch and a half longer than thoſe of a lamb of the ſame age. When examined eighteen days after birth, the white hairs were partly fallen off, and replaced by brown hairs, ſimilar in colour to thoſe in the he-goat, and nearly as coarſe. The limbs continued to be more than an inch and a half longer than thoſe of the lamb; and, on account of this length of limbs, it did not walk ſo well as the lamb. This lamb was killed by an accident; and I took no farther notice of the mule till four months afterwards, when I compared it with a ſheep of the ſame age. In the mule, from the ſpace between the eyes to the extremity of the muzzle, the diſtance was at leaſt an inch ſhorter than in the ſheep; and the head of the mule was more than half an inch broader at the broadeſt part. Hence the head of this mule was thicker and ſhorter than that of a ſheep of equal age. The curvature of the upper jaw, taken from the corner of the mouth, was near half an inch longer in the mule than in the ſheep. The head of the mule was not covered with wool, but with long buſhy hair. The tail was two inches ſhorter than that of the ſheep.

In the beginning of the year 1752, continues M. Buffon, I obtained, from the union of a he-goat with ewes, eight other mules; ſix of which were males, and two females. Two of them, a male and a female, had four teats, two on each ſide, like thoſe of the goats. In general, theſe mules had long hair on the belly, and particularly about the penis, as in the he-goat, and alſo on the feet, and particularly thoſe behind. Moſt of them had the chanfrin leſs arched than is common to lambs, the diſtance between the hoofs larger, and the tail ſhorter.

Ariſtotle remarks, that, "though animals of different ſpecies ſeldom intermix, yet it certainly happens among dogs, foxes, and wolves." The marquis de Spontin-Beaufort ſucceeded in the junction of a dog and a wolf. I was informed of this fact, ſays M. Buffon, by M. Surirey de Boiſſy, in a letter which he wrote me in the following terms: "The marquis de Spontin reared a very young ſhe-wolf, to whom he gave, as a companion, a dog of nearly the ſame age. They were left at full liberty, and came into the apartments, the kitchen, the ſtable, &c. The dog is a kind of mongrel maſtiff, and full of vigour. During the firſt ſix months, the wolf was fed with milk, and afterwards with raw fleſh, which it preferred to what was roaſted. When ſhe ate, no perſon durſt approach her. At other times, ſhe permitted every freedom, except abuſe. She careſſed all the dogs which came near her, till ſhe began to give a preference to her old companion; after which, ſhe was enraged at every other. She was covered, for the firſt time, on the 25th day of March laſt. Her amours continued fifteen days, with pretty frequent repetitions; and ſhe brought forth her young on the 6th day of June, at eight o'clock in the morning. Hence the time of her geſtation was ſeventy-three days. The young were four in number, and of a blackiſh colour. Some of them have half of the breaſt and the paws white. Theſe colours are derived from the dog, which is black-and-white. From the moment of littering, ſhe growled and attacked all who approached her. She no longer diſtinguiſhed her maſters; and would even have devoured the dog if he had come near her. I add, that ſhe has been chained ever ſince ſhe made a break at her gallant, who had leaped a neighbouring wall in order to come at a bitch in ſeaſon; that ſhe nearly worried her rival; and that the coachman ſeparated them by repeated blows of a large bludgeon, and conducted her to her lodge, where, imprudently commencing his chaſtiſement, her fury roſe to ſuch a degree, that ſhe bit him twice in the thigh, and the wounds confined him ſix weeks to his bed. *Namur*, June 9, 1773."

In my anſwer to this letter, I thanked M. de Boiſſy, and added ſome remarks with a view to remove my doubts. The marquis de Spontin, having ſeen my anſwer, obligingly wrote me in the following terms: "I read with much ſatisfaction the judicious remarks you tranſmitted to M. Surirey de Boiſſy, whom I had begged to communicate to you, during my abſence, a fact which cannot be denied, notwithſtanding the force of your arguments, and the opinion I have always entertained, as well as the reſt of the world, of the excellence of the many learned productions by which you have enlightened the republic of letters. But, whether it was an effect of chance, or one of thoſe ſports of Nature, who, as you remark, ſometimes departs from her eſtabliſhed laws, the fact is inconteſtible; and you will be convinced of its truth, if you give credit to what I have the honour of writing to you, which can be atteſted by two hundred perſons at leaſt, who were witneſſes to it as well as myſelf. This ſhe-wolf was only three days old when I purchaſed it from a peaſant, who had carried it off, after killing the mother. I fed it with milk till it was able to eat fleſh. I recommended to thoſe who had the care of it, to careſs and handle it often, with a view to render it as tame as poſſible. At laſt, it became ſo familiar, that I have taken it to hunt in the woods at the diſtance of a league from my houſe, without any danger of loſing it. Sometimes, when I was unable to call it back, it returned of its own accord in the night. I was always more certain of keeping it at home when I had a dog; for it was fond of dogs; and thoſe who had overcome their natural repugnance ſported with it, as if they had been animals of the ſame ſpecies. During all this time, it attacked only cats and poultry, whom it ſtrangled, but without diſcovering any inclination to eat them. As ſoon as ſhe attained the age of twelve months, her ferocity increaſed, and I began to perceive that ſhe had a ſtrong deſire to attack ſheep. I then chained her; becauſe ſhe frequently ſprang upon her maſter, when he attempted to reſtrain her. She was at leaſt one year old when I introduced her to the acquaintance of the dog which covered her. She had been kept in my garden, which is ſituated in the centre of the town, ſince the end of November laſt; and, therefore, no male wolf can be ſuppoſed to have had any communication with her. As ſoon as ſhe came in ſeaſon, ſhe diſcovered ſuch an affection for the dog, and the dog for her, that each of them howled frightfully when they were not together. She was firſt covered on the 28th of March, and twice each day during the two following weeks. They continued attached to each other more than a quarter of an hour at every embrace, during which time the wolf complained, and ſeemed to ſuffer pain; but the dog was perfectly at his eaſe. Three weeks after, her pregnancy was perceptible. On the 6th of June, ſhe brought forth four young, whom ſhe ſtill ſuckles, though they are five weeks old, and have pretty long ſharp teeth. They have a perfect reſemblance to puppies, having long pendulous ears. One of them is black, with a white breaſt, which was the colour of the dog. The others will probably be of the colour of the mother. The hair of each of them is coarſer than that of ordinary dogs. There is but one female, with a very ſhort tail, like the dog, who had ſcarcely any tail. They promiſe to be large, ſtrong, and very ferocious. The mother is extremely ſolicitous concerning their welfare. I doubt whether I ſhall keep her any longer, having been chagrined by an accident that befel my coachman, whom ſhe bit ſo cruelly, that he has been confined to his bed theſe ſix weeks paſt. But will engage, that, if preſerved, ſhe will again have puppies by the ſame dog, who is white, with large black ſpots on the back. I hope, ſir, that what I have ſaid will anſwer for a reply to your remarks, and that you will no longer heſitate concerning the truth of this ſingular event. *Namur*, July 14, 1773."

My doubts, continues M. de Buffon, are entirely removed, and I am happy to embrace this opportunity of expreſſing my thanks. The eſtabliſhment of a rare fact in natural hiſtory is a great acquiſition. The means of obtaining ſuch facts are always difficult, and often, as we have ſeen, very dangerous. It was for this laſt reaſon that I ſequeſtered my wolf and dog from all ſociety. I had formerly reared a young wolf, who, till the age of twelve months, did no miſchief, and followed his maſter like a dog. But, in the ſecond year, he committed ſo many exceſſes that it was neceſſary to kill him. I learned, by experience, that theſe animals, though ſoftened by education, reſume with age their natural ferocity. Willing to prevent theſe inconveniences, I kept my ſhe-wolf always confined along with the dog; and I acknowledge that this method of procuring an union between them was ill imagined; for, in this ſtate of ſlavery and diſguſt, the diſpoſitions of the wolf, inſtead of being ſoftened, were ſoured to ſuch a degree, that ſhe was more ferocious than if ſhe had been at full liberty; and the dog, having been early detached from his equals, and from the ſociety of men, had aſſumed a ſavage and cruel character, which the bad humour of the wolf ſerved only to augment; ſo that, during the two laſt years, their antipathy aroſe to ſuch a degree, that they deſired nothing ſo much as to devour each other. In the experiment made by the marquis de Spontin, every circumſtance was reverſed. The dog was in his ordinary condition: he had all the mildneſs and other qualities which this docile animal acquires by his intercourſe with man. The wolf was likewiſe reared in perfect freedom and familiarity along with the dog, which, by being under no reſtraint, had loſt his repugnance to her; and ſhe, by the ſame mild management, became ſuſceptible of attachment to him. Beſides, the proper moment for this unnatural union was ſeized. The wolf felt the impreſſion of love for the firſt time. She was only in the ſecond year of her age; and, of courſe, had not entirely reſumed her natural ferocity.

A ſimilar fact has been announced by M. Bourgelat, in a letter, dated April 15, 1775: "Lord Pembroke," ſays he, "informed me, that, within theſe few days, he ſaw a large maſtiff copulate with a ſhe-wolf; that the wolf is tame; that ſhe is always in her maſter's chamber, and conſequently under his eye; that ſhe never goes out alone; and that ſhe follows her maſter with all the fidelity of a dog. He adds, that an animal-merchant has had, at four different times, mules produced by the wolf and dog. He alleges, that the wolf is only a wild dog; and in this opinion he is joined by the celebrated anatomiſt Mr. Hunter. He thinks differently with regard to the fox. He tells me, that a bitch, who was a daughter of a wolf, and belonged to lord Clanbrazil, intermixed with a ſetting-dog, and produced puppies, which, according to his hunter, will be excellent pointers."

In general, kindred of ſpecies is one of thoſe myſteries of Nature, which man can never unravel, without a long-continued and difficult ſeries of experiments. How can we otherwiſe learn, than by the union of different ſpecies of animals, many thouſand times repeated, the degree of their kindred? Is the aſs more allied to the horſe than the zebra? Does the wolf approach nearer to the dog than the fox or jackal? At what diſtance from man ſhall we place the large apes, who reſemble him ſo perfectly in conformation of body? (Nature and the laws forbid us to make the experiment.) Are all the ſpecies of animals the ſame now that they were originally? Has not their number augmented, inſtead of being diminiſhed? Have not the feeble ſpecies been deſtroyed by the ſtronger, or by the tyranny of man, the number of whom has become a thouſand times greater than that of any other large animals? What relation can be eſtabliſhed between kindred ſpecies, and another kindred ſtill better known, that of different races in the ſame ſpecies? Does not a race, like the mixed ſpecies, proceed from an anomalous individual, which forms the original ſtock? In the dog ſpecies, there is, perhaps, a race ſo rare, that it is more difficult to procreate than the mixed ſpecies proceeding from the aſs and mare. How many queſtions does this ſubject admit of; and how few of them are we in a condition to ſolve? How many facts muſt be diſcovered before we can even form probable conjectures? However, inſtead of being diſcouraged, the philoſopher ought to applaud Nature, even when ſhe is moſt myſterious; and to rejoice that, in proportion as he removes one part of her veil, ſhe exhibits an immenſity of other objects, all worthy of his reſearches. For, what we already know ought to point out what may ſtill be known. There is no boundary to the human intellect. It extends in proportion as the univerſe is diſplayed. Hence man can and ought to attempt every thing: he wants nothing but time to enable him to obtain univerſal knowledge. By multiplying his obſervations, he might foreſee all the phenomena and all the events of nature with equal certainty as if he deduced them from their immediate cauſes: and what enthuſiaſm can be more pardonable, or rather more noble, than to believe that man is capable, by his labours, to diſcover all the powers and myſteries of Nature!

Theſe labours conſiſt chiefly in making obſervations and experiments, from which we diſcover new truths. For example, the union of animals of different ſpecies, by which alone we can learn their kindred, has never been ſufficiently tried. The facts we have been able to collect concerning this union, whether voluntary or forced, are ſo few, that we are not in condition to aſcertain the exiſtence of *jumars*. This name was firſt given to mules ſaid to have proceeded from the bull and mare; but it has likewiſe been applied to denote mongrels alleged to have been procreated by the jack-aſs and cow. Dr. Shaw tells us, that, in the provinces of Tunis and Algiers, "there is a little ſerviceable beaſt of burden, called *kumrah*, begot betwixt an aſs and a cow. That which I ſaw at Algiers (where it was not looked upon as a rarity) was ſingle-hoofed like the aſs, but diſtinguiſhed from it in having a ſleeker ſkin, with the tail and the head (though without horns) in faſhion of the dam's." Thus we have already two kinds of jumars, the one proceeding from the bull and mare, and the other from the jack-aſs and cow. A third is mentioned by Merolle, and is pretended to proceed from the bull and ſhe-aſs: "There was a beaſt of burden which proceeds from the bull and ſhe-aſs, and is obtained by covering the aſs with cow's ſkin, in order to deceive the bull."

But I am equally doubtful (continued M. de Buffon) concerning the exiſtence of all the three kinds of jumars: though I pretend not to deny the poſſibility of the fact. I have even enumerated ſome facts which prove an actual copulation between animals of very different ſpecies; but their embraces were ineffectual. Nothing ſeems to be more remote from the amiable character of the dog than the brutal manners and inſtinct of the hog: and the form of their bodies is as different as their natural diſpoſitions. I have ſeen, however, two examples of a violent attachment between a dog and a ſow. During the ſummer of 1774, a large ſpaniel diſcovered a violent paſſion for a ſow which was in ſeaſon: they were ſhut up together for ſeveral days; and all the domeſtics were witneſſes of the mutual ardour of the two animals. The dog exerted many violent efforts to copulate with the ſow; but the diſſimilarity of their organs prevented their union. The ſame thing happened ſome years before. Hence animals, though of a very different ſpecies, may contract a ſtrong affection to each other; for it is certain, that in the above examples nothing prevented the union of the dog and ſow but the conformation of their organs. It is not equally certain, however, that, if conſummation had taken place, production would have followed. It often happens, that animals of different ſpecies ſpontaneouſly unite. Theſe voluntary unions ought to be prolific, ſince they imply that the natural repugnance, which is the chief obſtacle, is ſurmounted, and alſo a conformity between the organs. No fertility, however, has reſulted from ſuch commixtures. In 1767, and ſome ſucceeding years, the miller at my eſtate kept a mare and a bull in the ſame ſtable, who contracted ſuch a paſſion for each other, that, as often as the mare came in ſeaſon, the bull covered her three or four times a-day. Theſe embraces were repeated during ſeveral years, and gave the maſter of the animals great hopes of ſeeing their offspring. Nothing, however, reſulted from them. All the inhabitants of the place were witneſſes of this fact, which proves, that in our climate at leaſt, the bull cannot procreate with the mare, and renders this firſt kind of jumar extremely ſuſpicious. I have not equal evidence to oppoſe to the ſecond kind, which Dr. Shaw ſays proceeds from the jack-aſs and cow. I acknowledge, that, though the diſſimilarities in ſtructure appear to be nearly equal in both caſes, the poſitive teſtimony of a traveller ſo well informed as Dr. Shaw ſeems to give a greater degree of probability to the exiſtence of this ſecond kind of jumar than we have for the firſt. With regard to the third jumar, proceeding from the bull and ſhe-aſs, I am perſuaded, notwithſtanding the authority of Merolle, that it has no more exiſtence than the one ſuppoſed to be produced by the bull and mare. The nature of the bull is ſtill farther removed from that of the ſhe-aſs than from that of the mare: and the unfertility of the mare and bull, which is aſcertained by the above examples, ſhould apply with greater force to the union of the bull and aſs.

A very ſingular *mule-bird* was a few years ago preſented to the world, by lord Stawell, of the Holt-park, near Farnham in Surrey. It was found by the ſpaniels of one of his gamekeepers in a coppice, and ſhot on the wing. The ſhape and general appearance of the bird, and a ſcarlet ring round its eyes, agree well with the appearance of a cock-pheaſant; but then the head and neck, with the breaſt and belly, were of a gloſſy black; and, though it weighed three pounds three ounces, the weight of a full-grown pheaſant, yet there were no ſigns of any ſpurs on the legs, as is uſual with all grown cock-pheaſants, who have large ones. The legs and feet were naked of feathers; and therefore it could be nothing of the grous kind. In the tail were no long bending feathers, ſuch as cock-pheaſants uſually have, and which are characteriſtic of the ſex. The tail was much ſhorter than the tail of a hen-pheaſant, and blunt and ſquare at the end. The back, wing-feathers, and tail, were all of a pale ruſſet curiouſly ſtreaked, ſomewhat like the upper parts of a hen-partridge. It was at firſt thought to have been a ſpurious hen-bird, bred between a cock-pheaſant and ſome domeſtic fowl: but, on enquiring more minutely into particulars, it was at laſt diſcovered that a pea-hen had ſtrayed into the coppice the preceding ſummer, where it took up its abode, and built its neſt; from which circumſtance this mule is ſuppoſed to have been produced.

In the *vegetable* as well as in the animal kingdom, mules are produced, by putting the farina fæcundans of one ſpecies of plant into the piſtil or utricle of the other. The carnation and ſweet-william being ſomewhat alike in their parts, particularly their flowers, the farina of the one will impregnate the other, and the ſeed ſo enlivened will produce a plant different from either. An inſtance of this we firſt had in Mr. Fairchild's garden at Hoxton; where a plant is ſeen neither ſweet-william nor carnation, but reſembling both equally: this was raiſed from the ſeed of a carnation that had been impregnated by the farina of the ſweet-william. See vol. v. p. 792.

This furniſhes a hint for altering the property and taſte of any fruit, by impregnating one tree with the farina of another of the ſame claſs; as a codlin with a pear-main, which will occaſion the codlin ſo impregnated to laſt a longer time than uſual, and to be of a ſharper taſte. Or, if the winter-fruits be fecundated with the duſt of the ſummer-kinds, they will ripen before their uſual time. And from this accidental coupling of the farina of one with another, it may poſſibly be, that, in an orchard where there is a variety of apples, even the fruit gathered from the ſame tree differ in their flavour, and in the ſeaſon of maturity. It is alſo from the ſame accidental coupling that the numberleſs varieties of fruits and flowers raiſed every day from ſeed are ſo abundantly produced.

The Horticultural Society, lately eſtabliſhed, has proſecuted this enquiry with great ſucceſs. At the laſt meeting, Oct. 7, 1817, the moſt important communication was a letter from T. A. Knight, eſq. F.R. & L. SS. the preſident, giving an account of a new peach raiſed from a ſweet almond impregnated with the farina of the common peach. The flavour of the fruit was fine; and Mr. Knight, who reared it, conſiders the almond as the parent of all our peaches. See vol. ii. of a *Syſtem of Natural Hiſtory*, in 14 vols. 8vo. publiſhed by the Proprietors of this Work.

MU'LE-DRIVER, *ſ.* One that drives mules. *Johnſon.*

MU'LE, Fairchild's, in botany. See DIANTHUS.

MU'LE-FERN. See HEMIONITIS.

MU'LE's TONGUE. See ASPLENIUM.

MU'LE-WORT. See HEMIONITIS.

MULELA'CHA, in ancient geography, a town of Africa, in Mauritania Tingitana, on a promontory which extended into the Atlantic, according to Pliny.

MULE'TA, a town of Naples, in Calabria Citra: ſixteen miles eaſt-ſouth-eaſt of Scalea.

MULETEE'R, *ſ.* Mule-driver; horſe-boy.—About a quarter of an hour farther, we came up with our *muleteers;* they having pitched our tents before they had gone ſo far as we intended. *Maundrel's Travels.*

Baſe *muleteers,*
Like peaſant foot-boys, do they keep the walls,
And dare not take up arms like gentlemen. *Shakeſpeare.*

MULET'TO, *ſ.* [from *mule.*] A great mule, a moil. One employed in driving mules; a boy that drives horſes. *Scott.*

MULE'VO, a town of Ruſſia, in the government of Viatka, on the Kama: ſixteen miles ſouth of Sarapul.

MULFIN'GEN, a town of the duchy of Wurzburg: ſix miles ſouth of Mergentheim, and thirty-one ſouth of Wurzburg.

MUL'GOM, a town of Hindooſtan, in Baglana: forty-ſeven miles ſouth-eaſt of Saler Mouler.

MULHARGUN'GE, a town of Hindooſtan, in the circar of Gohud: eleven miles ſouth of Lahaar.

MUL'HAUSEN. See MUHLHAUSEN, p. 169.

MUL'HEGAN, a river of the ſtate of Vermont, which runs into the Connecticut at Brunſwick.

MUL'HEIM, a town of the grand duchy of Berg, on the eaſt ſide of the Rhine: three miles north of Cologne.

MUL'HEIM, or MULLEN, a town of the grand duchy of Baden: three miles weſt of Badenweiler.

MUL'HEIM AM RU'HR, a town of the grand duchy of Berg, on the Ruhr: fourteen miles north of Duſſeldorp.

MULIEB'RITY, *ſ.* [*muliebris,* Lat.] Womanhood; the contrary to virility; the manners and character of woman.—The ladies of Rhodes, hearing that you have loſt a capital part of your lady-ware, have made their petition to Cupid, to plague you above all other, as one prejudicial to their *muliebrity. Soliman and Perſeda;* 1599.

MU'LIER, *ſ.* As uſed in our law, ſeems to be a word corrupted from the Latin *melior,* or the French *meilleur;* and ſignifies the lawful iſſue, born in wedlock, preferred before an elder brother born out of matrimony. See ſtat. 9 Hen. VI. c. 11. But, by Glanvil, lawful iſſue are ſaid to be *mulier,* not from *melior,* but becauſe begotten *è muliere,* of the wife, and not *ex concubinâ;* for he calls ſuch iſſue *filios mulieratos,* oppoſing them to baſtards. It appears to be thus uſed in Scotland alſo; Skene ſaying, *mulieratus filius* is a lawful ſon, begotten of a lawful wife. Where a man has iſſue by a woman, if he afterwards marries her, the iſſue is *mulier* by the civil law, though not by the laws of England. 2 *Inſt.* 99. 5 *Rep.* 416.

MULIER PUI'SNE, [Lat. and Fr.]—When a man has a baſtard ſon, and afterwards marries the mother, and by her has a legitimate ſon, the eldeſt ſon is *baſtard eigné,* and the younger ſon is *mulier puiſné. Blackſtone.*

MULIERO'SE, *adj.* Too much addicted to the love of women. *Bailey.*

MULIEROS'ITY, *ſ.* A criminal fondneſs for women. *Bailey.*

MU'LIERTY, *ſ.* The being or condition of a *mulier,* or lawful iſſue. *Co. Litt.* 352.

MULINAZ'ZO, a town of Sicily, on the ſouth coaſt, at the mouth of the river St. Croce: eighteen miles weſt of Modica.

MU'LINGEN (Groſs), a town of Germany, in the duchy of Anhalt Zerbſt: fourteen miles weſt of Zerbſt.

MU'LINGEN (Klein), a town of the duchy of Anhalt Zerbſt: twelve miles weſt of Zerbſt.

MU'LISH, *adj.* Like a mule; obſtinate as a mule. *Modern.*

MULIVAD'DY, one of the principal rivers in Ceylon, takes its riſe at a ſmall diſtance from that of Malivagonga, at the foot of Adam's Peak, a high mountain in the ſouth-weſt of Candy, and runs towards the weſt coaſt.

MULKAPOU'R, a town of Hindooſtan, in Golconda: twenty miles ſouth-eaſt of Hydrabad.

MUL'KEE, a town of Hindooſtan, in Canara. In 1799, this town was ceded to Great Britain: fixteen miles north-north-weſt of Mangalore.

MULL, *ſ.* [M. Goth. *muld;* Su. Goth. *mull.*] Duſt; rubbiſh. See MULLOCK.

That other cofre of ſtraw and *mull*
With ſtones meynd he fill'd alſo;
Thus be they full bothe two. *Gower's Conf. Am.*

To MULL, *v. a.* [*mollitus,* Lat.] To ſoften and diſpirit, as wine is when burnt and ſweetened. *Hanmer.*

Peace is a very apoplexy, lethargy,
Mull'd, deaf, ſleepy, inſenſible. *Shakeſpeare's Coriol.*

To heat any liquor, and ſweeten and ſpice it.—Drink new cyder *mull'd,* with ginger warm. *Gay.*

MULL, a large iſland ſituated on the weſtern coaſt of Scotland, and included within the county of Argyle, from the main land of which it is ſeparated on the north-eaſt by a narrow channel, called the Sound of Mull; and on the ſouth-eaſt by the large bay opening from the ſouth into the Linnhe-loch. On the weſtern parts, and on the ſouth, it is waſhed by numerous bays formed by the

Atlantic Ocean, and every-where interſperſed with ſmall iſlands, of which the celebrated Icolm-kill, or Iona, is the moſt remarkable. This iſland meaſures from eaſt to weſt about twenty-four miles, and from north to ſouth nearly the ſame extent, and comprehends three parochial diſtricts; Kilfinichen, Kilninien, and Toroſay. Its ſuperficial content, however, is by no means equal to a ſquare of that magnitude, owing to the many indentations of the ſea, particularly on its weſtern ſide. The coaſt here is, for the moſt part, bold and rocky; and the face of the country generally exhibits a ſeries of mountains, ſome of them riſing to a conſiderable height. The moſt elevated are the *Bien-More*, or Great Mountain; and *Bien-Talindh*, or Proſpect Mountain; both of which command very extenſive ſea-views.

In this peculiarity of country, as may be ſuppoſed, agriculture is little attended to; and indeed almoſt the only parts of the iſland under cultivation are ſome detached ſtrips of land near the ſhore. Some of the mountains form excellent ſheep-walks, and to this purpoſe they are accordingly applied. All the other portions of the iſland, not covered with wood or ſwampy moraſſes, are devoted to the feeding of cattle, of which great numbers are annually reared and exported. Theſe cattle are chiefly, if not entirely, of the black native ſpecies; and the ſale of them conſtitutes the principal mode whereby the tenants are enabled to procure money for the payment of their rents. Such of them as are unable to effect that object in this way are generally compelled to leave their homes, after they have ſown their little arable ſpots, to ſeek work in the more ſouthern diſtricts, whence they return before harveſt, with a trifling pittance ſaved from their hard-earned wages. As there are few incloſures in the iſland, either to ſeparate the grazing farms from each other, or to protect the arable fields from the depredations of the cattle, a number of perſons are neceſſarily employed in the capacity of herdſmen, who lead a life of great ſloth and inactivity. They are, nevertheleſs, a hardy and vigorous race, much attached to their native ſoil, and furniſh many excellent ſoldiers for the royal ſervice. The only kinds of corn ſown here are oats and barley; the former affording very indifferent crops, and the latter much more luxuriant ones than is uſual in the weſtern iſlands. The oats are generally made into meal; but the greateſt part of the barley is diſtilled into whiſkey, in ſpite of the conſtant efforts of the exciſe to prevent its manufacture. Sea-ware and ſhell-ſand are much uſed as manure, and are carried to the fields on the backs of horſes in baſkets, and in creels. All the implements of huſbandry are extremely rude, and probably the ſame that have been employed during ſeveral centuries paſt; for, as there is no regular plough or harrow maker in the iſland, each farmer conſtructs his own, after the manner of his forefathers.

Of the villages in Mull, the only one worthy of notice is Tober-Moray, which ſtands cloſe to the ſhore, near the northern extremity of the Sound. The village was built by the Britiſh Society for the Encouragement of the Fiſheries, in 1788; and might ſoon be improved into one of the chief ſea-ports on the weſtern coaſts of Scotland, as it poſſeſſes a fine bay completely ſheltered from the ocean by the ſmall iſland of Calve; and lies directly in the track of the numerous veſſels which paſs from more ſouthern ports to the northern countries of Europe. At preſent, however, it does not contain above thirty houſes, built of ſtone and lime; beſides, perhaps, nearly double that number of ſmall thatched huts. The inhabitants principally either hold ſituations in the poſt-office or cuſtom-houſe, or are employed in ſome capacity connected with, or dependent on, the herring-fiſheries.

Of the landed property in Mull, the greater proportion belongs to the repreſentative of the ancient family of the M‘Leans, but a conſiderable part of it is likewiſe in the poſſeſſion of the duke of Argyle. Torloigh, the reſidence of Mr. M‘Lean, is the only manſion of note in the whole iſland. Caſtle-Duart, the ſeat of his powerful anceſtors, which ſtood on a bold head-land projecting into the ſea, is now wholly in ruins; as is alſo Caſtle-Aros, or Aras, ſaid to have been long the reſidence of the M‘Donalds, lords of the iſles.

But what chiefly demands attention in an account of this iſland, is its mineralogy. The ſubſtratum, throughout a great extent, is a maſs of whin-ſtone, only different from baſaltes, which alſo frequently occurs, in the greater coarſeneſs of its grain. Some of the baſaltes aſſume a regular columnar form. Near Aros are ſome rocks of white lava, and apparently of the ſame kind with that deſcribed by M. Dolomieu, in his "Memoires ſur l'Iſle de Ponces." Lime-ſtone is extremely abundant, and in ſome places is of ſo fine a quality as to reſemble marble, and to be capable of a fine poliſh. Coal has been diſcovered in conſiderable quantity, but ſo ſituated as to render it impracticable to be worked with any proſpect of advantage. Hence the inveſtigation of the ſtrata of the iſland is more an object of curioſity to the mineralogiſt than of utility to the practical miner. In one ſpot a ſtratum of coal is diſcovered immediately "under baſaltes; and, in another, baſaltes incumbent on that mineral; perhaps the only inſtance of the kind in the world." The mountain called Ben-Enich contains a very uncommon mineral ſubſtance, a zeolite, or compound ſiliceous ſpar impregnated with petroleum. Sand-ſtone, and granite of an excellent grain, are very plentiful, and the ſhore abounds with pebbles of great variety and beauty. At Balphetriſh is the celebrated *ringing-ſtone*; which meaſures ſeven feet long by ſix broad, and is four and a half feet in thickneſs. This ſtone is of a dark grey colour, ſpotted with ſtars of black mica, and totally different from the ſurrounding rocks. It is ſo hard, that any attempt to break off the ſmalleſt fragment by the moſt vigorous ſtrokes of a common hammer would be entirely vain; and when ſo ſtruck it yields a ſound like braſs, or caſt iron. The mineral properties of this curious ſtone, we believe, have not yet been aſcertained. The other mineralogical curioſities in Mull are its caverns, which, though ſome have queſtioned the opinion, are doubtleſs natural excavations. Of theſe, two in the diſtrict of Airdmeanach are particularly deſerving of notice. One, called Ladder-Cave, is capable of containing about eighty men, and has a breaſt-work built at its entrance, to which a paſſage leads up the rock, where two men only can walk a-breaſt. In this cave, tradition ſays that the inhabitants anciently took ſhelter in times of danger. The other, called M‘Kinnen's-Cave, is much more capacious; and is commonly ſuppoſed to have taken its deſignation from a gentleman named M‘Kinnen, who went to explore it, and was never afterwards heard of. At that time it was generally thought to reach quite acroſs the country; but this idea has been long ſince found to be erroneous, every part of it having been examined, and its dimenſions determined by ſucceeding adventurers. If, therefore, there is any truth in the ſtory of M‘Kinnen, he muſt either have periſhed from ſome accidental cauſe, or have been murdered by perſons who had taken ſhelter in the cave, and conſidered him as a dangerous ſpy or intruder.

The common language of Mull is the Gaelic, or Erſe; but a number of perſons alſo ſpeak Engliſh; and, no doubt, if proper encouragement were given to the pariſh-ſchools, the latter would ſoon become almoſt univerſal. Unhappily, however, it happens here, as in many other highland diſtricts, that the ſtipend of a ſchoolmaſter is ſcarcely equal to the wages of the meaneſt labourer; and hence it may be conjectured, that few perſons of any ability will devote their time and acquiſitions to ſuch unprofitable employment, as taking the charge of education in a country, where their utmoſt efforts are inadequate to afford the moſt ordinary ſuſtenance of life.

Mull has, no doubt, been the ſcene of ſome ſevere conflicts in ancient times, which, however, for the moſt part, were of too little general importance to find a place in the page of Scottiſh or Engliſh hiſtory. Bloody-bay, according to tradition, is ſo called from a ſea-fight between a M‘Donald of the Iſles, and his ſon. The father was ſupported in this conteſt by the brave Hector Obhar M‘Lean, who afterwards died ſo gloriouſly in the field of Flodden, covering his monarch, James IV. from the arrows of the Engliſh archers. In 1588, the Florida, one of Philip's invincible Armada, was blown up in Tober-Moray bay, after the diſperſion of the fleet, as ſome aſſert, by the deſperate reſolution of a Scotchman; and in the ſame bay did the unfortunate earl of Argyle effect his firſt landing, attended by a few friends, when he invaded Scotland, with the view of ſupporting the cauſe of the duke of Monmouth. *Pennant's Tour in Scotland*, vol. ii.

MULL of CANTY'RE. See Cantyre, vol. iii.

MULL of GAL'LOWAY. See Galloway.

MULL of KIN'HO, the ſouth extremity of the iſland of Ilay. Lat. 55. 40. N. lon. 6. 9. W.

MULL SOU'ND, a narrow ſea between the iſland of Mull and the continent of Scotland.

MUL'LA, a town of Sweden, in the government of Abo: fifty-ſix miles ſouth-eaſt of Biorneborg.

MUL'LA, a town of Hindooſtan, in Lahore: twenty-four miles north-weſt of Rotas.

MULLAGHCA'RN, a mountain of Ireland, in the county of Tyrone: twelve miles ſouth-ſouth-eaſt of Strabane.

MULLAHA', mountains of Ireland, in the county of Leitrim: four miles eaſt of Manor Hamilton.

MULLAO'W, a town of Hindooſtan, in Guzerat: ten miles north of Champaneer.

MULLARGUR', a town of Hindooſtan, in the circar of Chauderee: fifteen miles north-weſt of Kimlaſſa.

MULLAVIL'LY, a town of Hindooſtan, in Myſore. It was taken by the Britiſh, under the marquis of Cornwallis.

MULLAWA'R, a town of Hindooſtan, in the circar of Bilſah: thirty-five miles north-weſt of Bilſah.

MULLEIN, *ſ.* in botany. See Verbascum.

MUL'LENS BA'Y, a bay on the coaſt of Yucatan. Lat. 18. 15. N. lon. 89. 17. W.

MULLENS I'SLAND, a ſmall iſland in the gulf of Mexico, near the coaſt of Eaſt Florida. Lat. 28. 1. N. lon. 82. 55. W.

MUL'LER, *ſ.* [*mouleur*, Fr. from *mola*, Icel. to crumble, to break into ſmall pieces.] A ſtone held in the hand, with which any powder is ground upon a horizontal ſtone.—The beſt grinder is the porphyry, white or green marble, with a *muller* or upper ſtone of the ſame, cut very even without flaws or holes; you may make a *muller* alſo of a flat pebble, by grinding it ſmooth at a grindſtone. *Peacham.*—The apothecaries uſe mullers to prepare many of their teſtaceous powders; and painters for their colours, either dry or in oil. *Muller* is alſo an inſtrument uſed by the glaſs-grinders; being a piece of wood, to one end whereof is cemented the glaſs to be ground, whether convex in a baſon, or concave in a ſphere or bowl.—The *muller* is ordinarily about ſix inches long, turned round: the cement they uſe is compoſed of aſhes and pitch. *Chambers.*

MUL'LER (John), the greateſt aſtronomer and mathematician in the fifteenth century, is commonly known by the name of *Regiomontanus*, from Mons-Regius, or Koningſhoven, a town in Franconia, where he was born in 1436. Having acquired a good claſſical education in his own country, he was admitted very young into the academy of Leipſic, where he formed a ſtrong attachment to the mathematics, and the other branches of knowledge connected with them. At this early period he felt that the aſſiſtance he obtained at Leipſic was not equal to his expectations; and he removed at the age of fifteen to Vienna, to ſtudy under the famous Purbach. A ſtrong attachment was formed between theſe two; and Muller made ſuch a rapid progreſs in the ſciences, that he was ſoon able to aſſiſt his maſter, and become the companion of his labours. They ſpent ten years together in elucidating obſcurities, obſerving the motions of the heavenly bodies, and comparing and correcting the tables of them. While they were thus employed, cardinal Beſſarion, a Greek by nation, and a man of extenſive erudition, came to Vienna to negociate ſome affairs for the pope; and, as he was a lover of aſtronomy, he ſoon formed an acquaintance with Purbach and Regiomontanus. He had begun to tranſlate into the Latin language the Almageſt of Ptolemy, or an epitome of it by Averroës; but, being prevented by his various engagements from completing his verſion, he requeſted Purbach to undertake that taſk, and to go with him into Italy, where, by learning Greek, with which he was yet unacquainted, he might be able to underſtand Ptolemy in his own language. To theſe propoſals Purbach aſſented; but not before he had ſtipulated that Regiomontanus ſhould accompany him, and be a partaker in his labours. Before the cardinal left Vienna, however, theſe friends had made a conſiderable progreſs in that work, by means of an Arabic verſion of Ptolemy; but their joint concern in the undertaking was terminated by the death of Purbach, which took place in the year 1461. This event filled Regiomontanus with the deepeſt affliction; and there is ſtill extant a letter of his, in which he bitterly laments the loſs of his maſter, and extols him above all the mathematicians of that age. The whole taſk of the tranſlation now devolved upon Regiomontanus, who finiſhed the work, in compliance with the requeſt of Purbach on his death-bed. He afterwards reviſed and perfected it at Rome, whither he accompanied the cardinal.

While in the metropolis of the ancient world, he applied himſelf with great diligence to the ſtudy of the Greek language, and examined the rich ſtores of learning in the public libraries. He did not, however, neglect his mathematical purſuits, and continued with great eagerneſs his aſtronomical obſervations. Soon afterwards, cardinal Beſſarion being ſent on a miſſion from his holineſs into Greece, Regiomontanus went to Ferrara, where he continued the ſtudy of the Greek language under Theodore Gaza, who explained to him the text of Ptolemy, with the Commentaries of Theon; till at length he could thoroughly underſtand, not only the Greek orators, hiſtorians, and philoſophers, but the poets likewiſe, and became ſo perfect in it, that he could compoſe Greek verſes, and converſe readily with the Grecian philoſophers. In 1463, he went to Padua, where he became a member of the univerſity; and, being urged to deliver a courſe of lectures there, he willingly complied, and explained to his auditors, Alfraganus, an Arabian philoſopher. In 1464, he went to Venice, to meet his patron Beſſarion; and, while he waited for him, he completed his accurate "Treatiſe of Triangles," which he had begun ſome time, and wrote a refutation of cardinal Cuſa's pretended "Demonſtration of the Quadrature of the Circle." He alſo computed a kind of calendar, containing the conjunctions and oppoſitions of the heavenly bodies, and the eclipſes for the years 1475, 1498, and 1513, with a table marking the time of Eaſter for thirty years. In the ſame year he returned with Beſſarion to Rome, where he continued his aſtronomical obſervations during the months of October, November, and December; and he afterwards prolonged his ſtay in that city, for the purpoſe of furniſhing himſelf with the moſt curious books. Many of thoſe which he could not purchaſe he was at the pains of tranſcribing himſelf, with great readineſs and elegance of penmanſhip; and others he got copied at a great expenſe. For, well knowing that none of theſe books were to be had in Germany, he intended, at his leiſure, to tranſlate and publiſh ſome of the beſt of them in that country. During this time he had a warm conteſt with George of Trebiſond, whoſe anger he had excited by criticiſing his tranſlation of Theon's Commentaries, and pointing out ſome egregious blunders which it contained. Having at length procured a great number of manuſcripts, and being weary of wandering about, as well as releaſed from his attendance on Beſſarion, who was conſtantly employed on foreign legations, he returned to Vienna, and for ſome time delivered mathematical lectures in that city.

While he was thus occupied, he was perſuaded to remove to Buda, on the invitation of Matthias king of Hungary, who had a high reputation as a warrior and as a lover of letters and the ſciences. This prince accompanied his invitation with rich preſents, and a promiſe of an annual penſion of two hundred pieces of gold. But what chiefly induced Regiomontanus to accept the king's offer was his deſire of having acceſs to the rich and noble library which Matthias had founded at Buda; in which he had placed all the Greek books that he could purchaſe after the ſacking of Conſtantinople, as well as at Athens, and wherever elſe they could be met with throughout the Turkiſh dominions. Our mathematician was received at Buda with great diſtinction; and was frequently honoured with a ſeat at the king's table, who expreſſed much ſatiſfaction at hearing his learned diſcourſes. He was alſo particularly noticed by the archbiſhop of Strigonia, who made him many preſents, and at whoſe requeſt he drew up his "Tables of Directions:" for Regiomontanus, profoundly as he was verſed in the principles of genuine ſcience, had not ſurmounted the prejudices of his age in favour of judicial aſtrology. See, on this ſubject, Sibly's Aſtrology, p. 457–608. 12th edit. 1817.

In the year 1471, a war having broken out between the king of Hungary and the Bohemians, our author prudently determined to avoid the threatening ſtorm; and, after obtaining the king's leave to retire to ſome place where he might purſue his ſtudies in tranquillity, he withdrew to Nuremberg in Franconia, and fixed his reſidence in that city. The reaſons, as he himſelf tells us, which induced him to ſettle in this place, were, its vicinity to his native country, the peculiar dexterity of the Nuremberg artiſts in fabricating his aſtronomical machines, and the facility with which he might maintain a correſpondence with foreign countries, by means of the merchants in that commercial city. Being now well ſkilled in all the branches of learning, and of the mathematical ſciences, he determined to employ himſelf in making aſtronomical obſervations, and alſo in publiſhing the beſt of the ancient authors, as well as the reſults of his own labours. With this deſign he began to ſet up a printing-houſe, and formed a nomenclature of the books intended by him for publication, which is ſtill extant. The fame of Regiomontanus had reached Nuremberg long before his ſettlement there; and, after he had taken up his abode among them, the citizens juſtly regarded him as an ornament to their city. Among others, one of the principal of that claſs, who was rich, and well-ſkilled in the ſciences, particularly aſtronomy, cultivated an intimacy with our mathematician; and, as ſoon as he was appriſed of the laudable deſigns which he had in view, he took upon himſelf the expenſe of conſtructing the neceſſary aſtronomical inſtruments, and of erecting a printing-houſe. With regard to his printing-houſe, as ſoon as it was completed, Muller put to preſs two works of his own, and two others. The latter were, the "New Theories" of his maſter Purbach, and the "Aſtronomics" of Manilius. His own productions were, the "New Calendar," and his "Ephemerides." In the former are given, as he ſays in the nomenclature above mentioned, "the true oppoſitions and conjunctions of the luminaries; delineations of their eclipſes; the true places of the luminaries every day; the difference of the hours, equinoctial and temporal, &c." Of his "Ephemerides" he ſays in the ſame nomenclature, that it is "what is vulgarly called an almanac for thirty years; where you may every day ſee the true motion of all the planets, of the head of the lunar dragon, together with the aſpects of the moon to the ſun and planets, and the hours of thoſe aſpects noted; laſtly, the eclipſes of the luminaries, if any ſhould hereafter happen, are deſcribed in their places; and in the fronts of the pages are marked the latitudes." So acceptable was this work at that time, that every copy was ſold for twelve hundred pieces of gold, and it was eagerly purchaſed by perſons of all nations. He likewiſe publiſhed moſt acute "Commentaries on Ptolemy's Almageſt:" a work which cardinal Beſſarion valued ſo highly, that he ſcrupled not to pronounce it worth a whole province. He alſo prepared new verſions of Ptolemy's Coſmography; and, at his leiſure hours, examined and explained works of another nature. He inquired how high the vapours are carried above the earth; which he fixed to be not more than twelve German miles. After making obſervations on two comets which appeared in 1471 and 1472, he publiſhed his Treatiſe "Concerning the true Place and Magnitude of Comets."

In the year 1474, pope Sixtus IV. entertained a deſign of reforming the calendar; and, conceiving Regiomontanus to be the moſt proper and able perſon for accompliſhing ſuch an undertaking, he ſent for him to Rome. To induce him the more readily to accept the invitation, his holineſs made him magnificent promiſes; and, as an earneſt of his future favours, nominated him for the preſent biſhop of Ratiſbon. Regiomontanus was for ſome time in ſuſpenſe, before he could prevail with himſelf to accept the invitation; but the importunity and authority of the pope prevailed, and he conſented, though not without great regret, to relinquiſh his employments at Nuremberg. He repaired to Rome in the year 1475: but died in that city about the end of July 1476; not without ſuſpicions of having been poiſoned by the ſons of George of Trebiſond, out of revenge for the death of their father, which was ſaid to have been haſtened by the mortification which he felt on account of the criticiſms made by our author on his tranſlation of Ptolemy's Almageſt. Regiomontanus died at the age of forty years and one month; and, as it was the ſubject of aſtoniſhment that he could undertake ſo many and ſuch prodigious works in ſo ſhort a ſpace of time, ſo his death was attended with univerſal lamentation for the loſs of ſuch an extraordinary man. He was buried in the Pantheon, and his memory was celebrated by the beſt poets of the times.

It may be proper here to obſerve, that Purbach was the firſt mathematician who reduced the trigonometrical tables of ſines, from the old ſexageſimal diviſion of the radius, to the decimal ſcale. The project of Purbach was perfected by Regiomontanus, who not only extended the ſines to every minute, the radius being 600,000, as deſigned by Purbach, but afterwards, diſliking that ſcheme, as evidently imperfect, he computed them likewiſe to the radius 1,000,000 for every minute of the quadrant. Regiomontanus alſo introduced the tangents into trigonometry, the canon of which he called *fœcundus*, becauſe of the great many advantages ariſing from them. Beſides theſe things, he enriched trigonometry with many theorems and precepts. Indeed, excepting for the uſe of logarithms, the trigonometry of Regiomontanus is but little inferior to that of our own time. His Treatiſe on Plane and Spherical Trigonometry, in five books, was written about the year 1464, and printed in folio at Nuremberg in 1553. In the fifth book are various problems concerning rectilinear triangles, ſome of which are reſolved by means of algebra: a proof that this ſcience was not wholly unknown in Europe before the treatiſe of Lucas de Burgo. Regiomontanus was author of ſome other works beſides thoſe already mentioned: and, of his mechanical projects, we are told by Peter Ramus, that in his workſhop at Nuremberg there was an automaton in perpetual motion: that he made an artificial fly, which, taking its flight from his hand, would fly round the room, and at laſt return to his maſter's hand: that he fabricated an eagle, which, on the emperor's approach to the city, he ſent out, high in the air, a conſiderable diſtance to meet him, and that it kept him company to the very gates of the city. "Let us no more wonder, adds Ramus, "at the dove of Archytas, ſince Nuremberg can ſhow a fly and an eagle armed with geometrical wings."

MUL'LER, the name of three Dutch engravers of the ſixteenth century.

HERMAN MULLER was a native of Holland, but we know not the preciſe time or place of his birth. He worked in conjunction with Cornelius Cort, in the earlier part of the career of that artiſt, for Jerome Cock. The ſole inſtrument of his art was the graver, which he handled with tolerable preciſion, but not much freedom. In his beſt works his drawing is performed with care; and in his latter works he aimed at the bold and free ſtyle of Goltzius, which had by this time excited the ſurpriſe of moſt of his contemporaries, and the admiration of ſome; but in this endeavour our artiſt was not very ſucceſsful.

JOHN MULLER, of the ſame family, was an artiſt of more vigorous powers. He was born in the year 1570, as is ſuppoſed at Amſterdam; but how he ſtood related to Herman is not known. His vigour, however, as an artiſt, was not wiſely employed, like that of an Hercules; but rather extravagantly laviſhed; he ſwaggered like a giant of romance. Studying under Henry Goltzius at his worſt period, he learned to exceed even his exceſſes. He caught the enthuſiaſm of that great artiſt, but fell ſhort of him in judgment and variety. The modeſty of Nature was with Muller, as with Spranger, entirely out of the queſtion, and the more he could out-herod Herod in his manual execution and ſtyle of deſign, (eſpecially when engraving after Bartholomew Spranger,) the better he appears to have pleaſed himſelf. Hence ſome of his extravagancies are ſcarcely leſs ludicrous than others are ſeriouſly ſurpriſing. Watelet ſays of him, that "he handled the graver with the greateſt freedom, and will ever be worthy of the attention of thoſe artiſts who wiſh to diſtinguiſh themſelves in the mechanical part of engraving; but they muſt learn to ſubdue the audacity of his ſtyle. It is very difficult to employ leſs work than Muller, in rendering the textures of objects; and he always worked his plates up to a good tone. He underſtood the human figure well; but, from engraving much after Adrian Vries and Bartholomew Spranger, acquired a mannered habit of drawing, which particularly diſcovered itſelf in his hands and feet." To this eſtimate of his merits, Strutt adds, "the facility with which he handled the graver, for he worked with that inſtrument only, cannot be ſufficient expreſſed; his works muſt be ſeen to convey a proper idea of it to the mind, yet, if in freedom of execution he equalled his maſter, in every other requiſite he fell far ſhort of him," &c.

That SOLOMON MULLER was of the ſame family with Herman and John, as Strutt has conjectured, appears very doubtful, if not altogether an error. He ſometimes wrote his name *Miller*; and is ſo utterly deſtitute of the talent and enthuſiaſm of the Mullers, that he appears, from his ſmall Bible-prints, rather to have copied the worſt of the Wierixes, with equal neatneſs, but with deeper dulneſs.

MUL'LER (John), a learned German Lutheran divine, and celebrated controverſial writer, was born at Breſlaw, the capital of Sileſia, in the year 1598. After having gone through his courſe of grammar-learning, he commenced the ſtudy of philoſophy and divinity in his native city, and at the age of twenty entered of the univerſity of Wittemberg. Here he purſued his ſtudies with uncommon aſſiduity, and about the year 1619 took the degree of maſter of philoſophy with great applauſe. He now removed for a ſhort time to the univerſity of Leipſic; and, returning afterwards to Wittemberg, in 1622 he was appointed to the profeſſorſhip of moral philoſophy. Two years after this he was admitted a licentiate in divinity, and in 1627 accepted an invitation to become paſtor of the church of St. Peter and St. Paul at Hamburg. In this city he lived till he was ſenior miniſter; was appointed inſpector of the ſchools and churches; was frequently conſulted in eccleſiaſtical affairs, by the princes of Brunſwick, Brandenburg, and the Palatinate; and acquired great celebrity by his numerous writings in defence of the proteſtant cauſe againſt the papiſts, as well as by his other various and controverſial productions. He expired ſuddenly at church, when about to enter the pulpit, in 1673, at the age of ſeventy-five. *Witte Diarium Biog.*

MUL'LER (John), a celebrated divine and preacher at Zurich in the ſeventeenth century. Though we are ſupplied with no materials relative to his perſonal hiſtory, excepting that he was living in the year 1678, yet the various literature requiſite for the production of his numerous works ſeems to entitle him to this ſlight notice. The principal of them are, 1. Quæſtione miſcellanæ de Muhammedonorum Deo. 2. De Perſico Twaſi Pentateuchs. 3. De Sadducæis, 1653. 4. Dyas Quæſtionum de Nomine Jeſu et Verſione Æthiopica, 1654. 5. Diſputationes de Hiſtoriæ Definitione, 1659. 6. De Sacris Scriptoribus in Genere. 7. De Evangelica Magorum Hiſtoria. 8. De Scriptis S. Matthæi, 1660. 9. Heptas Quæſtionum de Nativitatis Chriſti Feſto, 1672. 10. Vindiciæ Locorum Vet. Teſtament, Gen. i. iii. 11. Horologium pœnitentiale. 12. Tuba Joelis. 13. Speculum pœnitentiale. 14. Tractatus de Monachatu et Euchariſtia, &c. *Moreri.*

MUL'LER (Henry), a learned German Lutheran divine and theological profeſſor, was born at Lubeck, in the year 1631. He commenced the ſtudy of oriental literature and philoſophy at Roſtock; and in 1647 he was ſent to the univerſity of Grypſwalde, in Pomerania, where he continued three years, ſtudying divinity as well as the other branches of academical learning. In the year 1651 he was admitted to the degree of maſter of philoſophy; after which he ſpent about two years in increaſing his ſtock of knowledge, at the univerſities of Leipſic and Wittemberg. In 1563 he returned to Roſtock, of which place his father was a reſpectable citizen; and in the following year was promoted by the ſenate to the dignity of archdeacon. Six years afterwards he was appointed Greek profeſſor in the univerſity; and in 1660, he received the degree of doctor of divinity at Helmſtadt, after paſſing through the uſual exerciſes on ſuch occaſions with univerſal applauſe. In 1662, he was choſen paſtor of St. Mary's at Hamburgh, and ſuperintendent of the churches in that diſtrict; and not long afterwards he was nominated to the profeſſorſhip of divinity in that city, which he held with great reputation during about eight years. In 1671, he was appointed ſuperintendent of Roſtock; whence ſubſequent invitations to ſeveral other places could not induce him to remove, and where he thrice filled the poſt of rector of the univerſity. He died of an inveterate ſcorbutic diſorder in 1675, at the early age of forty-four. He was the author of ſeveral works which are held in much eſtimation, among which are, 1. Harmonia Veteris et Novi Teſtamenti. 2. Theologia Scholaſtica. 3. Orator Eccleſiaſticus. 4. Methodus Politica. 5. Tractatus de Pœnitentia; and ſeveral practical, devotional, and miſcellaneous, pieces in the German language. *Witte Diarium Biog.*

MUL'LER (Andrew), a celebrated German writer, a native of Pomerania, was born in 1630. At the age of ſixteen he was ſent to the univerſity of Roſtock; and became in a ſhort time diſtinguiſhed for his compoſitions in the Hebrew, Greek, and Latin, poetry. After this he ſtudied at Konigſberg and Wittemberg; and became ſo completely maſter of the oriental languages, that he was invited to England by Walton, to aſſiſt him in his famous Polyglott Bible, on which, and on Caſtelli's Lexicon, he laboured with incredible diligence for the ſpace of ten years. After his return to Germany, he became inſpector at Bernau, and provoſt at Berlin. He found the duties of theſe offices incompatible with his oriental ſtudies, reſigned them in a ſhort time, and devoted himſelf wholly to his favourite purſuits. At Stettin, whither he retired, he publiſhed, with obſervations, ſpecimens of the Lord's Prayer in ſixty-ſix alphabets. He was intimately acquainted with the Chineſe, and promiſed to draw up a Clavis Sinica, which he thought would enable a perſon of ordinary capacity to read Chineſe and Japaneſe books in the courſe of a few months. This work never appeared, and it is believed he burnt the manuſcript with many others, during a fit of ſickneſs attended with delirium. He died in 1694, and by his laſt will bequeathed his Chineſe printing-materials to the library at Berlin. He was author of many very learned works; of theſe the titles of the following may be noted: 1. Abdallæ Beidavei Hiſtoria Sinenſis Perſicè et Latinè, cum notis. 2. Monumentum Sinicum cum Commentario novenſili. 3. Hebdomas Obſervationum Sinicarum. 4. Æconomia Bibliothecæ Sinicæ. 5. Symbola Syrica, cum duabus Diſſertationibus. Some of his works were collected together and publiſhed in 1695, with the title of "Mulleri Opuſcula nonnulla Orientalia." It is recorded of him, that he was ſo attached to his books, that he would not leave them for a moment to witneſs the great cavalcade, on the entry of Charles II. into London, that paſſed by his window. *Gen. Biog.*

MULLER (Gerhard-Frederic), a celebrated German, known as well for his travels as his writings, was born in 1705, in Herforden, in Weſtphalia, where he received the early part of his education under his father. At the age of ſeventeen he was ſent to the univerſity of Rinteln, where he reſided a year, and then removed to Leipſic. Here he ſo diſtinguiſhed himſelf, that he was recommended by profeſſor Mencke as an adjunct in the hiſtorical claſs of the academy founded at Peterſburgh by Peter the Great. He accordingly ſet out for that city, and was ſome time employed in teaching the higher claſſes in the Latin language, geography, and hiſtory: he was then appointed aſſiſtant ſecretary to the inſtitution; in 1728 he was made under-librarian to the imperial library, and in 1730 he was choſen profeſſor of hiſtory.

He now applied for leave of abſence, in order to gratify his wiſh of ſeeing foreign countries. His tour through Germany, Holland, and England, laſted from the month of Auguſt 1730 till the month of Auguſt 1731; and in the courſe of which he was elected a fellow of the Royal Society of London. On his return to Peterſburgh he read lectures in the academy till 1733; and gave private inſtructions to ſome young gentlemen who were placed under his tuition.

At this period a new theatre was opened for his talents, by his being appointed to accompany J. G. Gmelin and De L'Iſle de la Croyere on their travels through Siberia. The department aſſigned to Muller was every thing that related to the geography and antiquities of the country, as well as the hiſtory of the different tribes by which it is inhabited; and it appears, from the information which he tranſmitted to the directing ſenate, and to the academy, and from his works, that no perſon better qualified could have been employed for this purpoſe. He wrote an accurate account of the whole journey; traced out the various routes, or cauſed them to be delineated by his aſſiſtants; wrote geographical, hiſtorical, and political, deſcriptions of all the towns; examined their records, and took extracts from them, which all together formed fifty volumes in folio. He likewiſe acted as ſecretary to the expedition, and aſſiſted Gmelin in collecting objects of natural hiſtory. He conſtructed, alſo, ſeveral maps, and had others conſtructed by the engineers who accompanied him. Theſe travellers left Peterſburgh on the 8th of Auguſt, 1733; and, proceeding down the Volga, arrived, in the middle of October, at Kaſan, and towards the end of December croſſed the Ural Mountains, which form the boundary between Europe and Aſia, and between Ruſſia Proper and Siberia. In the ſubſequent long ſeries of travels they underwent great fatigues, and their health was expoſed to much injury from the ſeverity of the climates which they viſited. M. Muller, in particular, was a conſiderable ſufferer from indiſpoſition, though it did not prevent his active purſuit of the objects of his miſſion. We ſhall not here enter into the particulars of his travels, which form a diſtinct narrative, together with thoſe of his companions. It was not till January 1742, that in company with Gmelin he left Tobolſk on his return to Europe. They paſſed the ſummer in Werchoturia, where Muller became acquainted with the widow of a German ſurgeon, whom he married, and with whom he afterwards lived in the happieſt union for forty-one years. In February 1743, they reached Peterſburgh, after a journey of nearly ten years, during which they had travelled about 4480 German miles, or more than three times that number of Engliſh miles. An account of their travels was afterwards publiſhed by Gmelin, in four volumes 8vo. Notwithſtanding the hardſhips which theſe travellers had undergone, and the difficulties they had encountered, in this long and tedious tour, they did not meet with that reward which they expected, and to which they were juſtly entitled. Gmelin, therefore, returned in diſguſt to his own country, where he was appointed profeſſor of chemiſtry and botany in Tubingen; but Muller remained in Ruſſia, obliged for a long time to ſtruggle with poverty, and all thoſe evils to which men of letters are too often expoſed. This neglect, however, did not damp his ardour for literary purſuits. He wrote in 1744, at the requeſt of prince Juſupof, a Diſſertation on the Trade of Siberia, compiled from authentic records which he had collected during his travels; but the printing of this uſeful work was impeded by ſo many obſtacles, that the firſt part was not publiſhed till 1750, and the continuation never made its appearance. In 1747 Muller was appointed hiſtoriographer of the Ruſſian empire, and in 1754 he was nominated by the preſident to be ſecretary to the Academy of Sciences; by which means he acquired a ſmall addition to his income. In conſequence of the latter office, he conducted the extenſive foreign correſpondence of the academy, ſuperintended the publication of the Tranſactions, and exerted himſelf to promote the object of the eſtabliſhment, by procuring men of talents to ſupply the vacant places. In the year 1755 he endeavoured to render himſelf ſtill farther uſeful by publiſhing in the Ruſſian language, a work entitled *Jeſchemeſatſchnia Lotſchinenia*, or Monthly Eſſays; which contributed very much to the general diffuſion of knowledge in Ruſſia, and in which he was aſſiſted by ſeveral Ruſſians of diſtinction who had a taſte for the ſciences. In the year 1759 he corrected and improved that part of Buſching's geography which relates to Ruſſia; and on this occaſion he collected much uſeful information in regard to Livonia and Eſthonia, with a view of publiſhing a topographical deſcription of theſe countries; but this deſign he never carried into execution. In 1763 he was appointed director of the ſchool for foundlings, eſtabliſhed by the empreſs Catharine at Moſcow; an office which he diſcharged for ſome time, much to his own credit and the ſatisfaction of his ſovereign; but in 1766 he was nominated to a ſituation more agreeable to his taſte and favourable to his purſuits, that of keeper of the archives in that city, (now no more,) with an additional ſalary of 1000 roubles. The remaining part of his life was ſpent in literary labours, to which he now entirely devoted himſelf; and, after being raiſed to the rank of counſellor of ſtate, and inveſted with the order of Wladimir, this learned and laborious man died, in the month of October, 1783, in the ſeventy-ninth year of his age.

Muller was of a robuſt conſtitution, and well-formed. He had a prepoſſeſſing countenance, and in his conduct diſplayed great ſimplicity and goodneſs of heart. His propenſity to labour was ſo exceedingly ſtrong, that he ſeldom went into company, being employed for the moſt part at his deſk, or in ſome uſeful occupation. He wrote the German, Ruſſian, French, and Latin, languages with uncommon fluency; and read the Engliſh, Dutch, Swediſh, Daniſh, and Greek, with great facility. His memory was ſurpriſing, even at an advanced age; and his accurate acquaintance with the minuteſt incidents of the Ruſſian annals almoſt ſurpaſſed belief. He poſſeſſed moſt of the books in the different languages of modern Europe which treat of Ruſſia, with an invaluable collection of ſtate-papers and manuſcripts, arranged in the exacteſt order; and, though he did not favour the world with a regular hiſtory of that country, he will always be conſidered as the great father of the Ruſſian hiſtory, both on account of the excellent ſpecimens which he himſelf produced, and the vaſt fund of information he bequeathed to future authors. His fine collection of books and manuſcripts was purchaſed by the empreſs Catharine for about 2000l. ſterling. His principal work is entitled *Sammlung Ruſſiſcher Geſchichte*, a Collection of Pieces reſpecting the Hiſtory of Ruſſia, in 9 vols. 8vo. printed at different intervals at the preſs of the Imperial Academy of Sciences. The firſt part came out in 1732, and the laſt in 1764. This ſtorehouſe of information and literature in regard to the antiquities, hiſtory, geography, and commerce, of Ruſſia, and many of the neighbouring countries, conveys the moſt indiſputable proofs of the author's learning, diligence, and fidelity. To this work the accurate and indefatigable author ſucceſſively added many other valuable performances upon ſimilar ſubjects, both in the German and Ruſſian languages, which elucidate various parts in the hiſtory of this empire.

MUL'LER (John), an eminent Swiſs hiſtorian, was born at Schaffhauſen, in 1752. He acquired a taſte for hiſtory, and particularly that of Swiſſerland, from his maternal grandfather, who poſſeſſed a very large collection of ancient chronicles and ſimilar works; and in his twelfth year he had made uncommon progreſs in that branch of ſtudy. The ſubſequent peruſal of the Latin claſſics excited in his breaſt a high admiration and reſpect for great men, and an ardent attachment to freedom. His father having deſtined him for the church, he was ſent to Gottingen, where he attended the lectures of the principal profeſſors; but he ſoon conceived a diſlike to theology, and, turning his attention to hiſtory, undertook, by the advice of Schlötzer, a critical examination of the Cimbrian war. He next began to make collections for a hiſtory of Swiſſerland; and he became alſo an active labourer for the General German Bibliotheque, which at that time was publiſhed at Berlin. The government of his country was not inattentive to his merit; and in his twentieth year, as an encouragement to his diligence, he was made profeſſor of the Greek language. As ſoon as his intention of writing a complete hiſtory of Swiſſerland was known, he received, for many years, the warmeſt ſupport from Bodmer, Breitinger, Gottlob Emanuel Haller, (ſon of the great Haller,) and many other eminent men. In his reſearches on this ſubject he employed eight or nine years; and in 1774 he went to Geneva, where he undertook the education of the two ſons of M. Tronchin. Here he became acquainted with a young man from Carolina, named Kinloch; and, an intimate friendſhip being formed between them, they agreed to employ two hours daily in reading Tacitus and Monteſquieu, and in ſtudying Blackſtone, and other Engliſh works. He lived alſo on terms of intimacy with Voltaire, and with Alleyn Fitzherbert, who at that time ſhowed indications of thoſe diplomatic talents which he afterwards diſplayed as Lord St. Helens. In 1780 he publiſhed the firſt part of his Hiſtory of Swiſſerland; and, having been recommended to Gleim, he went to Berlin to view the monarchy which had been raiſed by the genius of Frederick the Great. He was received by that prince's ſucceſſor in the moſt flattering manner; but the diſturbances of Geneva induced him ſoon to think of quitting Pruſſia, in order to aſſiſt his friends in that city. He had been a ſtrenuous ſupporter of the exiſting government, though he did not always approve of its meaſures; but his work, entitled Eſſais Hiſtoriques, being diſagreeable to the prevailing party, the preſent was not thought the moſt favourable time for his return. Having heard at Caſſel the ſtate of affairs at Geneva, he accepted there the place of profeſſor in the Caroline College, offered to him by the prince, who in 1782 made him a counſellor and under-librarian. In the next year, however, he returned with permiſſion to his native country, and reſided on an eſtate called Delices, belonging to M. Tronchin, in the neighbourhood of Geneva. In 1784 he began to reviſe his Swiſs hiſtory; and in 1786 he was appointed by the elector of Mentz aulic counſellor and librarian to the univerſity. In the year 1793 the emperor Leopold II. made him an aulic counſellor, and official in the imperial court and office of foreign affairs at Vienna. In 1800, on the death of Denis, he obtained the place of firſt keeper of the imperial library, one of the largeſt and richeſt in the world. In 1804 he removed to Berlin, as hiſtoriographer to the houſe of Brandenburg, and a member of the Academy of Sciences, with the title of privy-counſellor. In 1807 he was invited by the king of Wurtemberg to be profeſſor in the univerſity of Tubingen, with permiſſion to devote himſelf to his literary labours at pleaſure; and ſoon after, he was nominated ſecretary of ſtate in the ephemeral kingdom of Weſtphalia, and obtained the grand croſs of Holland. He, however, did not long ſurvive theſe honours, dying at Caſſel on May 29, 1809.

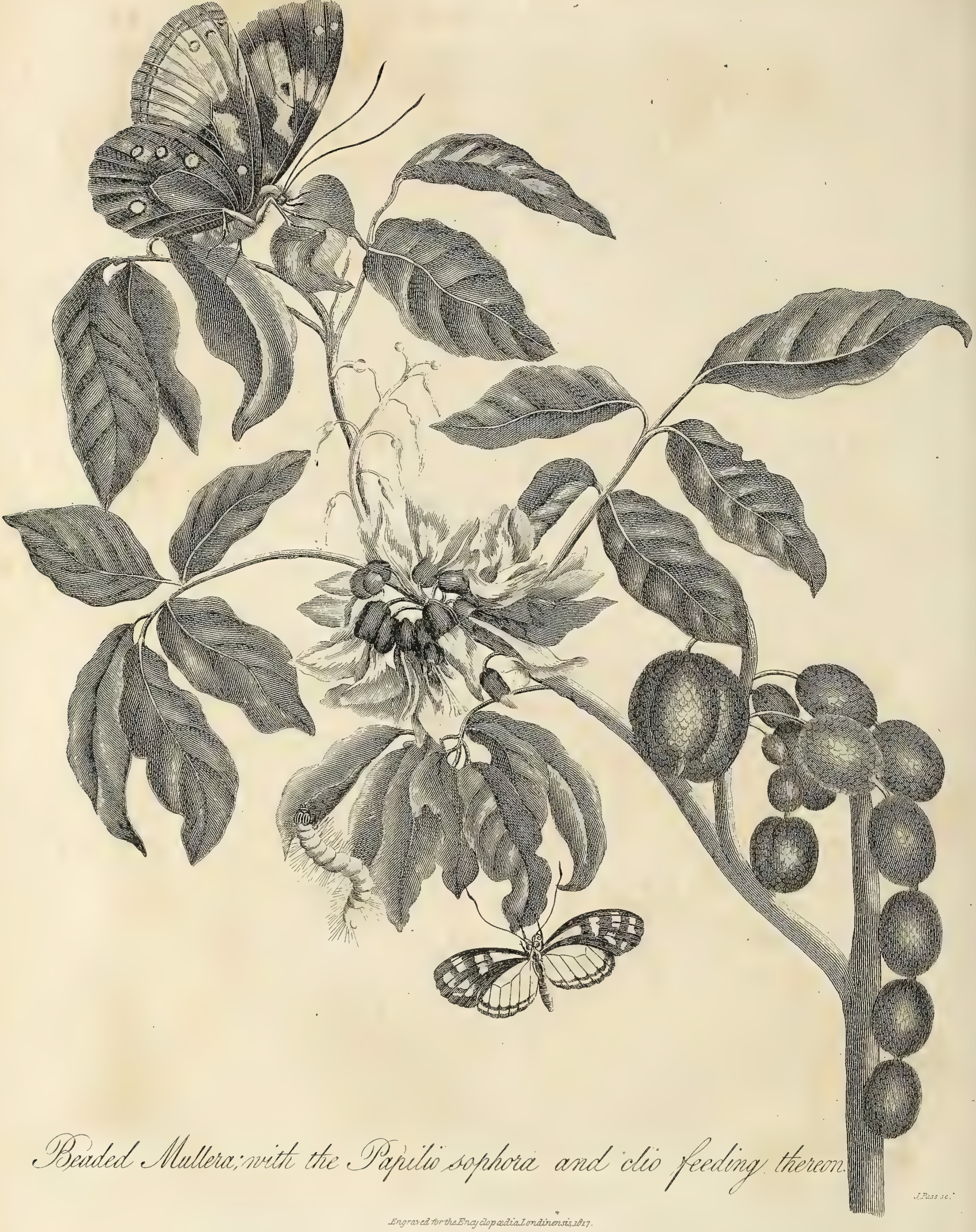
Muller may be juſtly reckoned among the claſſical writers of Germany. His hiſtorical models were Thucydides and Tacitus, whoſe manner he cloſely imitated. His reflections are judicious; and his ſtyle, though ſometimes harſh, is ſtrong and energetic. His principal works are 1. The Hiſtory of the Swiſs Confederation, a new and improved edition, Leipſic, 1806, five parts, 8vo. 2. A View of the German Confederation, ſecond improved edition, ibid. 1788, 8vo. 3. Letters from a young literary Man to his Friend, Tubingen, 1802, 8vo. He was the author alſo of a great many diſſertations publiſhed in journals and other periodical works; among which are the following: On the Hiſtory of Frederic II. read before the Royal Academy of Sciences at Berlin, on the 24th of January 1805; and On the Decline of Liberty among ancient Nations, read in the ſame on the 30th of January, 1806. He left in manuſcript A general Hiſtory of the World, in Twenty-four Books, which has been publiſhed by his brother in eight volumes 8vo. Tubingen, 1811. His whole works were printed at the ſame place, in fifteen vols. 8vo. 1810—1812. *Monthly Review*, vol. lxxi. p. 449–457.

MUL'LERA, *ſ.* [named by the younger Linnæus in honour of *Otho Frederic Muller*, author of the Flora Fridrichſdalina, and continuator of the Flora Danica after Oeder declined it. Muller furniſhed various tracts on natural hiſtory for the Daniſh Society's Tranſactions; and died at Copenhagen in 1784, at the age of fifty-four.] In botany, a genus of the claſs diadelphia, order decandria, natural order of papilionaceæ, (leguminoſæ, *Juſſ.*) Generic characters—Calyx: perianthium one-leafed, bell-ſhaped, compreſſed, truncated and flattiſh at the baſe, four-toothed; the upper tooth obliterated, very ſeldom cloven; the lateral ones more remote, acute, the loweſt more produced, and more awl-ſhaped. Corolla: papilionaceous; banner reflex, cordate, ovate, quite entire, obtuſe, flat; claw flattiſh, ſcarcely longer than the calyx, remote from the wings and keel; wings oblong, converging, gibbous at the baſe, clawed; keel ſhorter than the wings, compoſed of two diſtinct, converging, clawed petals, forming an oblong, compreſſed, ſtraight ſheath. Stamina: filaments ten, united into a compreſſed ſheath, broader at the baſe; antheræ ovate. Piſtillum: germen linear, compreſſed; ſtyle ſhort; ſtigma acute. Pericarpium; fruit necklace-form, compoſed of three, four, or five, concatenated, ſolid, one-celled, one-valved, one-ſeeded, globules, the loweſt of which are larger. Seeds: ſolitary, compreſſed, kidney-form, ſmooth.—*Eſſential Character.* Pericarpium elongated, fleſhy, necklace-form, with one-ſeeded globules.

Mullera moniliformis, or beaded mullera; the only ſpecies. It is a tree with ferruginous, ſomewhat-warted, branches. Leaves alternate, pinnate, having two pairs of leaflets, with an odd one at the end; flowers ſcattered, nodding, the ſize of thoſe of Laburnum: the petals fall off, whilſt the calyx remains, and the germen ſwells: this

however

MULLERA.



Beaded Mullera; with the Papilio sophora and clio feeding thereon.

J. Pass sc.

Engraved for the Encyclopaedia Londinensis, 1817.

however does not become a fruit, but it is lengthened out, and from it, as from a receptacle, come out ſeveral globules, flatted a little and in a chain, no veſtige of which is in the flower. At firſt they are the ſize of a lentil-ſeed, but when perfect they are as big as a large plum: they are exactly ſpherical, very ſmooth, and ſeparated from the receptacle by a petiole; from the top of each globule iſſues a ſhort petiole uniting it to the next, and ſo on: no ſuture is apparent in the globules, nor are they cloven as in the proper legume; but they are compoſed of a thick hard ſubſtance, in the middle of which is a cavity, as in oblong plums, filled with one kidney-form ſeed, the ſize of a large kidney-bean, with the *hilum*, or umbilical ſcar, at the angle, as in legumes. This plant has a near affinity to Sophora; but it differs from it in having the ſtamens properly diadelphous, and the fruit not leguminous, or opening longitudinally by two valves. Native of Surinam.

It has its name (moniliformis) from the mode in which the fruit hangs, joined in a long row like a necklace, or rather like a papiſt's roſary, or ſtring of beads; as appears from the annexed figure, which is copied from Mad. Merian, who drew it on the ſpot in Surinam.

MUL'LERAS, a town of Germany, in the circle of Upper Saxony, and marquiſate of Brandenburg, ſeated thirty-eight miles ſouth of Berlin, upon a canal which joins the Oder and the Spree. This canal is fifteen miles in length, ten yards in breadth, and ſeven feet in depth. It was eight years in making; and ſince that time the cities of Hamburgh and Breſlaw have carried on great trade by water. Lat. 52. 21. N. lon. 14. 50. E.

MUL'LET, *ſ.* [*mulet*, Fr.] A ſea-fiſh. See Mugil.—Care muſt be taken, leſt, being deceived by the identity of names, we take our Engliſh *mullet* to be the mullus of the ancients. *Ray.*

Of carps and *mullets* why prefer the great?
Yet for ſmall turbots ſuch eſteem profeſs? *Pope.*

MUL'LET, or Mollet, *ſ.* [*mollette*, Fr.] See the article Heraldry, vol. ix. p. 423.

MUL'LET, a peninſula of Ireland, in the county of Mayo, about nine miles long, and, in general, about two wide; a large bay, called *Blackſod Bay*, almoſt dividing it from the reſt of the county. This peninſula is, contrary to the neighbouring coaſt of Mayo, ſaid to be fertile and populous.

MULLICKPOU'R, a town of Bengal: fixteen miles eaſt of Hoogly.

MULLICKPOU'R, a town of Bengal: twenty-five miles north-eaſt of Calcutta.

MUL'LICO HILL', a town of New Jerſey: fifty miles north-eaſt of Philadelphia.

MUL'LICUS, a river in New Jerſey, which runs into the Atlantic a little to the ſouth of Little-Egg-harbour.

MULLIEBANG', a town of Bengal, on the left bank of the Ganges, oppoſite Hoogly.

MULLIGOWITZ', a town of Bohemia, in the circle of Rakonitz: five miles north of Rakonitz.

MUL'LIGRUBS, *ſ.* Twiſting of the guts; ſometimes ſullenneſs. *Dr. Johnſon, from Ainſworth.*—Sick of the *mulligrubs;* low-ſpirited; having an imaginary ſickneſs. *Groſe's Claſſ. Dict.*—Dr. Jamieſon defines the Scottiſh *molligrant*, *molligrub*, or *mullygrub*, the act of whining, complaining, or murmuring; and cites the Icel. *mogla*, murmur, and *graun*, the countenance; q. d. ſuch whining as diſtorts the countenance; or, as including two ideas nearly connected, *grunnia*, murmuring and grunting. He finds another apparent etymon in the Teut. *muylen*, to mutter, with the Germ. *grob*, great; q. d. a great complaint or muttering. Whether this be the origin or not, the word certainly ſeems to have been old in Engliſh, as a contemptuous expreſſion; though Dr. Johnſon could find no example of it. *Todd.*—What's the matter? Whither go all theſe men-menders? theſe phyſicians? Whoſe dog lies ſick o' the *mulligrubs*? *Beaumont and Fletcher's Monſ. Thomas.*

MULINCOT'TA, a town of Hindooſtan, in the Carnatic: fifteen miles ſouth-eaſt of Tinevelly.

MULLINGA'R, the county-town of Weſtmeath, in the province of Leinſter, Ireland. It is a large well-built town, ſituated on the River Feyle, iſſuing out of Lough Hoyle. There is a wool-fair held here; but it is not ſo much frequented as formerly, in conſequence of that held at Balinaſloe. It formerly returned two members to parliament, but this privilege ceaſed at the union. Mullingar is thirty-eight miles weſt-by-north from Dublin. Lat. 53. 31. N. lon. 7. 18. W.

Within a few miles of Mullingar are the ruins of a church, and alſo thoſe of a caſtle. In 1227, the priory of St. Mary, formerly known by the name of *The Houſe of God of Mullingar*, was founded here by Ralph de Petyt biſhop of Meath, for regular canons of the order of St. Auguſtin. A Dominican friary was alſo founded here in 1237 by the family of Nugent; ſome ruins of which ſtill remain. In 1622, the friars of Multifarnham began to erect a houſe there for friars of the order of St. Francis, but it was never completed.

MUL'LION, *ſ.* [*moulure*, Fr.] A diviſion in a window-frame; a bar to divide the light into compartments, and is either curved or ſtraight. Vertical mullions are ſometimes called *munnions;* and thoſe which run horizontally are called *tranſoms.* The whole of the mullions of a window above the ſpringing of the arch is called the *head-work.*

MUL'LOCK, *ſ.* An old word, and yet uſed in ſeveral places, ſignifying dirt, rubbiſh, or aſhes. See Mull.—The *mullock* on an hepe yſweped was. *Chaucer's Chan. Yeom. Tale.*

MULLOO'IA, a fortreſs of Fez, in the province of Garet, furniſhed with a garriſon.

MULLOO'IAH, or Mullu'via, a river of Africa, which riſes in the mountains between Morocco and Sugulmeſſa, and runs into the Mediterranean in lat. 34. 55. N. lon. 2. 6. W. It forms the boundary between the empire of Morocco and the province of Tremecen; as it was formerly between Mauritania and Numidia, or between Mauritania Tingitana and Mauritania Cæſarienſis. Its whole courſe is from ſouth to north about two hundred miles. This river is only navigable for ſmall veſſels.

MULLUNG', a town of Bengal: eight miles ſouth of Rungpour.

MUL'LUS, *ſ.* the Surmullet; in ichthyology, a genus of fiſhes of the order thoracici, of which the generic characters are—Head compreſſed, ſloping, ſcaly; eyes oblong, approximate, vertical, furniſhed with a nictitating membrane; noſtrils double, minute; jaws and palate armed with ſmall teeth; tongue ſhort, narrow, ſmooth, fixed; gill-membrane three-rayed; the coverts of three pieces, very finely ſtriate; body round, long, moſtly red, coated with large ſcales eaſily dropping off. Moſt of the ſpecies have cirri or barbles from the lower lip: Cepede makes this a part of the generic character; but it is not univerſal. The fins are eight in number: two pectorals, two ventrals, one anal, one at the tail, and two at the back, of which the firſt is armed with ſpines.

Theſe fiſhes live on aquatic plants and the young of other fiſhes. They haunt the North and Baltic Seas, and other parts of the ocean; but more particularly the Mediterranean. As they are of a beautiful red colour, it is no wonder they were admired by the Greeks and Romans, particularly the latter. Pliny knew of two ſpecies with barbles; but he diſtinguiſhes them only as one living on fleſh, the other on ſnails and weeds; but this diſtinction is not in the nature of the fiſh; both have the mouth formed alike, therefore their food muſt be the ſame. Gmelin mentions ſix ſpecies only; ſeven have been added by Cepede from Commerſon's MSS. and two by Dr. Ruſſel.

1. Mullus ſurmuletus, the ſtriped ſurmullet. Two cirri from the lower jaw, and four yellow ſtripes, placed lengthwiſe, form the ſpecific character. There are 3 rays in the membrane of the gills, 15 in the pectoral fins, 6 in the

ventrals, 7 in the anal, 22 in the tail, 7 in the firſt dorſal, and 9 in the ſecond. The head of this fiſh is large, ornamented with yellow ſtripes on a white ground inclining to red. The mouth is ſmall, and the upper jaw is a little longer than the lower; from the lower ſide of the ſnout hang two barbles, about two inches long. The eyes, which are near the top of the head, are large, pupil blue, iris ſilvery. The aperture of the gills is wide, the membrane narrow. The trunk, which is broad in front, becomes narrow towards the extremity of the tail; it is round at the back and tail; on the back is a furrow to receive and hide the dorſal fin when the fiſh would withdraw it. The lateral line is parallel with the back; but goes off from it towards the tail, in the middle of which it is loſt. The body is red; and the ſtripes, which are of a gold-yellow, are loſt when the ſcales fall off, becauſe the ſtripes are on the ſurface of the ſcales; but the red colour, which is ſeen through the tranſparent ſcales, appears more beautiful after the ſcales are fallen. In China, this fiſh is red, white, and blue; and the head is of a beautiful red. All the fins are yellow, the rays inclining to red, except thoſe of the back; the rays of the firſt dorſal are hard and ſingle, the others ſoft and branched. See the annexed Plate, fig. 1.

This fiſh is found in the Northern Ocean, the Baltic, the Mediterranean, at the Antilles, and in China; but of various ſizes. In the Baltic, it is ſeldom more than ſix inches long; in the Northern Sea, fourteen inches; but larger in the Mediterranean; Juvenal ſpeaks of one which weighed 6lbs. Pliny ſpeaks of a fiſh found in the Red Sea, weighing 100lbs. which he regards as a ſurmullet: but Cepede ſuppoſed this muſt have been a Silurus, as they grow very large, are furniſhed with barbles, and are common in the waters of Egypt.

The ſurmullet, beſides its beautiful colours, is recommended by the whiteneſs, firmneſs, and delicacy, of its fleſh; and, when not too fat, is excellent food, and of eaſy digeſtion. They were in ſuch requeſt among the Romans, as to be bought by the private citizens for their weight in ſilver. It was in the purchaſe of this fiſh, above all others, that the wealthy ſenators ſhowed their extravagance and ſenſuality. Juvenal and Pliny afford ample teſtimony of the luxury of their age, which, happily for mankind, has never been equalled in any other period of human ſociety. An inſtance of 64l. being paid for a fiſh of three pounds weight, is recorded by Pliny. But the manner of dreſſing and eating theſe fiſh, ſtill more than the extravagance of the price, evinced the epicuriſm of the ancient entertainments. The mullet was not reckoned worth a farthing if it did not die in the hand of your gueſt. There was water kept in the eating-room into which the living animal was put, and from thence conveyed immediately to the ſtew, where it was dreſſed, which was alſo in the ſame apartment, and under the table; from thence the fiſh was placed upon it. It was cuſtomary to put the mullets into glaſs vaſes, that the company might be entertained with the various changes of their rich colours as they lay expiring. It was Apicius, that prince of gluttons, that firſt hit upon the ingenious invention of ſuffocating them in the exquiſite Carthaginian pickle, and afterwards procuring a rich ſauce from their livers. They were alſo regarded as a great ornament in fiſh-ponds, on account of their beautiful colours. The Greeks conſecrated it to Diana, becauſe, if we may believe Plutarch, it purſues and kills the ſea-wolf, which is one of the greateſt enemies to man. The ſurmullet is certainly one of the voracious tribe; according to Elian, it devours every thing it comes nigh, and is particularly fond of the fleſh of man and of animals; but it commonly lives on little fiſhes, crabs, and ſnails. Pliny ſays the ſnails give it a diſagreeable ſmell; the ſame ſays Galen of the crabs on which it feeds; that great phyſician ſeems not to have been fond of the ſurmullet, for he ſays it is not well-taſted, and that the large ones are hard and difficult of digeſtion; Ariſtotle, on the contrary, ſays it is tender and delicate, eſpecially in autumn. They aſſemble in the ſpring in ſhoals, leaving the bottom of the ſea, and depoſit their ſpawn at the mouths of rivers. According to Ariſtotle, they ſpawn the lateſt of any fiſh, and three times a-year; but this opinion can only ariſe from fiſh of different ages ſpawning at different parts of the year.

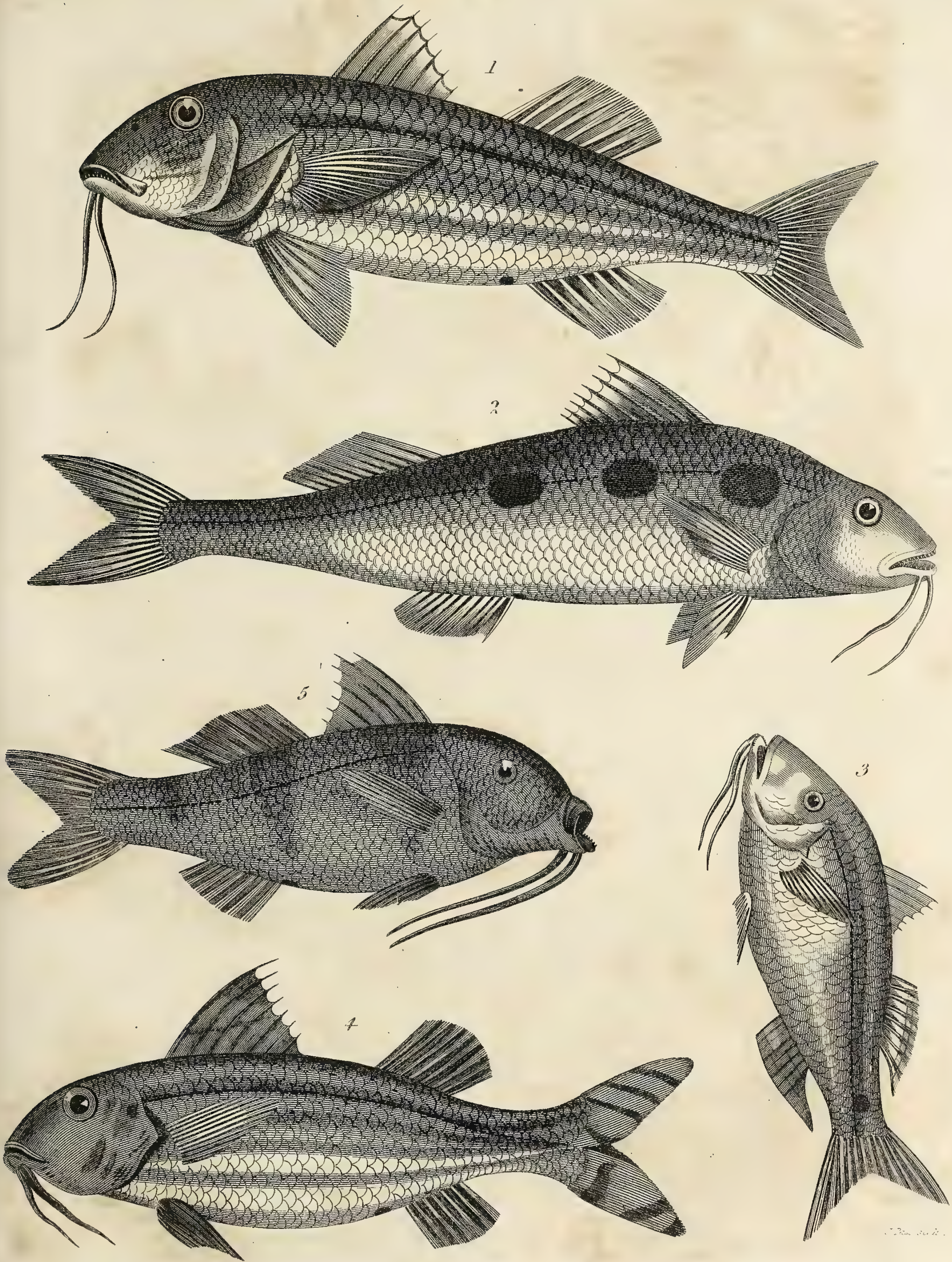
β. M. maculatus, the ſpotted ſurmullet, with three black ſpots on the lateral line, is regarded by Gmelin as a variety of the foregoing, but made a ſeparate ſpecies by Bloch and Cepede. The head is compreſſed, with a declining roſtrum, and ſcaly. The jaws of equal length, with teeth like a file. The noſtrils are ſingle. The eyes near the top of the head; the pupil is black, in a yellow iris. The gills have a large aperture, the membrane is covered. The body is long, and covered with ſcales; the lateral line is near the back; the anus in the middle of the body. The whole fiſh is of the colour of blood, except the barbles and the edges of the tail-fin, which incline to yellow, ſo that the black ſpots on the back appear very remarkable. This fiſh is found in the ſea at the Antilles, and in the lakes of Braſil. It grows to the ſize of a ſmall ſalmon; and prince Maurice ſays that thoſe caught in ſtill waters are fat and tender, but they will not keep. According to Piſo, this fiſh has no gall-bladder. This variety is ſhown at fig. 2.

2. Mullus barbatus, the red ſurmullet, or ſmaller redbeard: head rounded off or foreſhortened; cirri 2; body red, without ſtripes. There are 3 rays in the membrane of the gills, 15 in the pectoral fins, 6 in the ventrals, 7 in the anal, 17 in the tail, 7 in the firſt dorſal, and 9 in the ſecond. The head is broad, compreſſed, and covered with ſcales which eaſily come off. The jaws are of equal length, with a number of ſmall teeth; the front of the palate alſo is rough, and there are four bones like a file in the gullet; the tongue however is ſmooth. There are two long barbles at the chin; the noſtrils are ſingle, and midway between the bones of the lips (which are narrow) and the eyes. The aperture of the gills is large, the membrane concealed. The body is broad upwards, diminiſhed and compreſſed towards the tail, and covered with ſcales. The lateral line runs near the back; the anus nearer the tail than the head. The back and ſides are red, the belly ſilvery, the fins yellow. The firſt dorſal is compoſed of ſtiff rays; of the ſecond dorſal, ventral, and anal, the firſt is a ſtiff ray, the reſt flexible, and four-branched. This ſpecies is known on the coaſt of Cornwall; in the Baltic, about Denmark; in the Mediterranean, near Rome, Sardinia, and Malta; in the Atlantic, on the coaſts of Spain, Portugal, and France, eſpecially about Bourdeaux; in the North Sea, about Holland; and in the Eaſt Indies at the Moluccas. Mr. John, of Tranquebar, deſcribes it as a beautiful fiſh with golden ſpots on a red ground; it is ſix to nine inches long, and very well taſted; it comes up into rivers, and is caught in every ſeaſon, but not in abundance. The price is extremely high at Rome; but at Conſtantinople very low, becauſe they are brought to the markets in great plenty, and thereby become daily food. This was equally eſteemed in ancient Rome with the firſt ſpecies. It lives on crabs and other cruſtaceous fiſh; is caught either with a net or a line baited with a piece of crab.

3. Mullus Japonicus, the Japan ſurmullet: body yellow, without ſtripes; tail forked; cirri two. The firſt dorſal fin has 7 rays, the ſecond 9. This is hardly to be diſtinguiſhed from the preceding, except by the colour. It inhabits Japan, and is about ſix inches long. There are no teeth in the mouth. It was firſt deſcribed by Houttuyn.

4. Mullus auriflamma, the gold-ſpotted ſurmullet: white, with a tawny longitudinal ſtripe on each ſide; a round yellow ſpot on the baſe of the tail; tail-fin yellow, cirri two. Seven ſpines in the firſt dorſal fin, 10 rays in the ſecond, 17 in the pectorals, 6 in the ventrals, 9 in the anal, 15 in the tail. Obſerved by Forſkael in the Red Sea in Arabia. In this ſpecies the ſcales are membranaceous at the edge. The head is ſpotted with yellow at the ſides;

MULLUS.



J. Pass sculp.

1. Striped Surmullet; 2 Variety of the same. 3. Gold-spotted Surmullet.
4. Five-striped Purmullet. 5. Three-banded Surmullet.

[illegible]

teeth ſmall, numerous; the lateral line a little branched, nearer the back. Dorſal and caudal fins yellow, the reſt whitiſh. This is ſhown at fig. 3.

5. Mullus vittatus, the five-ſtriped ſurmullet: cirri two; body white, with two brown and three yellow ſtripes on each ſide; tail-fin ſtriped tranſverſely with brown. This was alſo found by Forſkael in the Red Sea. Body lanceolate, white; ſcales finely toothed, with obſolete elevated rivulets. Jaws crowded with teeth at the edges; cirri as long as the gill-coverts. Lateral line near the back, and ſlightly branched. Dorſal and caudal fins white, with brown bands. See fig. 4.

6. Mullus imberbis, the beardleſs ſurmullet: the want of barbles forms the ſpecific character. Six rays in the firſt dorſal fin, 10 in the ſecond, 12 in the pectorals, 6 in the ventrals, 10 in the anal, 20 in the tail. This ſpecies is found in the ſea about the iſland of Malta. It is of a beautiful red colour; the mouth is large; both jaws and palate rough. Artedius placed this, and indeed all the ſurmullets, in the genus Trigla. Cepede, from its wanting the barbles, made it a ſeparate genus, Apogon, ſignifying beardleſs. At Malta it is called *re di triglia*, king of the gurnards; and modern authors call it king of the ſurmullets; but for what reaſon is not known.

7. Mullus bifaſciatus, the two-banded ſurmullet: a tranſverſe ſtripe or band of a dark colour at the baſe of the firſt and ſecond dorſal fins; tail-fin diſtinctly bilobated; ſcales on the head ſimilar to thoſe on the back; cirri two, tapering. Seven ſtiff rays in the firſt dorſal fin, $\frac{1}{9}$ in the ſecond, in the anal fin 6 or 7 rays. This and the ſeven following are arranged by Cepede from Commerſon's MSS. not having been hitherto deſcribed by any other naturaliſt. The ſpecific character is ſo ample, that little more remains to be added. The ſcales of the upper ſurface are ſpotted at the baſe; the jaws are furniſhed with ſmall teeth.

8. Mullus trifaſciatus, the three-banded ſurmullet: body whitiſh, with three broad dark-brown ſtripes on each ſide; one from each dorſal fin, the third on the tail; cirri two, very long. Seven ſpines in the firſt dorſal fin, 9 rays in the ſecond, 6 or 7 in the anal. The head is covered with ſcales ſimilar to thoſe on the body; lower jaw the longeſt; teeth ſmall; the dorſal fins are very cloſe to each other. See fig. 5.

9. Mullus cycloſtomus, the round-mouthed ſurmullet: neither ſtripes, bands, nor ſpots; cirri two, very long; the aperture of the mouth forms a large portion of a circle; lateral line ſtraight, parallel with the back. Eight ſpinous rays in the firſt dorſal fin, $\frac{1}{8}$ in the ſecond, 7 or 8 in the anal. The lower jaw is ſomewhat longer than the upper; and from the ſhape of the mouth the ſpecific name is taken; *κυκλος* ſignifying a circle, and *στομα* the mouth. The tail-fin is bifurcated, like moſt of the genus, and very large. Teeth very ſmall.

10. Mullus macronema, the long-bearded ſurmullet: cirri two, very long; body whitiſh, with a longitudinal line on each ſide, and a black ſpot near the lateral line. Seven ſpinous rays in the firſt dorſal fin, 8 or 9 articulated rays in the ſecond, 7 or 8 in the anal. This is called *macronema* from the length of barbles, (*μακϱος*, long, and *νημα*, filament or barble;) though in this it reſembles the two preceding ſpecies. The ventral fins are much ſmaller than the pectorals; and there is a longitudinal ſtripe of a dark colour on the baſe of the ſecond dorſal.

11. Mullus barberinus, the ſhort-bearded ſurmullet: cirri two, reaching only to the hinder piece of the operculum, which ends in a recurved ſpine. There are 3 rays in the membrane of the gills, 7 in the firſt dorſal, 9 in the ſecond, (the laſt much longer than the reſt,) 17 in the pectorals, 6 in the ventrals, 7 in the anal, and 15 in the tail, which is forked. This ſpecies grows to the length of ſixteen or eighteen inches. The upper ſurface is dark-green mingled with yellow; red and brown on the top of the head and back; and a longitudinal black ſtreak on each ſide. The under part is whitiſh; the fins fleſh-colour; a large round black ſpot appears on each ſide towards the extremity of the lateral line. The upper jaw is extenſible, and ſomewhat protruded; the teeth are ſharp, but very ſhort, and diſtant; the tongue hard, and griſtly. Some ſcales, ſimilar to thoſe on the back, appear on the operculum, under which Commerſon obſerved the rudiment of a fifth gill. The lateral line, which follows the bending of the back, and is near to it, is made up of a ſeries of little ſtrokes branching towards the back, like half-ſtars. The ſcales which cover the body and tail are radiated at the baſe, and finely ſerrated at their extremity, ſo as to feel rough when the hand is paſſed upwards. Found in the ſea about the Moluccas, where the natives brought a great many on-board Commerſon's veſſel in September 1768.

12. Mullus rufeſcens, the rufous ſurmullet: body and tail reddiſh; ſecond dorſal, anal, and tail, fins, ſtrewed with brown lentile-coloured ſpots; a black ſpot near the end of the lateral line. One foot in length, or thereabouts.

13. Mullus chryſerydros, the golden ſurmullet: body and tail red; gold ſtripes from the eye as from a centre; cirri two, reaching to the baſe of the ventral fins, and then bending back. There are 4 rays in the membrane of the gills (the fourth very diſtant), 7 in the firſt dorſal, 10 in the ſecond, 16 in the pectorals, 6 in the ventrals, 8 in the anal, 15 in the tail, which is much forked. Smaller than the preceding, ſeldom exceeding eight inches in length. It is found moſt part of the year, though not plentifully, at the Mauritius, where Commerſon obſerved it in February 1770. It ſhines with the brightneſs of gold, the ruby, and the amethyſt. The general colour is a deep red, like the lees of wine. A large ſpot or patch of gold appears between the dorſal and tail fin, falling down on each ſide ſomewhat in ſhape of a ſaddle; with oblique ſtripes of gold-yellow on the anal and ſecond dorſal fins. Mouth like the preceding; but the teeth are blunt, and the tongue not moveable. This ſpecies is good food, but not ſo well-taſted as the following.

14. Mullus flavo-vittatus, the yellow-lined ſurmullet: back bluiſh, a yellow line quite along each ſide; operculum in three pieces; cirri two, not quite reaching to the origin of the ventral fins. Four rays in the membrane of the gills, 7 in the firſt dorſal, 8 in the ſecond, 16 in the pectorals, 6 in the ventrals, 8 in the anal, 15 in the tail, which is forked. Size of the preceding; upper ſurface blue mingled with brown; under part ſilvery; tail-fin and upper tips of the dorſals yellow; ſometimes a yellow ſtripe or two before the eyes. Teeth hardly viſible. In other reſpects it reſembles the preceding; it is excellent food.

15. Mullus lonchiurus, the lancet-tail: tail-fin in the ſhape of a lancet, or bleeding-inſtrument; cirri two. There are 5 rays in the membrane of the gills, 15 in the pectoral fins, 6 in the ventrals, 9 in the anal, 18 in the tail, and 46 in the dorſal. The head is compreſſed, and covered with ſcales, terminating in a naſal ſnout. The mouth is ſmall; the jaws of equal length, and furniſhed with ſmall pointed teeth, and broad lip-bones. The noſtrils are ſingle, and oval. The eyes are vertical, with a black pupil in a blue iris. The anterior operculum has ſeveral inciſions on the rim, which makes it appear ſerrated. The vent is in the middle of the body. The fins are all pointed; they are compoſed of ſoft ramified rays; the dorſal only, which is divided in two, has ſimple rays. The lateral line runs near the back; and the whole fiſh is of a red-brown colour. The firſt ray of each ventral fin terminates in a long filament; hence Cepede has named it *dianema*, ſignifying two threads or filaments. Bloch received the ſpecimen from Surinam; he has formed it into a ſeparate genus, Lonchiurus, or lancet-tail; in which he is followed by Cepede, and Turton the tranſlator of Gmelin. It is about ten inches long.

16. Mullus macropodus, the long-finned ſurmullet:

cirri none; the ventral and tail fins very long. This is a ſmall but beautiful fiſh, ſeldom more than four or five inches long. Cepede calls it Macropodus, or long-foot, from the length of the under fins. Its colours are elegant, its motions quick and varied. The head and opercula are clothed with ſcales ſimilar to thoſe on the back, which are a mixture of green and gold; the fins are red; theſe form a delightful ſpectacle when the animals are in motion in the limpid waters of the Chineſe lakes, where they are found; and from a Chineſe coloured drawing (brought from Holland to Paris) this account was taken by Cepede. The mouth is very ſmall; teeth none or very minute; upon each operculum there is a ſmall round black ſpot, appearing at a diſtance like a dent or ear-hole. The tail-fin is very large, and deeply furcated.

17. Mullus Indicus, the Indian ſurmullet: body above purple, whitiſh below, and marked on each ſide with two ſpots. Its ſize and habit are the ſame as thoſe of the red ſurmullet. In the living fiſh the colour is extremely beautiful, but it fades very quickly after death. The upper part of the head, and back, dark changeable purple, growing faint on the ſides, which are marked by a few longitudinal azure and golden lines, and by two oblong ſpots on each ſide. It is a native of the Indian ſeas; was obſerved by Dr. Ruſſell near Viſgapatam: as food, it is much inferior to the M. barbatus.

18. Mullus bandi: whitiſh, with two longitudinal yellow bands on each ſide. It is about ſix inches long. The body is white, with two yellow fillets on each ſide from the gills to the tail; breaſt and belly greeniſh-white; dorſal and caudal fin ſtreaked obliquely with yellow and duſky lines; ventral and anal greeniſh-white. Inhabits the river near Viſgapatam. *Bandi-goolivinda* is the Indian name. Dr. Ruſſell ſays it is not much eſteemed as food.

MULLY'NE, a town of Hindooſtan, in Oude: forty-two miles weſt-north-weſt of Lucknow. Lat. 27. 10. N. lon. 80. 31. E.

MUL'NA SHAD'DY, a town of Candahar: thirty-five miles eaſt-north-eaſt of Suffa.

MULNAPOU'R, a town of Bengal: twenty-five miles ſouth-eaſt of Purneah.

MULNAPOU'R, a town of Hindooſtan, in Oude: fifteen miles ſouth-weſt of Goorackpour. Lat. 26. 38. N. lon. 83. 28. E.

MUL'NDORF, a town of Bavaria, in the biſhopric of Bamberg: three miles weſt of Bamberg.

MULNIT'ZA, a town of Croatia: ten miles north of Bihacs.

MULOSLAV'KICH, a town of Ruſſia, in the government of Irkutſk, on the Angara: thirty-ſix miles north of Balaganſkoi.

MULRE'A, mountains of Ireland, in the county of Mayo: twenty-three miles ſouth-weſt of Caſtlebar.

MULRO'SE, a town of Brandenburg, in the Middle Mark, on a canal made from the Spree to the Oder: nine miles ſouth-weſt of Frankfort. Lat. 52. 17. N. lon. 14. 32. E.

MUL'ROY BA'Y, a bay on the north coaſt of Ireland, and county of Donegal: ſix miles weſt of Lough-Swilly.

MULSE, *ſ.* [*mulſum*, Lat.] Hydromel; wine boiled and mingled with honey. See Honey and Hydromel.

MUL'TA, or Multura Episcopi, *ſ.* A fine or final ſatisfaction, anciently given to the king by the biſhops, that they might have power to make their laſt wills; and that they might have the probate of other men's, and the granting of adminiſtrations. *Chambers.*

MULTAN'GULAR, *adj.* [from the Lat. *multus*, many, and *angulus*, an angle.] Many-cornered; having many corners; polygonal.—Some round; others long, oval, *multangular*. *Evelyn.*

MULTAN'GULARLY, *adv.* Polygonally; with many corners.—Granates are *multangularly* round. *Grew's Coſmol. Sacra.*

MULTAN'GULARNESS, *ſ.* The ſtate of being polygonal, or having many corners.

MULTAN'GULED, *adj.* Having many angles. *Phillips.*

MULTATI'TIOUS, *adj.* Gotten by mulct or fine. *Bailey.*

MULTE'NEN, a town of Pruſſia, in the province of Natangen: forty miles ſouth-eaſt of Königſberg.

MULTIBO'NA, *ſ.* A name given by ſome writers to the Athamanta, or mountain-parſley.

MULTICAP'SULAR, *adj.* [*multus* and *capſula*, Lat.] Divided into many partitions or cells.

MULTICA'VOUS, *adj.* [*multus* and *cavus*, Lat.] Full of holes.

MULTICO'LOR, *adj.* Of many colours.

MULTIFA'RIOUS, *adj.* [*multifarius*, Lat.] Having great multiplicity; having different reſpects; having great diverſity in itſelf.—There is a *multifarious* artifice in the ſtructure of the meaneſt animal. *More's Divine Dialogues.*

MULTIFA'RIOUSLY, *adv.* With multiplicity; with great variety of modes or relations.—If only twenty-four parts may be ſo *multifariouſly* placed, and ordered, as to make many millions of millions of differing rows: in the ſuppoſition of a thouſand parts, how immenſe muſt that capacity of variation be! *Bentley's Sermons.*

MULTIFA'RIOUSNESS, *ſ.* Multiplied diverſity.—According to the *multifariouſneſs* of this imitability, ſo are the poſſibilities of being. *Norris's Miſcellanies.*

MULTIFER'NAN, or Multifarnham, a village of the county of Weſtmeath, Ireland, on the river Gaine, and near Lough Derveragh, where there was a celebrated monaſtery. Some ruins of the abbey ſtill remain. It is ſeven miles north from Mullingar, and forty-five weſt-north-weſt from Dublin.

MULTIF'EROUS, *adj.* [from the Lat. *multus*, many, and *fero*, to bear.] Producing many things. *Scott.*

MULTIF'IDOUS, *adj.* [*multifidus*, Lat.] Having many partitions; cleft into many branches.—Theſe animals are only excluded without ſight which are multiparous and *multifidous*, which have many at a litter, and have feet divided into many portions. *Brown.*

MUL'TIFORM, *adj.* [*multiformis*, Lat.] Having various ſhapes or appearances.—The beſt way to convince is proving, by ocular demonſtration, the *multiform* and amazing operations of the air-pump and the loadſtone. *Watts.*

Ye that in quaternion run
Perpetual circle, *multiform*. *Milton's P. L.*

MULTIFOR'MITY, *ſ.* Diverſity of ſhapes or appearances ſubſiſting in the ſame thing.—Barking out a *multiformity* of oaths, like helliſh Cerberi; as if men could not be gallants, unleſs they turned devils. *Purchas's Pilgrim.*

MULTIFOR'MNESS, *ſ.* Multiformity. *Scott.*

MULTIGEN'EROUS, *adj.* [from the Lat. *multus*, many, and *genus*, a kind.] Having many kinds.

MULTILAT'ERAL, *adj.* [*multus* and *lateralis*, Lat.] Having many ſides.—He will perceive, that there may be viſible as well as tangible circles, triangles, quadrilateral, and *multilateral*, figures. *Reid.*

MULTILIN'EAL, *adj.* [*multus* and *linea*, Lat.] Having many lines.—This map is *multilineal* in the extreme, and is the firſt in which the Eaſtern iſlands are included. *Steevens's Note on Twelfth Night.*

MULTIL'OQUOUS, *adj.* [*multiloquus*, Lat.] Very talkative.

MULTIMO'DOUS, *adj.* [from the Lat. *multus*, many, and *modus*, a mode.] Having diverſe ſorts; having many faſhions. *Scott.*

MULTINO'DOUS, *adj.* [from the Lat. *multus*, many, and *nodus*, a knot.] Having many knots; full of knots. *Scott.*

MULTINO'MIAL, Multinom'inal, or Multinom'inous, *adj.* Having many names.—*Multinomial* or *multinominal* roots, in algebra, are ſuch as are compoſed of many names, parts, or members; as, $a+b+c+d$, &c. *Chambers.*—Venus is *multinominous*, to give example to her proſtitute diſciples, who ſo often, to diſguiſe themſelves from magiſtrates, are to take new names. *Donne's Paradoxes.*

MULTINO'MIAL, or Multinom'inal, *ſ.* in algebra, a quantity a quantity conſiſting of many names or parts, joined by the ſigns + or —.—For raiſing an infinite *multinominal* to any given power, or extracting any given root out of ſuch a power, ſee a method of M. de Moivre, in Phil. Tranſ. N° 230. *Chambers.*

MULTIP'AROUS, *adj.* [*multiparus*, Lat.] Bringing many at a birth.—Animals feeble and timorous are generally *multiparous;* or, if they bring forth but few at once, as pigeons, they compenſate that by their often breeding. *Ray on Creation.*

MULTIPAR'TITE, *adj.* [from the Lat. *multus*, many, and *pars*, a part.] Having many parts; divided into ſeveral parts.

MUL'TIPEDE, *ſ.* [*multipeda*, Lat.] An inſect with many feet; a wood-louſe. *Bailey.*

MUL'TIPLE, *adj.* [from the Lat. *multus*, many, and *plico*, to fold.] Manifold; numerous.

MUL'TIPLE, *ſ.* in arithmetic, a number which may be divided into ſeveral other equal numbers without any remainder.

MULTIPLEE', *ſ.* A number which may be divided into ſeveral other equal numbers without any remainder; as fifteen is the multiplee of five. *Aſh.*

MULTIPLI'ABLE, *adj.* [Fr. from *multiply.*] Capable to be multiplied.

MULTIPLI'ABLENESS, *ſ.* Capacity of being multiplied.

MUL'TIPLICABLE, *adj.* Capable of being arithmetically multiplied; multipliable.

MULTIPLICAN'D, *ſ.* [*multiplicandus*, Lat.] The number to be multiplied in arithmetic.—Multiplication hath the *multiplicand*, or number to be multiplied; the multiplier, or number given, by which the *multiplicand* is to be multiplied; and the product, or number produced by the other two. *Cocker's Arithmetic.*

MULTIP'LICATE, *adj.* [from *multiplico*, Lat.] Conſiſting of more than one.—In this *multiplicate* number of the eye, the object ſeen is not multiplied, and appears but one, though ſeen with two or more eyes. *Derham's Phyſico-Theology.*

MULTIPLICA'TION, *ſ.* [from *multiplicatio*, Lat.] The act of multiplying or increaſing any number by addition or production of more of the ſame kind.—*Multiplication* of gold and ſilver was prohibited and declared to be felony by ſtat. 5 Hen. IV. c. 4. which ſtatute was made on a preſumption that perſons ſkilful in chemiſtry could multiply or augment theſe metals, by changing other metals into gold or ſilver. This ſtatute was repealed by ſtat. 1 W. and M. c. 30. *Jacob.*—[In arithmetic.]—*Multiplication* is the increaſing of any one number of another, ſo often as there are units in that number by which the one is increaſed. *Cocker's Arithmetick.*—*Multiplication* is a compendious method of addition. ARITHMETIC, vol. ii. p. 168.

MULTIPLICA'TION TA'BLE. A table containing the products of the multiplication of any two factors from 1 to 9, or to 12, or ſometimes to a greater extent. See the page juſt quoted.—A man had need be a good arithmetician to underſtand this author's works: his deſcription runs on like a *multiplication-table*. *Addiſon on Anc. Medals.*

MULTIPLICA'TOR, *ſ.* The number by which another number is multiplied.—The largeſt number is ordinarily made the multiplicand, and placed above the ſmaller, or *multiplicator;* but the reſult is the ſame, which ſoever of the numbers be made multiplicand or *multiplicator;* 4 times 5, and 5 times 4, making the ſame ſum. *Chambers.*

MULTIPLIC'IOUS, *adj.* [*multiplex*, Lat.] Manifold. *Not uſed.*—Amphiſbæna is not an animal of one denomination; for that animal is not one, but *multiplicious*, or many, which hath a duplicity or gemination of principal parts. *Brown.*

MULTIPLIC'ITY, *ſ.* [*multiplicité*, Fr.] More than one of the ſame kind.—Had they diſcourſed rightly but upon this one principle, that God was a being infinitely perfect, they could never have aſſerted a *multiplicity* of gods: for, can one God include in him all perfections, and another God include in him all perfections too? Can there be any more than all? And, if this all be in one, can it be alſo in another? *South's Sermons.*—State of being many.—You equal Donne in the variety, *multiplicity*, and choice, of thoughts. *Dryden's Ded. to Juvenal.*

MUL'TIPLIER, *ſ.* [from *multiply.*] One who multiplies or increaſes the number of any thing.—Broils and quarrels are alone the great accumulators and *multipliers* of injuries. *Decay of Chr. Piety.*—The multiplicator in arithmetic.—Multiplication hath the multiplicand, and the *multiplier*, or number given by which the multiplicand is to be multiplied. *Cocker's Arithmetick.*

To MUL'TIPLY, *v. a.* [*multiplier*, Fr. *multiplico*, Lat.] To increaſe in number; to make more by generation, accumulation, or addition.—He clappeth his hands amongſt us, and *multiplieth* his words againſt God. *Job*, xxxiv. 37.

His birth to our juſt fear gave no ſmall cauſe;
But his growth now to youth's full flower, diſplaying
All virtue, grace, and wiſdom, to achieve
Things higheſt, greateſt, *multiplies* my fears. *Milton.*

To perform the proceſs of arithmetical multiplication.—From one ſtock of ſeven hundred years, *multiplying* ſtill by twenty, we ſhall find the product to be one thouſand three hundred forty-ſeven millions three hundred ſixty-eight thouſand four hundred and twenty. *Brown's Vulgar Err.*

To MUL'TIPLY, *v. n.* To grow in number.—The *multiplying* brood of the ungodly ſhall not thrive. *Wiſd.* iv. 3. To increaſe themſelves.—We ſee the infinitely fruitful and productive power of this way of ſinning; how it can increaſe and *multiply* beyond all bounds and meaſures of actual commiſſion. *South's Sermons.*

The *multiplying* villanies of nature
Do ſwarm upon him. *Shakeſpeare's Macbeth.*

MULTIP'OTENT, *adj.* [*multus* and *potens*, Lat.] Having manifold power; having power to do many different things:

By Jove *multipotent*,
Thou ſhould'ſt not bear from me a Greekiſh member.
Shakeſpeare's Troil. and Creſſ.

MULTIPRES'ENCE, *ſ.* [*multus* and *præſentia*, Lat.] The power or act of being preſent in more places than one at the ſame time.—This ſleeveleſs tale of tranſubſtantiation was ſurely brought into the world, and upon the ſtage, by that other fable of the *multipreſence* of Chriſt's body. *Bp. Hall.*

MULTIS'CIOUS, *adj.* [*multiſcius*, Lat.] Having variety of knowledge.

MULTISILI'QUÆ, in botany, the twenty-ſixth among the Natural Orders of Linnæus, ſo termed becauſe the fruit conſiſts of ſeveral aggregate ſeed-veſſels, which have the appearance of pods. See the article BOTANY, vol. iii. p. 296.

MULTISILIQ'UOUS, *adj.* The ſame with corniculate; uſed of plants, whoſe ſeed is contained in many diſtinct ſeed-veſſels. *Bailey.*

MULTIS'ONOUS, *adj.* [from the Lat. *multus*, many, and *ſonus*, a ſound.] Having many ſounds.

MULTISYL'LABLE, *ſ.* [*multus*, Lat. and *ſyllable.*] A polyſyllable; a word of many ſyllables.—Which is to be obſerved, not only in the length of ſentences, but of words; among which a *multiſyllable* better anſwers a monoſyllable precedent, than a monoſyllable a *multiſyllable*. *Inſtruct. for Oratory*, 1682.

MUL'TITUDE, *ſ.* [from *multitudo*, Lat.] The ſtate of being many; the ſtate of being more than one.—Number collective; a ſum of many; more than one.—It is impoſſible that any *multitude* can be actually infinite, or ſo great that there cannot be a greater. *Hale.*—A great number, looſely and indefinitely.—It is a fault in a *multitude* of preachers, that they utterly neglect method in their harangues. *Watts.*—A crowd or throng; the vulgar.—He the vaſt hiſſing *multitude* admires. *Addiſon.*

MULTITU'DINOUS, *adj.* [from *multitude.*] Having the appearance of a multitude:

Will all great Neptune's ocean waſh this blood
Clean from my hand? No, this my hand will rather
Thy *multitudinous* ſea incarnardine,
Making the green one red. *Shakeſpeare's Macbeth.*

Manifold:

At once pluck out
The *multitudinous* tongue; let them not lick
The ſweet that is their poiſon. *Shakeſpeare.*

Belonging to a multitude.—There was another parting ſpeech, which was to have been preſented in the perſon of a youth, and accompanied with divers gentlemen's younger ſons of the country; but, by reaſon of the *multitudinous* preſs, was hindered. *B. Jonſon's Entertainments.*

MULTIV'AGANT, or MULTIV'AGOUS, *adj.* [*multivagus,* Lat.] That wanders or ſtrays much abroad.

MUL'TIVALVES, *ſ.* The name of a general claſs of ſhell-fiſh; diſtinguiſhed from the univalves, which conſiſt of only one ſhell, and the bivalves, which conſiſt of two, by their conſiſting of three or more ſhells. See the article CONCHOLOGY, vol. v.

MULTIV'IOUS, *adj.* [*multus* and *via,* Lat.] Having many ways; manifold.

MULTIV'OLENT, *adj.* [from the Lat. *multus,* many, and *volo,* to fly.] Mutable; fickle. *Scott.*

MUL'TO, a town of Hindooſtan in the circar of Bickaneer: ſixteen miles weſt of Bickaneer.

MUL'TO, *ſ.* in old records, a wether ſheep. *Aſh.*

MULTOC'ULAR, *adj.* [*multus* and *oculus,* Lat.] Having more eyes than two.—Flies are *multocular,* having as many eyes as there are perforations in their corneæ. *Derham's Phyſico-Theol.*

MULTO'NES AU'RI, in our ancient writers, an old coin of gold, having an Agnus Dei, ſheep or lamb, on the one ſide, and from that impreſſion called *multones.* This coin was moſt common in France, and ſometimes current in England. *Patent* 33 *Edw.* I. cited by Spelman.

MUL'TURE, *ſ.* [*moulture,* Fr. from *molo,* Lat. to grind.] A griſt, or grinding; the corn ground; alſo the toll, or fee, that is due for grinding. *Cotgrave and Sherwood.*—*Molter,* the toll of a mill; uſed in the north of England. *Groſe.*—This old Engliſh word is common in Scotland. *Todd.*—*Multure,* in Scots law, is a certain ſtipulated quantity of meal given as payment to the proprietor or tackſman of a mill for grinding the corn; and all corn ground on farms thirled to the mill is obliged to pay *multure,* whether the corn be ground at that mill or elſewhere. *Ency. Brit.*

MUL'TZIG, a town of France, in the department of the Lower Rhine: three miles weſt of Molſheim.

MU'LUCHA, in ancient geography, a river of Mauritania Tingitana, with a town of the ſame name upon it. The river divided Numidia from Mauritania. *Pliny. Florus. Salluſt.*

MUL'VIA, a river of Barbary, in Africa, which riſes in the mountains of Atlas, and divides the empire of Morocco from that of Algiers, and then falls into the Mediterranean to the weſtward of Marſal-quiver.

MUL'VIUS PONS, a bridge on the Flaminian Way, about one mile from Rome.

MU'LUL, a river of Fez, which runs into the Mullooiah at Haddaja.

MULUPGUN'GE, a town of Bengal: twenty-eight miles ſouth-eaſt of Dacca.

MUL'WAGGLE, a town of Hindooſtan, in Myſore: twenty-two miles eaſt of Colar.

MULYGUN'GE, a fort of Hindooſtan, in Bahar: ſixty miles ſouth-ſouth-eaſt of Durbungah. Lat. 25. 53. N. lon. 87. 13. E.—Alſo, a town of Bengal: twenty miles north-north-weſt of Purneah.

MUM, *ſ.* [*mumme,* Germ.] Ale brewed with wheat.—In Shenibank, upon the river Elbe, is a ſtorehouſe for the wheat of which *mum* is made at Brunſwick. *Mortimer.*

The clam'rous crowd is huſh'd with mugs of *mum,*
Till all tun'd equal ſend a general hum. *Pope.*

The proceſs of brewing mum, as recorded in the town-houſe of the city of Brunſwick, is as follows: Take ſixty-three gallons of water that has been boiled till one-third part is conſumed, and brew it with ſeven buſhels of wheaten malt, one buſhel of oat-meal, and one buſhel of ground beans. When it is tunned, the hogſhead muſt not be filled too full at firſt: as ſoon as it begins to work, put into it three pounds of the inner rind of fir, one pound of the tops of fir and beech, three handfuls of carduus benedictus, a handful or two of the flowers of roſa ſolis: add burnet, betony, marjoram, avens, pennyroyal, and wild thyme, of each a handful and a half; of elder-flowers, two handfuls or more; ſeeds of cardamom bruiſed, 30 ounces; barberries bruiſed, one ounce: when the liquor has worked a while, put the herbs and ſeeds into the veſſel; and, after they are added, let it work over as little as poſſible; then fill it up: laſtly, when it is ſtopped, put into the hogſhead ten new-laid eggs unbroken; ſtop it up cloſe, and uſe it at two years end. The Engliſh brewers, inſtead of the inner rind of fir, uſe cardamom, ginger, and ſaſſafras; and alſo add elecampane, madder, and red ſanders.

MUM, *interject.* [Of this word the ſuppoſed original is mentioned in MOME, vol. xv. It may be obſerved, that when it is pronounced it leaves the lips cloſed.] A word denoting prohibition to ſpeak, or reſolution not to ſpeak; ſilence; huſh.—*Mum* then, and no more proceed. *Shakeſpeare's Tempeſt.*—Well ſaid, maſter; *mum!* and gaze your fill. *Shakeſpeare.*

But to his ſpeach he aunſwered no whit,
  But ſtood ſtill mute, as if he had beene dum,
Ne ſigne of ſence did ſhew, ne common wit,
  As one with griefe and anguiſhe over-cum,
  And unto every thing did aunſwere *mum.* *Spenſer.*

To MUM. See *To* MUMM.

MUM, *adj.* Silent.—The *mum* club is an inſtitution of the ſame nature, and as great an enemy to noiſe. *Addiſon's Spectator.*

They rage with wrath; they daily fret and fume;
Ruthfull revenge them alwaies hath in ſute,
And right in time makes might both *mum* and mute.
Mir. for Mag.

MUM-BUD'GET, *interject.* [*mum* and *budget.* "I come to her in white, and cry *mum;* ſhe cries, *budget;* and by that we know one another." *Shakeſpeare's Merry Wives.*—"To play *mum-budget,* demeurer court, Fr." which Cotgrave renders "to be gravelled, put to ſilence or a nonplus."] An expreſſion denoting ſecrecy as well as ſilence; uſed in a contemptuous or ludicrous manner.—I thought he laught not merier than I, when I got this money; but *mum-bouget;* for Cariſophus I eſpie. *Damon and Pithias.*—They neither alledge the fond ſurmiſed cauſes by Frarine, nor mumble them over in *mum-budget;* but plainlie declare the reaſonable, ſufficient, and neceſſarie, cauſes. *Fulke's Anſwer to P. Frarine,* 1580.—If a man call them to accomptes, and aſke the cauſe of all theſe their tragical and cruel doings, he ſhall have a ſhort anſwer with *mum-budget.* *Orat. againſt the Unl. Inſur. of the Proteſtants.*

Have theſe bones rattled, and this head
So often in thy quarrel bled?
Nor did I ever wince or grudge it,
For thy dear ſake. Quoth ſhe, *mum-budget.* *Hudibras.*

MUM'-CHANCE, *ſ.* Silence. *Huloet.*—A game of hazard with dice.—They repaire hither to viewe as well their incomparable beauty, as for to accompany them at *mum-chance,* and then after to daunce with them. *Cavendiſh's Life of Wolſey.*—A fool, dropped as it were by chance, or by the fairies; one who is for the moſt part ſtupid and ſilent, rarely ſpeaking to the purpoſe; [from *mome,* a fool.] Uſed in the weſt of England. *Groſe.*

MUMMING.

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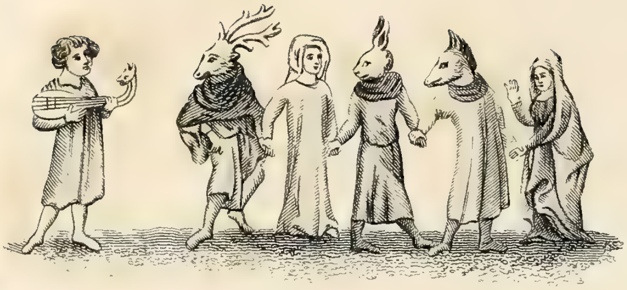

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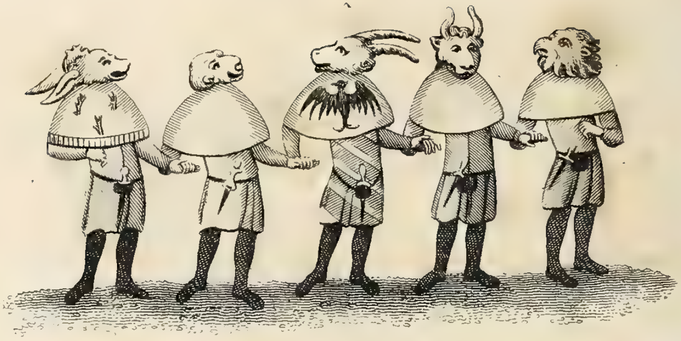

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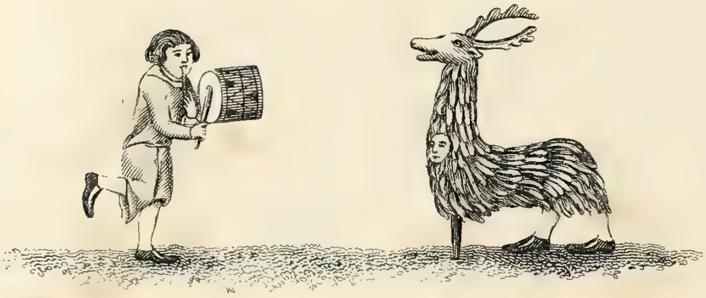

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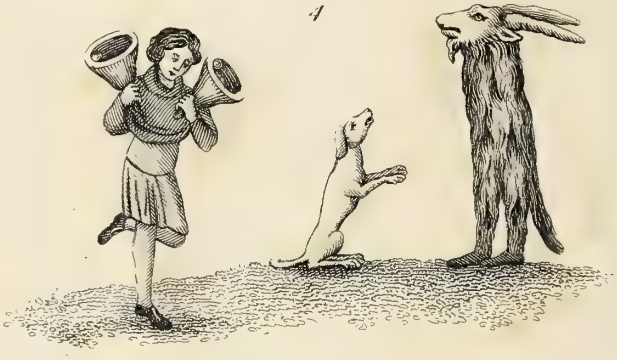

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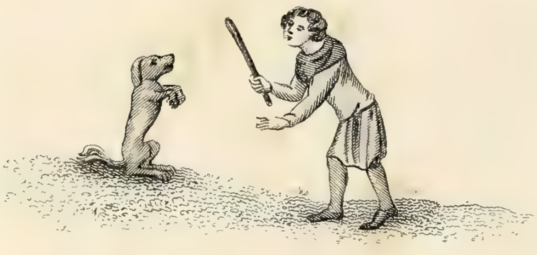

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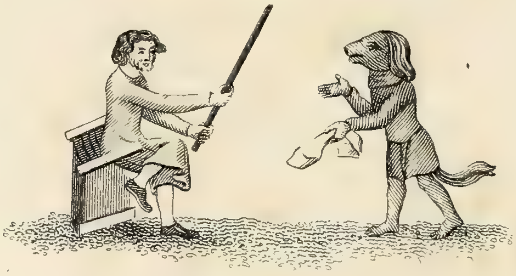

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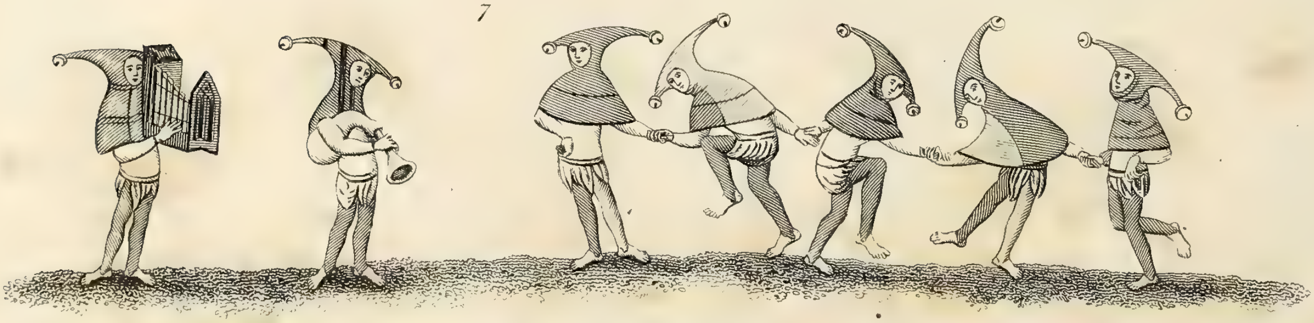


[illegible]

1 to 6. Various specimens of Mumming. 7. The old English Morris-dance.

[illegible]

MUMBA'CUM, a town of Hindooſtan, in the Carnatic: fifteen miles ſouth of Arcot.

To MUM'BLE, *v. n.* [*mommelen*, Teut. *mumler*, Dan. *momla*, Su. Goth. to mutter.] To ſpeak inwardly; to grumble; to mutter; to ſpeak with imperfect ſound or articulation.—Peace, you *mumbling* fool. *Shakeſpeare.*

A wrinkled hag, with age grown double,
Picking dry ſticks, and *mumbling* to herſelf. *Otway.*

To chew; to bite ſoftly; to eat with the lips cloſe:

The man, who laugh'd but once to ſee an aſs
Mumbling to make the groſs-grain'd thiſtles paſs,
Might laugh again to ſee a jury chaw
The prickles of unpalatable law. *Dryden.*

To MUM'BLE, *v. a.* To utter with a low inarticulate voice.—They neither alledge the fond ſurmiſed cauſes by Frarine, nor *mumble* them over in mum-budget. *Fulke's Anſwer to P. Frarine*, 1580.—He with *mumbled* pray'rs attones the deity. *Dryden's Juvenal.*

Here ſtood he in the dark,
Mumbling of wicked charms, conjuring the moon
To ſtand 's auſpicious miſtreſs. *Shakeſpeare's K. Lear.*

To mouth gently:

Spaniels civilly delight
In *mumbling* of the game they dare not bite. *Pope.*

To ſlubber over; to ſuppreſs; to utter imperfectly.—The raiſing of my rabble is an exploit of conſequence; and not to be *mumbled* up in ſilence, for all her pertneſs. *Dryden.*

MUM'BLE-NEWS, *ſ.* A kind of tale-bearer; one who privately reports news:

Some carry-tale, ſome pleaſe-man, ſome ſlight zany,
Some *mumble-news*, ſome trencher-knight, ſome Dick,
Told our intents before. *Shakeſpeare's Love's Lab. Loſt.*

MUMBLE PO'INT, a rock in the Briſtol Channel, at the weſt of the entrance into Swanſea-bay. Lat. 51. 37. N. lon. 4. 3. W.

MUM'BLER, *ſ.* One that ſpeaks inarticulately; a mutterer.—Employing a company of boys, or old illiterate *mumblers*, to read the ſervice. *Echard on the Cont. of the Clergy.*

MUM'BLING, *ſ.* The act of uttering with a low inarticulate voice; a low inarticulate ſound; the act of chewing with the lips ſhut.

MUM'BLING, a river of Germany, which riſes about ſeven miles ſouth of Erbach in Franconia, and runs into the Mayne, near Obenburg, in the electorate of Mentz.

MUM'BLINGLY, *adv.* With inarticulate utterance.

MUMBO'LE, a town of Hindooſtan, in the Carnatic: twenty miles ſouth-weſt of Nellore.

MUM'BOS, a country of Africa, north-weſt of Mocaranga.

MU'MIA, *ſ.* [Arabic.] A mummy.

MU'MIAL, *adj.* Belonging to a mummy. *Cole.*

To MUM, *v. a.* [*mumme*, Dan.] To maſk; to frolic in diſguiſe.

MUM'MER, *ſ.* [*mumme*, Dan.] A maſker; one who performs frolics in a perſonated dreſs. *Dr. Johnſon.*—Originally, one who geſticulated, without ſpeaking.—If you chance to be pinch'd with the colick, you make faces like *mummers. Shakeſpeare's Coriolanus.*

Good faith, ſir, concernynge the people, they are not gay;
And, as farre as I ſee, they be *mummers;* for nought they
ſay. *Damon and Pithias.*

MUM'MERY, *ſ.* Maſking; frolic in maſks; foolery. Sometimes written *mommery*, from the Fr. *momerie.*—This open day-light doth not ſhew the maſks and *mummeries* and triumphs of the world, half ſo ſtately as candlelight. *Bacon's Nat. Hiſt.*

Your fathers
Diſdain'd the *mummery* of foreign ſtrollers. *Fenton.*

To MUM'MIFY, *v. a.* [*mummy*, and *fio*, Lat.] To preſerve as a mummy; to make a mummy of:

Thy virtues are
The ſpices that embalm thee; thou art far
More richly laid, and ſhalt more long remaine
Still *mummified* within the hearts of men,
Than if to lift thee in the rolls of fame
Each marble ſpoke thy ſhape, all braſs thy name.
J. Hall's Poems 1646.

MUM'MING, *ſ.* The amuſement of mummery, of pantomime-tricks in diſguiſe:

The thriftleſs games,
With *mumming* and with maſking all around. *Spenſer.*

Theſe mummings, or mummeries, are of very ancient date. We trace them as far back as the reign of Edward III. and the preparations made for them at that time are mentioned without the leaſt indications of novelty, which admits of the ſuppoſition that they were ſtill more ancient. At the time we mention, they were a court-amuſement, and were exhibited chiefly from Chriſtmas-day to Twelfth-day. How far they were enlivened by dialogues or interlocutory eloquence is not known; but probably they partook more of the feats of pantomime than of colloquial excellency, and were better calculated to amuſe the ſight than to inſtruct the mind. The magnificent pageants and diſguiſings frequently exhibited at court in the ſucceeding times, and eſpecially during the reign of Henry VIII. no doubt, originated from the mummeries above-mentioned. Theſe mummeries, as a modern writer juſtly obſerves, were deſtitute of character and humour, their chief aim being to ſurpriſe the ſpectators "by the ridiculous and exaggerated oddity of the vizors, and by the ſingularity and ſplendour of the dreſſes; every thing was out of nature and propriety. Frequently the maſque was attended with an exhibition of gorgeous machinery, reſembling the wonders of a modern pantomime." (Warton's Hiſt. Poet. vol. ii. p. 156.) The reader may form ſome judgment of the appearance the actors made upon theſe occaſions, from fig. 1, 2, of the annexed Plate, copied from Strutt, and by him taken from a beautiful manuſcript written and illuminated in the reign of Edward III. The performance ſeems to have conſiſted chiefly in dancing, and the mummers are uſually attended by the minſtrels playing upon ſeveral different kinds of muſical inſtruments.

In the middle ages, mummings were very common; and at court, as well as in the manſions of the nobility, on occaſions of feſtivity, it frequently happened that the whole company appeared in borrowed characters; and, full licenſe of ſpeech being granted to every one, the diſcourſes were not always kept within the bounds of decency. Theſe ſpectacles were exhibited with great ſplendour during the reign of Henry VIII. Perſons capable of well ſupporting aſſumed characters were frequently introduced at public entertainments, and alſo in the pageants exhibited on occaſions of ſolemnity; ſometimes they were the bearers of preſents, and ſometimes the ſpeakers of panegyrical orations. Froiſſart tells us, that, after the coronation of Iſabel of Bavaria, the queen of Charles VI. of France, ſhe had ſeveral rich donations brought to her by mummers in different diſguiſements; one reſembling a bear, another an unicorn, others like a company of Moors, and others as Turks or Saracens. When queen Elizabeth was entertained at Kenilworth-caſtle, various ſpectacles were contrived for her amuſement; and ſome of them produced without any previous notice, to take her as it were by ſurpriſe. It happened about nine o'clock one evening, as her majeſty returned from hunting, and was riding by torch-light, there came ſuddenly out of the wood, by the road-ſide, a man habited like a ſavage, covered with ivy, holding in one of his hands an oaken plant torn up by the roots, who placed himſelf before her, and, after holding ſome diſcourſe with a counterfeit echo, repeated a poetical oration in her praiſe, which was well received. This was on the 10th of July, 1575.

The jugglers and the minſtrels, obſerving how highly theſe ridiculous diſguiſements were reliſhed by the people in general, turned their talents towards the imitating of different animals, and rendered their exhibitions more pleaſing by the addition of their new acquirements. From the ſame ſource we have borrowed three ſpecimens of theſe performances. Fig. 3 preſents to us the reſemblance of a ſtag; fig. 4 that of a goat walking erect on his hinder feet. “ Neither of theſe fictitious animals have any fore-legs; but to the firſt the deficiency is ſupplied by a ſtaff, upon which the actor might recline at pleaſure; his face is ſeen through an aperture on the breaſt; and, I doubt not, a perſon was choſen to play this part with a face ſuſceptible of much grimace, which he had an opportunity of ſetting forth to great advantage, with a certainty of commanding the plaudits of his beholders. It was alſo poſſible to heighten the whimſical appearance of this diſguiſe by a motion communicated to the head; a trick the man might eaſily enough perform by putting one of his arms into the hollow of his neck. Fig. 6 repreſents a boy, with a maſk reſembling the head of a dog, preſenting a ſcroll of parchment to his maſter.” To fill out our Plate, we have added, at fig. 7. a repreſentation of the old Engliſh morrice-dance, deſcribed at p. 16. Mr. Strutt is of opinion, that all theſe amuſements are off-ſhoots from the Saturnalian disfigurements; and from the ſame ſtock we may pertinently derive the ſucceeding maſquings and diſguiſements of the perſon frequently practiſed at certain ſeaſons of the year; and hence alſo came the modern *maſquerades.*

The mummeries practiſed by the lower claſſes of the people uſually took place at the Chriſtmas-holidays; and ſuch perſons as could not procure maſks rubbed their faces over with *ſoot,* or painted them; hence Sebaſtian Brant, in his “ Ship of Fools,” alluding to this cuſtom, ſays,

> The one hath a viſor ugley ſet on his face,
> Another hath on a vile counterfaite veſture,
> Or painteth his viſage with *fume,* in ſuch caſe
> That what he is, himſelf is ſcantly ſure.

It appears that many abuſes were committed under the ſanction of theſe diſguiſements; and for this reaſon an ordnance was eſtabliſhed, by which a man was liable to puniſhment who appeared in the ſtreets of London with “ a painted viſage.” Stow's Survey, fol. 680. By ſtat. 3 Hen. VIII. it was ordained that no perſons ſhould appear abroad like *mummers,* covering their faces with vizors, and in diſguiſed apparel, under pain of impriſonment for three months. The ſame act enforced the penalty of 20s. againſt ſuch as kept vizors in their houſes for the purpoſe of mumming. The laſt act againſt mumming is the 3 Anne 8. c. 9. *Strutt's Sports and Paſtimes of the People of England,* p. 124, 189.

MUM'MIUS (Lucius), a Roman of a mean family, who notwithſtanding arrived at the conſulſhip. He was ſent againſt the Achæans, whom he conquered, B. C. 147. He deſtroyed Corinth, Thebes, and Chalcis, by order of the ſenate; and obtained the ſurname of *Achaicus* from his victories. The plunder of Corinth, the richeſt city then in the world in the remains of ancient art, was given to the ſoldiery, with the exception of ſuch pieces as the conſul thought worthy of preſerving for the decoration of Rome. His judgment in this matter, however, was much inferior to his diſintereſtedneſs and integrity; for ſo little did he poſſeſs of the taſte of a connoiſſeur, that, when the ſpoils were put on ſhip-board to be conveyed to Rome, he gave notice to the maſters of the veſſels, that, if any of them were loſt, they were to be replaced with others as good, at their own expenſe. The fortune of a famous picture, the Bacchus of Ariſtides, was remarkable. It was found employed by ſome Roman ſoldiers as a table to play at dice upon; and, being reſcued from their hands, was put up to ſale with the other ſpoils. Attalus, king of Pergamus, bid for it near 5000l. ſterling; at which Mummius was ſo much ſurpriſed, that, ſuppoſing it to poſſeſs ſome magical virtue, he cancelled the bargain, to the king's great mortification. The conſul placed it in the Temple of Ceres, where it was ſeen by Strabo before its deſtruction in the conflagration of that edifice. Mummius, on his return to Rome, was honoured with a triumph, which was embelliſhed by a diſplay of all the rarities of art that he had brought from Corinth. He afterwards ſerved the office of cenſor; but, falling upon ſome account under the diſpleaſure of his fellow-citizens, was ſent into baniſhment, and died at Delos. His ignorance of antiquity and the fine arts is become proverbial.

MUM'MY, *ſ.* [*mumie,* Fr. *mumia,* Lat. derived by Salmaſius from *amomum,* Lat. by Bochart from the Arab. *mumia. Dr. Johnſon.*—The Spaniards call piſſaſphalt (Bitumen mumia?) *cera de minera,* mineral wax, perhaps from its conſiſtency; but the Arabians term it *mumia;* whence, it may be, embalmed bodies came to be called *mummies,* from their being preſerved with this piſſaſphalt; and this we are the more apt to believe, ſince the true aſphalt, or bitumen Judaicum, was very ſcarce. *Greenhill's Art of Embalming,* 1705.] A dead body preſerved by the Egyptian art of Embalming.—It is ſtrange how long carcaſes have continued uncorrupt, as appeareth in the *mummies* of Egypt, having laſted ſome of them three thouſand years. *Bacon's Nat. Hiſt.*

> Saved by ſpice, like *mummies,* many a year,
> Old bodies of philoſophy appear. *Pope's Dunciad.*

The liquor which diſtils from mummies; any gum.—In or near this place is a precious liquor or *mummy* growing: a moiſt redolent gum it is, ſovereign againſt poiſons. *Sir T. Herbert's Travels.*

MUMMY, properly ſpeaking, is not the fleſh of the deceaſed, but the compoſition with which it is embalmed; but, in common acceptation, mummy is alſo uſed for the body. The preparation of mummy is of ſo old a ſtanding, that it was in uſe in Egypt before the time of Moſes. The coffin in which the mummy is contained was to be of ſycamore-wood, which is found to keep ſound for the ſpace of 3000 years; but the tree, properly thus called, was very different from our ſycamore.

Mummy is ſaid to have been firſt brought into uſe in medicine by a Jewiſh phyſician, who wrote, that fleſh thus embalmed was good for the cure of divers diſeaſes, and particularly for bruiſes, to prevent the blood gathering and coagulating. The Turks prevent the exportation of mummy into Europe as much as poſſible.

There are two kinds of bodies denominated mummies. The firſt are only carcaſes, dried by the heat of the ſun, and by that means kept from putrefaction: theſe are frequently found in the dry ſands of Lybia. Some ſay, they are the bodies of deceaſed people buried there on purpoſe, to keep them entire without embalming; others, that they are the carcaſes of travellers, &c. who have been overwhelmed with clouds of ſand raiſed by the hurricanes frequent in thoſe deſerts. Mummies of the ſecond kind are bodies taken out of the pits or catacombs near Cairo, in which the Egyptians depoſited their dead after embalming. Theſe conſtitute the mummies ſo much valued, and to which ſuch extraordinary virtues are aſcribed. See the article EGYPT, vol. vi. p. 351, 2.

We have two different ſubſtances preſerved for medicinal uſe under the name of *mummy,* though both in ſome degree of the ſame origin. The one is the dried and preſerved fleſh of human bodies, embalmed with myrrh and ſpices; the other is the liquor running from ſuch mummies, when newly prepared, or when affected by great heat or damps. The latter is ſometimes in a liquid, ſometimes of a ſolid, form, as it is preſerved in vials well ſtopped, or ſuffered to dry and harden in the air. The firſt kind of mummy is brought to us in large pieces, of a lax and friable texture, light and ſpongy, of a blackiſh brown colour, and often damp and clammy on the ſurface: it is of a ſtrong but diſagreeable ſmell. The ſecond kind of mummy, in its liquid ſtate, is a thick, opaque, and viſcous, fluid, of a blackiſh colour, but not diſagreeable ſmell. In its indurated ſtate, it is a dry ſolid ſubſtance, of a fine ſhining black colour, and cloſe texture, eaſily broken, and of a good ſmell; very inflammable, and yielding a ſcent of myrrh and aromatic ingredients while burning. This, if we cannot be content without medicines from our own bodies, ought to be the mummy uſed in the ſhops; but it is very ſcarce and dear; while the other is ſo cheap, that it will always be moſt in uſe.

All theſe kinds of mummies are brought from Egypt. But we are not to imagine, that any body breaks up the real Egyptian mummies, to ſell them in pieces to the druggiſts, as they make a much better market of them in Europe whole, when they can contrive to get them. What our druggiſts are ſupplied with, is the fleſh of executed criminals, or of any other bodies the Jews can get, who fill them with the common bitumen, ſo plentiful in that part of the world; and, adding a little aloes, and two or three other cheap ingredients, ſend them to be baked in an oven, till the juices are exhaled, and the embalming matter has penetrated ſo thoroughly that the fleſh will keep and bear tranſporting into Europe. Mummy has been eſteemed reſolvent and balſamic; but whatever virtues have been attributed to it, ſeem to be ſuch as depend more upon the ingredients uſed in preparing the fleſh than in the fleſh itſelf; and it would ſurely be better to give thoſe ingredients without ſo ſhocking an addition. *Hill's Mat. Med.*

There are found in Poland a kind of natural mummies, or human bodies preſerved without the aſſiſtance of art. Theſe lie in conſiderable numbers in ſome of the vaſt caverns in that country. They are dried with the fleſh and ſkin ſhrunk up almoſt cloſe to the bones, and are of a blackiſh colour. In the wars which ſeveral ages ago laid waſte that country, it was common for parties of the weaker ſide to retire into theſe caves, where their enemies, if they found them out, ſuffocated them by burning ſtraw, &c. at the mouth of the cavern, and then left the bodies; which, being out of the way of injuries from common accidents, have lain there ever ſince.

Paræus has a very curious treatiſe of mummies, in which he ſhows the abuſes of them; and makes it appear, that they can never be of any real medicinal uſe. Matthiolus is of the ſame opinion, after Serapion. Both theſe authors take even the Egyptian mummies to be no more than bodies embalmed with piſſaſphaltum. *Chambers.*

Mummy is alſo uſed, among gardeners, for a ſort of wax uſed in the planting and grafting of trees. Agricola directs the preparation of it as follows: Take one pound of common black pitch, and a quarter of a pound of common turpentine; put them together in an earthen pot, and ſet them on fire in the open air, having a cover ready to quench the mixture in time: the matter is to be thus alternately lighted and quenched, till all the nitrous and volatile parts be evaporated. To this a little common wax is to be added; and the compoſition is then to be ſet by for uſe. To apply it in the dreſſing of roots of trees, melt it, and dip in the two ends of the pieces of root, one after another; then put them in water, and plant them in the earth, the ſmall end downward, ſo that the larger may appear a little way out of the earth, and ſo may have the benefit of the air; then preſs the earth hard down upon them, that they may not receive too much wet.

To beat to a Mummy. To beat ſoundly. *Ainſworth.*

To MUMP, *v. a.* [*mompelen*, Teut. *mund*, Germ. the mouth; *mumſa*, Su. from *mun*, q. d. *munſa*, to work with the mouth. *Serenius.*] To nibble; to bite quick; to chew with a continued motion:

Let him not pry nor liſten,
Nor friſk about the houſe
Like a tame *mumping* ſquirrel with a bell on. *Otway.*

To talk low and quick.—[In cant language.] To beg. *Ainſworth.*—To deceive; to chouſe.—I'm reſolved hereafter to bend my thoughts wholly for the ſervice of the nurſery, and *mump* your proud players! *D. of Buckingham's Rehearſal.*—He watches then like a younger brother, that is afraid to be *mump'd* of his ſnip. *Wycherley's Love in a Wood.*

To MUMP, *v. n.* To chatter; to make mouths; to grin like an ape.—The ghoſt knocks; Harlequin opens the door; and, ſeeing the apparition, runs backward in a fright, whips up a diſh of vermicelli, with which he retreats under the table: the ghoſt enters, ſits down at table, talks to Don John, while Harlequin *mumps* below, with ſuch buffoonery as excites the mirth of the whole audience. *Drummond's Travels.*

Thou world of marmoſets and *mumping* apes,
Unmaſke; put off thy feigned, borrowed, ſhapes. *Marſton.*

To implore notice by making a face of diſtreſs; to beg with a falſe pretence. *A cant word.*—They had no way left for getting rid of this mendicant perſeverance, but by ſending for the beadle, and forcibly driving our embaſſy of ſhreds and patches, with all its *mumping* cant, from the inhoſpitable door of cannibal caſtle. *Burke on a Regicide Peace.*

MUM'PER, *ſ.* [In cant language.] A beggar.

MUM'PING, *ſ.* Fooliſh tricks; acts of mockery. *Sherwood.*—Begging tricks.—Their own *mumpings*, and beggarly tones, while they pretend to ſpeak in Plutarch's voice. *Bentley's Phil. Lipſ.*

MUM'PISH, *adj.* Sullen.

MUM'PISHNESS, *ſ.* Sullenneſs.

MUM'RAH, a town of Bengal: thirty-eight miles north-north-weſt of Midnapour.

MUMPS, *ſ.* [*mompelen*, Dut.] Sullenneſs; ſilent anger. *Skinner.*—The ſquinancy. *Dr. Johnſon from Ainſworth.*—It is properly a ſwelling of the glands about the throat, and the jaws; [perhaps from *muns*, the mouth. *Todd.*]—The diſeaſe reſembled the *mumps*, or ſwelling of the chaps. *White's Journ. of a Voy. to N. South Wales.*

MUN. Muſt. See Mowe. Uſed in the north of England. "I *mun* gang; thou *munnot* gang:" i. e. I muſt, thou muſt not, go.

MUNA'RI (Pellegrino), a painter who had the happineſs to be ſcholar and aſſiſtant to Raphael, in executing the works for the chambers of the Vatican. Being born at Modena, he moſt uſually bore the name of Pellegrino da Modena. He poſſeſſed conſiderable talents; and, according to M. Fuſeli, reſembled his maſter more than any of his contemporaries in the airs of his heads, and the graces of attitudes: but he lived too ſhort a time to have much to teſtify the truth of this aſſertion, dying at the early age of thirty-eight, in the year 1523.

MUNCAR'A, a town of Bengal: ſix miles ſouth of Coſſimbazar.

MUN'CER (Thomas), a famous fanatic, was born at Zwickaw, a town of Miſnia, in Germany, probably towards the cloſe of the fifteenth century. He was educated to the church; and became a diſciple of Luther, whoſe tenets he propagated ſome time with great zeal and ſucceſs in Thuringia. He connected himſelf with Nicholas Storck, a leader among the Baptiſts, who pretended to have communications with the Almighty, and to hold greater purity of doctrine than the reſt of the party. Muncer was a convert to his notions, and became ardent in making proſelytes. He maintained that, for men to avoid vice, they muſt practiſe perpetual mortification. They muſt put on a grave countenance, ſpeak but little, wear a plain garb, and be ſerious in their whole deportment. Such as prepared their hearts in this manner, might expect that the Supreme Being would direct all their ſteps, and by viſible ſigns diſcover his will to them; if that illumination be at any time withheld, he ſays we may expoſtulate with the Almighty, and remind him of his promiſes. This expoſtulation will be acceptable to God, and will at laſt prevail on him to guide us with the ſame unerring hand which conducted the patriarchs of old. He alſo maintained, that all men were equal in the ſight of God; and that, therefore, they ought to have all things in common, and ſhould on no account exhibit any marks of ſubordination or pre-eminence. Theſe notions, ſo flattering to the feelings of the maſs of the people, ſpread rapidly among the peaſants of Thuringia; and produced the moſt ſerious tumults and commotions in that and ſome other parts of Germany, which in the end brought on their own deſtruction, and that of their leader. This occurred about the year 1526. *Robertſon's Hiſt. of Charles V.*

MUNCE'RA, a town of Hindooſtan, in Baglana: ten miles north of Junere.

MUNCE'RIANS, *ſ.* in church-hiſtory, a ſect of German enthuſiaſts, ſo called from their leader, Thomas Muncer.

MUN'CEY, a town of America, in Lycoming-county, Pennſylvania: 231 miles from Waſhington.

To MUNCH, *v. a.* [*manger*, Fr.] To chew by great mouthfuls. This is likewiſe written *mounch.* See *To* MOUNCH.—Say, ſweet love, what thou deſir'ſt to eat?—Truly, a peck of provender; I could *munch* your good dry oats. *Shakeſpeare's Midſ. Night's Dream.*

To MUNCH, *v. n.* To chew eagerly by great mouthfuls. —It is the ſon of a mare that's broken looſe, and *munching* upon the melons. *Dryden's Don Sebaſtian.*

MUNCHABOO'. See MONCHABOO.

MUNCHAU'RACH, a town of Germany, in the principality of Culmbach: thirteen miles eaſt of Neuſtatt.

MUN'CHBACH. See LUSITZ, vol. xiii.

MUN'CHBERG, a town of Germany, in the principality of Culmbach: ſix miles ſouth of Hof, and ſixteen north of Bayreuth.

MUN'CHENBERG, a town of Brandenburg: nineteen miles weſt of Cuſtrin, and twenty-nine eaſt of Berlin, Lat. 52. 30. N. lon. 14. 15. E.

MUNCHENBER'NSDORF, a town of Saxony, in the circle of Neuſtadt: ſeven miles north-weſt of Weyda.

MUN'CHENGRATZ, or HRADISTI'E, a town of Bohemia: fifteen miles ſouth-weſt of Rakonitz.

MUN'CHER, *ſ.* One that munches.

MUN'CHHAUSEN, a town of France, in the department of the Upper Rhine: twelve miles ſouth of Muhlhauſen.

MUN'CHHAUSEN, a town of Bavaria: twelve miles weſt of Vilzhoven, and fifteen eaſt of Dingelfingen.

MUNCHHAU'SIA, *ſ.* [named by Linnæus in honour of *baron Gerlach Adolphus von Munchhauſen*, governor of Hanover, who greatly improved the botanic garden at Gottingen, and alſo of the baron Otho von Munchhauſen, miniſter there, a diſtinguiſhed practical botaniſt and rural economiſt.] In botany, a genus of the claſs polyadelphia, order polyandria, natural order of calycanthemæ, (ſalicariæ, *Juſſ.*) Generic characters—Calyx: perianthium one-leafed, half ſix-cleft, turbinate, toruloſe, permanent; with blunt ſegments. Corolla: petals ſix, obovate, ſpreading, clawed, inſerted into the calyx. Stamina: filaments twenty-four or thirty, capillary, ſhorter than the petals, collected into ſix bodies; antheræ kidney-form. Piſtillum: germen ſuperior ovate; ſtyle filiform, declining of a middling length; ſtigma blunt. Pericarpium: capſule ovate, acuminate, ſix-celled. Seeds: very many.—*Eſſential Character.* Calyx ſix-cleft, toruloſe; petals clawed; ſtamina in ſix bodies, four or five in each; piſtil ſuperior, with a filiform curved ſtyle.

Munchhauſia ſpecioſa, the only ſpecies. This is a ſmall tree, with alternate patulous round ſmooth branches; leaves alternate, ovate or ovate-oblong, acuminate, quite entire, ſmooth, paler underneath; on very ſhort petioles. Flowers alternate, on very ſhort peduncles, extremely handſome; calyxes ſubtomentoſe, with ſix channelled ſwellings; petals four times as large as the calyx; ſtamens half the length of the petals; ſtyle at firſt equal to the ſtamens, but afterwards longer. Native of Java and China. Cultivated in the Upſal garden in 1748, and flowered there the year following. See LAGERSTROEMIA ſpecioſa, vol. xii.

MUN'CHING, *ſ.* The act of chewing by great mouthfuls.

MUN'CHRODT, or ROTH, a princely abbey of Germany, founded in the year 1126, and put under the protection of the empire by Charles IV. It is eighteen miles ſouth of Ulm, and thirty-eight weſt-ſouth-weſt of Augſburg.

MUNCHSTOCK'HEIM. See STOCKHEIM.

MUNCK (John), a celebrated Daniſh navigator, was born towards the end of the ſixteenth century. The diſcoveries of Hudſon, in 1610, having excited conſiderable attention in all the maritime countries of Europe, Munck was ordered by his ſovereign to purſue the ſame route, in order to determine whether it was poſſible to proceed to India by a north-weſt paſſage. Two ſhips were equipped for this purpoſe; and on the 16th of May, 1619, Munck ſet ſail from the Sound. On the 20th of June following, he ſaw Cape Farewell; and, paſſing through Hudſon's Strait, to which, in honour of his king, he gave the name of *Fretum Chriſtiani*, or Chriſtian's Strait, diſcovered in it an iſland, in lat. 60° 20′ N. which, on account of the rein-deer found in it, was called Deer Iſland. He alſo gave the name of *Mare Novum*, or the New Sea, to that which waſhes the coaſt of Labrador; and the appellation of *Mare Chriſtianum*, or Chriſtian's Sea, to the part adjacent to Greenland. In the latitude of 60, this navigator met with ſo much ice as rendered it impracticable for him to advance farther north; he therefore directed his courſe to Churchill's River, where he landed, and where he found the ice to be from three hundred to three hundred and ſixty feet in thickneſs. Here the greater part of his men were attacked by the ſcurvy, which was followed by the dyſentery; and, on the 4th of June, 1620, Munck himſelf was taken ſo ill that he remained four days without food or drink, as his proviſions were almoſt entirely exhauſted. On crawling out of his hut, after recovering ſome degree of ſtrength, he found no more than two of his men alive; though the crews of his two ſhips had conſiſted of ſixty-four. Theſe two men were overjoyed to ſee their commander; and the three ſurvivors endeavoured to give each other every aſſiſtance in their power. The ice being diſſolved on the 18th, they began to fiſh for ſalmon and trout; and in a little time they were completely reſtored to health. They now left the larger of the two veſſels in the river, giving it the name of Munck's Harbour; and ſet out in the ſmaller, in order to return. Soon after, they loſt their boat, and, the ice having broken their rudder, they found it very difficult to repair it. They, however, recovered their boat in the courſe of ten days; and, after encountering a violent ſtorm, which ſhattered their maſt and carried away their ſail, they were ſo fortunate as to reach a harbour in Norway, and in a few days after arrived at Copenhagen, where the king, who had conſidered Munck as loſt, was much aſtoniſhed to ſee him. Munck was afterwards employed by his ſovereign in the North Sea, and in the Elbe, in the years 1624, 1625, and 1627; and died in the month of June, 1628, during a maritime expedition. *Forſter's Hiſtory of the Diſcoveries in the North.*

MUN'CY CREE'K, a river of Pennſylvania, which runs into the Suſquehannah two miles north of Sunbury.

MUND, a river of the duchy of Cleves, which runs into the Rhine three miles below Orſoy.

MUND, *ſ.*—*Mund* is peace; from which our lawyers call a breach of the peace, *mundbrech:* Eadmund is happy peace; Æthelmund, noble peace; Ælmund, all peace; with which theſe are much of the ſame import; Irenæus, Heſychius, Lenis, Pacatus, Sedatus, Tranquillus, &c. *Gibſon's Camden.*

MUN'DA. See MONDA.

MUN'DA VAL'LI, *ſ.* in botany. See MOMEA.

MUNDANAGOO'DY, a town of Hindooſtan, in Golconda: ſix miles north of Rachore.

MUNDA'NE, *adj.* [*mundanus*, Lat.] Belonging to the world.—The atoms which now conſtitute heaven and earth, being once ſeparate in the *mundane* ſpace, could never without God, by their mechanical affections, have convened into this preſent frame of things. *Bentley's Sermons.*

I, king Pericles, have loſt
This queen, worth all our *mundane* coſt. *Shakeſpeare.*

MUNDAN'ITY, *ſ.* Secularity; attention to the things of the world. *Not in uſe.*—The love of *mundanity*, wherein do reſide the vital ſpirits of the body of ſin. *W. Montague's Dev. Eſſ.* 1648.

MUNDA'REA. See MUDANIA.

MUNDAPUM', a town of Hindooſtan, in Marawar: ſixteen miles eaſt of Ramanadporum.

MUNDA'TION, *ſ.* [*mundus*, Lat.] The act of cleanſing.

MUN'DATORY, *adj.* [from *mundus*, Lat.] Having the power to cleanſe.

MUN'DAY (Anthony), a dramatic writer, was born about the year 1553. He is celebrated by Meres among the comic poets as the *beſt plotter;* but few of his dramatic pieces are come down to the preſent times. He appears to have been a writer through a very long period, there being works exiſting publiſhed by him, which are dated in 1580 and 1621, and probably both earlier and later than thoſe years. In the year 1582 he detected the treaſonable practices of Edmund Campion and his confederates, of which he publiſhed an account, wherein he is ſtyled, "ſometime the Pope's ſcholler, allowed in the ſeminarie at Roome." The publication of this pamphlet brought down upon him the vengeance of his opponents, one of whom, in an anſwer to him, has given his hiſtory in theſe words: "Munday was firſt a ſtage-player; after an apprentiſe, which tyme he wel ſerved with deceaving of his maſter; then, wandring towardes Italy, by his own report, became a coſener in his journey. Comming to Rome, in his ſhort abode there was charitably relieved, but never admitted in the ſeminary, as he pleſeth to lye in the title of his booke; and, being wery of well doing, returned home to his firſt vomite, and was hiſt from the ſtage for his folly. Being thereby diſcouraged, he ſet forth a balet againſt plays, though (o conſtant youth) he afterwards began again to ruffle upon the ſtage. I omit, among other places, his behaviour in Barbican, with his good miſtreſs and mother. Two things, however, muſt not be paſſed over of this boy's infelicitie, two ſeveral ways of late notorious. Firſt, he, writing upon the death of Everard Haunſe, was immediately controled and diſproved by one of his own batche; and, ſhortly after, ſetting forth the apprehenſion of M. Campion, was diſproved by George (I was about to ſay Judas) Eliot, who, writing againſt him, proved that thoſe things he did were for luker's ſake only, and not for the truthe, thogh he himſelf be a perſon of the ſame predicament, of whom I muſte ſay, that, if felony be honeſty, then he may for his behaviore be taken for a laweful witneſs againſt ſo good men." It will take from the credit of this narrative to obſerve, that our author was after this time ſervant to the earl of Oxford, and a meſſenger of the queen's bedchamber; poſts which he would ſcarcely have held, had his character been ſo infamous as is repreſented above. At the time of his death, which happened Auguſt 10, 1633, he was eighty years of age, as appears by his monument, in the pariſh-church of St. Stephen, Coleman-ſtreet, where he was buried. He is ſtyled in the inſcription, Citizen and Draper of London. For a liſt of his dramatic productions, we refer to the *Biographia Dramatica.*

MUN'DBRECH. See MUND.

MUN'DE, a town of Pomerelia, on the Friſch Nerung: five miles north of Dantzic.

MUNDEL'LA, a town of Hindooſtan, in the country of Gurry Mundella: forty miles ſouth-eaſt of Gurrah, and ninety-five weſt-north-weſt of Ruttunpour. Lat. 23. 45. N. lon. 80. 57. E.

MUN'DELLSVILLE, a town of Virginia: 110 miles weſt of Waſhington.

MUN'DEN, or GEMUNDEN, a town of Weſtphalia, in the principality of Calenberg, at the conflux of the Werra and the Fulda, where they join to form the Weſer. It contains two Lutheran churches, an elegant building for the worſhip of the Calviniſts, an hoſpital, and barracks for a double garriſon. The goods brought hither by land and water are ſent down the Weſer, and other goods in return are brought hither by the ſame mode of conveyance. No foreigner, or non-freeman of Munden, is allowed to trade here, but is required to conſign his goods to a factor of the town. It is thirteen miles ſouth-weſt of Gottingen. Lat. 51. 26. N. lon. 9. 35. E.

MUN'DEN. See MINDEN.

MUN'DER, a town of Weſtphalia, in the principality of Calenberg, on the Hammel. It ſuffered very much by the war which preceded the peace of Weſtphalia. Near the town is a ſalt-work. It is eighteen miles eaſt-ſouth-eaſt of Munden. Lat. 52. 11. N. lon. 9. 24. E.

MUNDERA'R, a province of Candahar, in the northern part of the country of Cabul.

MUNDERKIN'GEN, a town of Wurtemberg, to which it was ceded, in 1805, by the houſe of Auſtria; ſituated on the Danube. This town ſuffered extremely during the long war in Germany. It is nine miles north of Buchau, and thirty-ſix ſouth-ſouth-weſt of Stuttgart. Lat. 48. 14. N. lon. 9. 40. E.

MUN'DIC, *ſ.* [ſo called from its cleanly ſhining appearance; *mundus*, Lat.] See the article MINERALOGY, vol. xv. p. 493.—When any metals were in conſiderable quantity, theſe bodies loſe the name of marcaſites, and are called ores: in Cornwal and the Weſt they call them *mundick. Woodward.*

MUNDIFICA'TION, [*mundus* and *facio*, Lat.] Cleanſing any body, as from droſs, or matter of inferior account to what is to be cleanſed. *Quincy.*

MUNDIFICA'TIVE, *adj.* Cleanſing; having the power to cleanſe.—Gall is very *mundificative*, and was a proper medicine to clear the eyes of Tobit. *Brown's Vulg. Err.*

MUNDIFICA'TIVE, *ſ.* A medicine to cleanſe.—We incarned with an addition to the fore-mentioned *mundificative. Wiſeman's Surgery.*

To MUN'DIFY, *v. a.* To cleanſe; to make clean.—Simple wounds, ſuch as are *mundified* and kept clean, do not need any other hand but that of nature. *Brown.*

MUN'DIMUS. See MONDINO, vol. xv. p. 650.

MUNDIV'AGANT, *adj.* [*mundivagus*, Lat.] Wandering through the world. *Dict.*

MUN'DON (Great), or MUNDON FURNIVAL, a village in Hertfordſhire, to the ſouth-weſt of Puckeridge. Its church ſtands on a hill.

MUN'DON (Little), or MUNDON FREWELL, ſtands in a vale, one mile and a half to the ſouth-weſt of the former. There is a cuſtom here, that the lord ſhall not plough or break up two acres near the church, becauſe it was heretofore granted for the recreation of the youth of the pariſh after evening ſervice every Lord's day.

MUND'SEE, a lake of Brandenburg, in the Ucker Mark, near Angermunde.

MUN'DU, a town of Hindooſtan, in the country of Malwa, of which it was formerly the capital: thirty-two miles ſouth-weſt of Indore, and ninety north of Burhampour. Lat. 22. 45. N. lon. 75. 40. E.

MUNDU'BI, *ſ.* in botany. See ARACHIS.

MUNDU'BI GUACU'. See IATROPHA.

MUNDUN'GUS, *ſ.* Stinking tobacco. *A cant word.*—Exhale *mundungus*, ill-perfuming ſcent. *Philips.*

MUN'DUS PA'TENS, the OPEN WORLD; in Roman antiquity, a ſolemnity performed in a ſmall temple, of a round form like the world, dedicated to *Dis* and the reſt of the infernal gods. This temple was opened but three times in the year, viz. the 24th of Auguſt, the 4th of October, and the 7th of November. During theſe days, the Romans believed hell was open; on theſe days therefore they never offered battle, liſted ſoldiers, put to ſea, or married.

MUNDY (John), in 1594, gentilman, bachiler of muſicke, and one of the organiſts of his majeſty's free chapel of Windſor, publiſhed Songs and Pſalmes compoſed into three, four, and five, Parts, for the uſe and delight of all ſuch as either love or learn Muſicke. Theſe are dedicated to the unfortunate earl of Eſſex, with all the punning, quibbling, and efforts at wit, which the taſte of the times encouraged, and indeed required.

MU'NERARY, *adj.* [from *munus*, Lat.] Having the nature of a gift.

To MU'NERATE, *v. a.* To reward. *Cole.*

MUNERA'TION, *ſ.* Gift; reward. *Lemon.*

MUNG'-CORN, or MANG'-CORN, *ſ.* [from *mengen*, Dut. to mingle.] Corn of ſeveral kinds mixed; as wheat and rye, &c.

MUNGALO'VA, a town of Ruſſia, in the government of Irkutſk, at the union of the rivers Ona and Uda: eighty-eight miles of Verchnei Udinſk.

MUN'GAR, a town of Hindooſtan, in the circar of Bopal: twenty miles ſouth-eaſt of Bopaltol.

MUNGAR'VA, a town of Africa, in Nigritia. Lat. 11. 42. N. lon. 23. 45. E.

MUN'GLA, a town of Hindooſtan, in Bahar: thirty-three miles ſouth-weſt of Patna.

MUNGLAPET', a town of Hindooſtan, in Myſore: five miles north of Dalmachery.

MUNGLO'RE, a town of Candahar: twenty-five miles weſt of Cachemire, and 130 eaſt of Cabul. Lat. 34. 15. N. lon. 71. 15. E.

MUN'GO, *ſ.* A name given in India to the ichneumon-weaſel, which fights naturally and by choice with the ſerpents. See VIVERRA.—The word is uſed in England to denote a negro, or black man.

MUN'GOS, *ſ.* in botany. See OPHIORHIZA.

MUNGRA'R, a town of Bengal: twelve miles ſouth-ſouth-weſt of Curruckpour.

MUN'GREL, *ſ.* [frequently written *mongrel.* See MONGREL.] Any thing generated between different kinds; any thing partaking of the qualities of different cauſes or parents:

Maſtiff, greyhound, *mungrel* grim,
Hound or ſpaniel, brache or lym,
Or bobtail tike, or trundle-tail. *Shakeſpeare.*

MUN'GREL, *adj.* Generated between different natures; baſeborn; degenerate.—*Mungrel* curs bawl, ſnarle, and ſnap, where the fox flies before them; and clap their tails between their legs when an adverſary makes head againſt them. *L'Eſtrange.*

MUNGULHAU'T, a large manufacturing town of Hindooſtan, twelve miles from Calamatty, ſituated on the ſouth ſide of the river Durlah, which divides the diſtrict of Cooch Bahar from that of Rungpore. The inhabitants of this town pay a greater attention to the comforts and commodiouſneſs of living than thoſe of any other town which captain Turner viſited in India. Their houſes, compoſed of mats inſerted between frames of bamboo, are neatly thatched; and each had a portion of land encircled with a bamboo paliſade. The ſtreets are ſpacious; and boats of large burthen upon the river, added to the neatneſs and regularity of the town, give it an air of induſtry and traffic. The ſtaple commodity conſiſts of cotton cloths, which furniſh the moſt conſiderable part of the large returning cargo which is carried by the Bootan caravan annually from Rungpore. *Turner's Embaſſy to Tibet.*

MUNHA'Y, a country of Africa, dependent on Mocaranga.

MU'NI, in Hindoo mythology, is a name applied on a variety of occaſions, and with ſeeming confuſion and contradiction. Mr. Colebrooke, (the worthy ſucceſſor of ſir William Jones in the chair of the Aſiatic Society of Bengal,) on the authority of the Puranas, ſeems to identify the Riſhis and Munis. He calls them "the virtuous ſages, who delight in protecting the people; the mighty ſages." Aſ. Reſ. vol. ix. p. 358. (See RISHI.) Some authorities enumerate twenty of theſe perſonages, who are ſometimes called "inſpired writers." Sometimes they appear as anchorets or aſcetics. The appellation is ſometimes given to Budha or Boodh, who is called *Budha Muni.* Both words ſeem to mean *wiſdom*, more eſpecially divine wiſdom, or theology: and Muni may perhaps be traced to the ſame root with Menu, to *men* or *man*, the mind. See MENU.

In that curious work of Anquetil du Perron, which he ſtyles Oupnekhat, the following paſſage occurs, tranſlated from one of the Puranas: "Brahm ſaid, Riſe up, O Rudra (or Siva), and form men to govern the world. Rudra immediately obeyed: he began the work; but the men he made were fiercer than tigers, having nothing but the deſtructive quality in their compoſition: and they ſoon deſtroyed one another; for anger was their only paſſion. Brahma, Viſhnu, and Rudra, then joined their different powers, and created ten men, whoſe names were Nareda, Dakſha, Vaſiſhta, Brighu, Kritu, Pulaha, Pulaſtya, Angira, Atri, and Marichi; (that is, Reaſon, Ingenuity, Emulation, Humility, Piety, Pride, Patience, Charity, Deceit, Morality;) the general name of whom is the *Munis.* Brahma then produced *Dherma*, or Juſtice, from his breaſt; *Adherma*, Injuſtice, from his back; *Labha*, Appetite or Paſſion, from his lips; and *Kama*, Love or Deſire, from his heart. The laſt was a beautiful female, and Brahma looked upon her with amorous emotions; but, the Munis telling him that ſhe was his own daughter, he ſhrunk back, and *Ladja*, Shame, a bluſhing virgin, ſprung from him. Brahma, deeming his body defiled by its emotions towards Kama, purified himſelf by partially changing it into ten females, who were reſpectively eſpouſed by the Munis."

The Hindoo books abound with ſtories of the potency of theſe devotees, under the names of Riſhis, or Munis. On one occaſion, Kapila, having been rudely diſturbed while at his devotion, "filled with exceſſive anger, uttered from his noſtrils a loud ſound, and inſtantly by him, of immeaſurable proweſs, were all the ſons of Sagara (60,000 in number) reduced to aſhes." This is from a long and extravagant, but poetical, ſtory related in the firſt book of the Ramayana.

MU'NIA, *ſ.* [Latin.] A mummy; a ſuppoſed kind of vital ſpirit. *Aſh.*

MUNIA'NEN, a town of Pruſſia, in the circle of Natangen: thirty-ſix miles ſouth of Konigſberg.

MU'NIC (Burchard Chriſtopher, Count), a celebrated general, was born of a noble family, at New-Huntorf, in the county of Oldenburgh, in the year 1683. He received an excellent education; and, being endowed with a ready genius, and a ſtrong deſire for the acquirement of knowledge, he had made ſuch progreſs in languages and ſciences that, at the age of ſixteen, he was qualified to undertake a tour to France, where he improved himſelf in every branch of learning, and applied in particular to engineering both civil and military, and alſo to fortification. Having by theſe means become advantageouſly known to the court of Louis XIV. he was appointed an engineer in the French army; but, being unwilling to ſerve againſt the empire, he returned to Germany, and in conſequence of his knowledge of tactics was made a captain by the landgrave of Heſſe-Darmſtadt, and with his troops was preſent at the ſiege of Landau. Soon after, he entered into the ſervice of the prince of Heſſe-Caſſel, by whom he was promoted to be a major of the foot-guards; and in this ſituation he had an opportunity of improving himſelf in the art of war under the duke of Marlborough and prince Eugene. He diſtinguiſhed himſelf by his cool intrepidity in ſeveral engagements and ſieges, and particularly at the battle of Malplaquet; when, as a recompenſe for his bravery, he was raiſed to the rank of lieutenant-colonel. At the battle of Denain, in 1712, he was dangerouſly wounded and taken priſoner by the French; but, being liberated the year following, he was promoted to the command of a regiment. In 1716 he quitted the Heſſian and entered into the Poliſh ſervice under Auguſtus II. where he ſoon roſe to the rank of major-general; but, being inſulted in 1721 by count Fleming, the king's favourite, he repaired to Peterſburgh, by the advice of prince Dolgorucki the Ruſſian miniſter in Poland, and was received in the moſt honourable manner by Peter the Great, who employed him in ſeveral important affairs, both civil and military, ſo that he ſucceſſively filled the higheſt poſts in the army and the ſtate. In 1723 he was intruſted with the conſtruction of the famous canal of Ladoga, and this work he completed with ſo much ſkill and expedition, that the czar, as a mark of his ſatisfaction, admitted him a member of his council. But his talents were more ſuited to the field than the cabinet. By the imprudence of his conduct he incurred the diſpleaſure, in particular, of count Oſterman; nevertheleſs, the empreſs Catharine conferred on him the order of Alexander Newſki; and, in 1727, Peter II. made him commander in chief, and in 1728 raiſed him to the rank of count. He was in no leſs favour with the empreſs Anne, who honoured him with various marks of her approbation; ſo that in the courſe of a few years he became preſident of the College of War, general field-marſhal, chief of the new corps of noble land-cadets, and knight of the order of St. Andrew. Count Oſterman, however, was continually labouring to procure his fall; and, having at length gained over counts Löwenwolde and Biren to be of the ſame party, the latter, to remove Munic from court, cauſed him to be appointed commander of the Ruſſian troops in Poland, with orders to reduce Dantzic, which had given ſhelter to the fugitive king Staniſlaus. Though his enemies threw every poſſible obſtacle in the way to impede his progreſs, he carried on his operations with ſo much effect, that the place at length ſurrendered, after a long and cloſe ſiege. He was then ordered to reſtore tranquillity in Poland, which he did with ſo much ſucceſs, that the whole kingdom ſubmitted to king Auguſtus; but, war having, in the mean time, broken out between Ruſſia and the Porte, he was again obliged to take the field, being appointed commander in chief of the Ruſſian army ſent into the Ukraine. The campaign was opened in the month of October 1735; and before the end of the next year Munic had defeated the Tartars of the Crimea in two ſkirmiſhes, and made himſelf maſter of Perekop, Koſlof, and Baktſchiſari, but with the loſs of 30,000 men, and the diſcontent of ſeveral of his officers, of whom the prince of Heſſe-Homburg and a nephew of count Biren were the moſt conſiderable. The empreſs, however, was ſo well ſatisfied with his conduct, that ſhe rewarded him with the grant of a conſiderable eſtate in the Ukraine. In the year 1737 he took Oczacow by ſtorm, and after an almoſt uninterrupted ſeries of victories reduced Choczim in 1739, and ſubjected the greater part of Moldavia to the Ruſſian dominion. But moſt of theſe conqueſts were reſtored to the Turks by the treaty of peace which followed ſoon after; and this gave conſiderable umbrage to Munic, whoſe diſcontent was ſtill further increaſed in conſequence of his not having been conſulted in regard to that treaty.

When Biren, after the death of the empreſs Anne in the year 1740, got the chief management of affairs during the minority of prince Ivan, Munic endeavoured, by every means in his power, to obtain his favour, with a view of being appointed generaliſſimo of the naval and land forces; but, being diſappointed in his expectation, he reſolved, if poſſible, to effect the duke's overthrow, a deſign which he at length accompliſhed, Biren with two other perſons of diſtinction being arreſted about the end of the year 1740, and conveyed to Siberia. Munic, however, did not obtain that office of which he was ſo ardently deſirous; and, though the grand ducheſs made him prime miniſter, he was ſo diſſatisfied at not being appointed generaliſſimo, and his ambition began to excite the jealouſy of the court ſo much, that he requeſted permiſſion to reſign his employments; and this requeſt was granted with a readineſs which he little expected. Inſtead, however, of repairing to the Pruſſian court, to which he was ſtrongly invited, he imprudently remained in Ruſſia, flattering himſelf with the hopes of being reinſtated in his former dignity; and, when the empreſs Elizabeth aſcended the throne, in conſequence of a new revolution, he was arreſted by order of that princeſs on the 6th of December, 1741. The oſtenſible reaſon of this diſgrace was, that he had perſuaded the empreſs Anne to nominate Ivan her ſucceſſor; but the real cauſe, according to a late traveller in Ruſſia, was, that by order of that empreſs he had taken into cuſtody one of Elizabeth's favourites.

Munic was brought before a committee appointed to examine ſtate-priſoners; and, being haraſſed with repeated queſtions, and perceiving that his judges were determined to find him guilty, he ſaid to them: "Dictate the anſwers which you wiſh me to make, and I will ſign them." The judges immediately wrote down a confeſſion of ſeveral charges, which being ſubſcribed by Munic, his mock-trial was concluded. Being thus convicted of high treaſon, he was condemned to be quartered; but his ſentence was changed by Elizabeth to perpetual impriſonment. During the long period of twenty years he was confined at the ſmall town of Pelim in Siberia, in an oſtrog or priſon, of which, according to Manſtein, he had himſelf drawn the plan for the reception of Biren. It was an area incloſed by high paliſades about 170 feet ſquare, within which was a wooden houſe inhabited by himſelf and his wife, his chaplain Marten, and a few ſervants, with a ſmall garden which he cultivated with his own hands. He received a daily allowance of twelve ſhillings for the maintenance of himſelf, his wife, and domeſtics; which ſmall ſum he increaſed by keeping cows and ſelling part of the milk, and occaſionally inſtructing youth in geometry and engineering. During his tedious confinement he exhibited the utmoſt reſignation, tranquillity, and even cheerfulneſs. He was accuſtomed every day, at dinner, to drink to his wife, "a happy return to Peterſburgh." He had prayers twice a-day; from eleven to twelve in the morning, and from ſix to ſeven in the evening: they were read, in German, by his chaplain, who dying in 1741, the count himſelf afterwards performed the ſervice. Notwithſtanding the time ſpent in the cultivation of his garden, and in giving inſtruction, he found ſufficient leiſure for compoſing hymns, for tranſlating ſeveral pſalms and prayers into German verſe, and for writing a treatiſe on the art of war, which he propoſed, if releaſed from his confinement, to preſent to the king of Pruſſia. In the laſt year of his confinement, a ſoldier, whom he had cauſed to be arreſted on account of ſome theft, having threatened to inform againſt his ſervants for ſupplying him with pens and paper, he was obliged, in order to prevent a diſcovery, to deſtroy all his writings, the labour and amuſement of ſo many ſolitary hours.

He had always flattered himſelf with the expectation of recovering his liberty at the acceſſion of Peter III. but he was no ſooner informed of that event, than, with the agitation natural to a perſon in his ſtate, he began to dread that his expectation was ill-founded. For ſeveral weeks he ſuffered the moſt alarming anxiety, always fluctuating between hope and fear; and often declared that theſe few weeks appeared to him much longer than all the former years of his confinement. At length, on the morning of the 11th of February, 1762, the long-expected meſſenger arrived from Peterſburgh with the order for his releaſe. Being informed of his recall, he was ſo affected as to faint away; but ſoon recovering he fell down upon his knees, and in the moſt fervent manner offered up his thanks for this change of ſituation. On the 19th he departed from Pelim, and on the 24th of March arrived at Peterſburgh, in the ſame ſheep-ſkin dreſs which he had worn in his priſon. On the 31ſt he was admitted to an audience of the emperor. Peter, after hanging about his neck the order of St. Andrew, and reſtoring him to his ancient rank, ſaid to him, "I hope that your advanced age will ſtill permit you to ſerve for me." "Since your majeſty," replied the count at the concluſion of a long ſpeech, "has raiſed me from darkneſs into light, and recalled me from Siberia, to proſtrate myſelf before your throne, I ſhall always be moſt willing to expoſe my life in your ſervice."

During the memorable revolution of 1762, Munic, actuated by a noble ſenſe of gratitude, had offered to ſupport the emperor at the hazard of his own perſon; but this conduct did not draw down upon him the reſentment of Catharine after ſhe had aſſumed the reins of government. When that princeſs mildly inquired the motives of ſuch an oppoſition to her intereſt, Munic, with a ſpirit which twenty years' impriſonment could not ſubdue, replied: "At that period, I was engaged by the ſtrongeſt ties of duty and gratitude to exert myſelf in behalf of my late maſter. Your majeſty is now my ſovereign, and you will experience from me the ſame fidelity." The empreſs, ſtruck with the magnanimity of his anſwer, repoſed in him, with equal greatneſs of mind, the moſt unbounded confidence, which was juſtified by his ſubſequent conduct. He died in the month of October 1767, in the eighty-fifth year of his age.

Munic was a man who diſplayed in his character great virtues and great defects. He was exceedingly laborious; and ſo pertinacious in his deſigns, when once formed, that no obſtacle or difficulty could deter him from carrying them into execution. To great acuteneſs of judgment he united uncommon accuracy, which was apparent even in his ſtyle. He favoured literature, and frequented the company of learned men. He was alſo acquainted with the arts, for which he had a conſiderable taſte; and diſtinguiſhed himſelf, in particular, as a general, and by his knowledge of tactics; but is accuſed of exerciſing too much ſeverity to thoſe who were placed under his command. To the defective ſide of his character may be added, that he was too precipitate in his meaſures; and this fault was further heightened by an unſteadineſs of diſpoſition, which rendered him ſometimes parſimonious, and at others liberal; often haughty and imperious, but frequently fawning and abject. He was violent, and prone to anger; irreconcileable when once offended; eager for revenge, and, on ſome occaſions, ungrateful. Being immoderately ambitious, he ſolicited, after the conqueſt of Moldavia, to remain there as hoſpodar; and, when diſappointed in this object, he requeſted, but without ſucceſs, to be created duke of Ukraine. When he made the latter requeſt, Biren ſaid: "Munic is remarkably modeſt; I thought he would be contented with nothing leſs than to be grand duke of Ruſſia." His faults, however, did ſcarcely any hurt but to himſelf; and his virtues were of great benefit to Ruſſia. *Buſching's Hiſt. Mag. Coxe's Travels in Ruſſia, &c.* vol. iii. *Gen. Biog.*

MU'NICH, a city of Bavaria, of which it is the capital, and reſidence of the king, ſituated on the Iſer. The ſtraight and broad ſtreets of this place, (with paths on both ſides for foot-paſſengers, the want of which is productive of ſo much inconvenience in Paris and many other continental cities,) and the great number of fine buildings in it, both eccleſiaſtical and ſecular, render it one of the handſomeſt cities in all Germany, and even in Europe; and it is ſaid to contain 50,000 inhabitants. Having been built at firſt by duke Henry the Lion, in 1175, on a ſpot of ground belonging to a convent, it had from thence in German the name of *Munchen*, i. e. Monk's Town, and a monk for its arms. The palace here is a very grand ſtructure, conſiſting of ſeveral courts, furniſhed and adorned in the moſt magnificent manner, with tapeſtry, gilding, ſculpture, ſtatues, and paintings. It contains an amazing collection of jewels, antiquities, and curioſities. The great hall is 118 feet long and 52 broad; and the ſtaircaſe leading to it, from top to bottom, of marble and gold. In the hall of antiquities are 354 buſts and ſtatues of jaſper and porphyry, braſs and marble. In this palace is a library, containing 200,000 volumes, and many valuable manuſcripts, in moſt languages, ancient and modern; and a chamber of rarities, among which is the picture of a bravo or aſſaſſin, who is ſaid to have committed 345 murders with his own hand, and to have been accomplice in, or privy to, 400 more. The treaſury in the chapel contains alſo a vaſt number of pictures, precious ſtones, medals, veſſels of gold and ſilver, &c. Among other curioſities, here is a cherry-ſtone with 140 heads diſtinctly engraved upon it. The gardens of the palace are alſo very fine, and it is ſaid a ſecret paſſage leads from it to all the churches and convents in the town. There is a great number of other fine buildings in this city, public and private, particularly the riding-houſe, town-houſe, opera-room, large edifice for tournaments, the churches, convents, fountains, &c. Its manufactures are thoſe of ſilk, particularly velvet, woollen cloths, and tapeſtry; and it has two annual fairs, at which great quantities of goods are ſold. Moſt of the houſes are well built, and painted on the outſide. The market-place is extremely beautiful. Not far from Munich are four other palaces, with fine gardens, belonging to the elector, viz. thoſe of Sleiſheim, Nymphenburg, Dauchau, and Starenberg. The firſt and laſt are about three leagues from the capital; the ſecond about half a league, and the third about two, at a market-town of the ſame name.

A college called the Atheneum has been lately founded by profeſſor Thierch, for the inſtruction of young modern Greeks. It is already in a flouriſhing ſtate; ſeveral young men from Greece, Aſia, Moldavia, Wallachia, &c. purſue their ſtudies there; and the plan of the eſtabliſhment is calculated to have a great influence on the cultivation of the mind of Greek youth.

It has been ſometimes lamented that England is not a wine-producing country: but the common people have no reaſon to regret this circumſtance, ſince it is obſerved of the inhabitants of London and of Munich, that they obtain an excellent malt-beverage at a low price, which renders their ſituation ſuperior to the people in countries where the vine is cultivated, whoſe only drink is moſt deteſtable wine. If, however, the bourgeoiſie of Munich reſemble John Bull in their predilection for good malt-liquor, they differ from him *toto cœlo* in their mode of obſerving Sunday; which, eſpecially at the Carnival ſeaſon, is a day of the greateſt levity and diſſipation. "The people of Munich (ſays Mr. Depping) are leſs diſtinguiſhed by a taſte for the arts than by their love of diverſions and good living. Particularly during the carnival, this city preſents a continual ſucceſſion of *fêtes* and pleaſures. A ſtatement of the amuſements which are to take place every day is publiſhed; and on the Sundays of the carnival they have what is called the *Academy of Maſks*, a diverſion peculiar to this city, which takes place at the principal theatre. No one can be admitted without a maſk, or at leaſt without a part of the face being maſked; and ſome perſons, availing themſelves of this latitude in the order, appear with merely a maſk over their noſes. Not only is the body of the theatre ſplendidly illuminated, but every range of boxes. The pit is made level with the ſtage; though at the end a ſmall ſpace is left for the performance of lively pantomimes, the characters of which are always Harlequin and Columbine, Caſſander (Pantaloon), and Giles (the Clown). The loves of Harlequin and Columbine, the tricks, the diſguiſes, and addreſs, of Harlequin, and the traps which Caſſander and Giles lay for them, conſtitute the ſubſtance of the piece: but the incidents are much varied, and ſucceed each other with great rapidity. This ſpecies of repreſentation, which appears to have been tranſplanted from Italy into Bavaria, we need not wiſh more perfect; yet it is not the faſhion at Munich to give it much attention, only the middling claſſes and children being attracted by the ſcene. Other people either walk about or place themſelves at the card-tables. The royal family are almoſt always preſent on theſe evenings, and make a party at cards for an hour or two. A ſtranger muſt be ſurpriſed at ſeeing the king, the queen, and the princes, ſitting in the midſt of their ſubjects, who enjoy their amuſements, in the royal preſence, without conſtraint. As a means of diverting themſelves, and at the ſame time of turning matters to a good account, at the hall of entrance is a kind of lottery in behalf of the poor; the tickets are ſold at a moderate price: but there is only one prize to a hundred blanks. This lottery promotes alſo the national induſtry, ſince all the prizes conſiſt of articles manufactured in the country, as neck-handkerchiefs, gloves, ſilver-ſpoons, &c."

It is probable, that the ancient city of Campodunum, or Campidonum, ſtood in this neighbourhood. In 1327, Munich was greatly damaged by fire; and in 1448 almoſt entirely deſtroyed. In 1632 it was taken by the Swedes; and in 1704, 1742, and 1743, by the Auſtrians, who, in the laſt-mentioned year, eſtabliſhed a commiſſion of regency. The French took this city in September 1796, and levied on the elector a contribution of 3300 ſaddle and draught horſes, 200,000 quintals of grain, 100,000 ſacks of oats, 10,000 pair of boots, 30,000 ells of cloth, and 20 pictures, with other conditions, which the ſudden change of circumſtances that followed rendered highly neceſſary to obſerve. In 1800 they took the city again. It is two hundred miles weſt of Vienna, and twenty-nine ſouth-eaſt of Augſburg. Lat. 48. 6. N. lon. 11. 32. E. *Depping's Remarks on a Tour from Paris to Munich in* 1813. *Baron d'Uklanſki's Travels in Poland, Bavaria, &c.*

MU'NICHA, a town of South America, in the audience of Quito: ſixty miles ſouth of St. Yago de la Laguna.

MUNI'CIPAL, *adj.* [from *municipalis*, Lat. of *munus*, office, and *capio*, I take or hold.] Belonging to a corporation.—*Municipal cities* were thoſe whoſe inhabitants were capable of civil offices in the city of Rome. *Municipal*, among us, is now applied to the cuſtomary laws that obtain in any particular city or province, and which have no authority in the neighbouring places. *Municipal officers*, are thoſe elected to defend the intereſts of cities, their rights and privileges, and to maintain order and good policy: as mayor, ſheriffs, conſuls, bailiffs, &c. *Chambers.*—A counſellor, bred up in the knowledge of the *municipal* and ſtatute laws, may honeſtly inform a juſt prince how far his prerogative extends. *Dryden.*

MUNICIPAL'ITY, *ſ.* The people of a diſtrict in the diviſion of republican France.—Do you ſeriouſly think, that the territory of France, upon the ſyſtem of eighty-three independent *municipalities*, can ever be governed as one body? *Burke.*

MUNI'CIPES, *ſ.* An appellation given by the Romans to the inhabitants of the *municipia*, or municipal cities. See MUNICIPIUM.

MUNICIP'IUM, *ſ.* in Roman antiquity, a corporation borough, or enfranchiſed city or town, where the inhabitants enjoyed their own laws and cuſtoms, and at the ſame time were honoured with the privileges of Roman citizens; but then this privilege generally reached no further than the bare title. Some indeed, by particular merit, obtained the liberty of votes, which occaſioned that diſtinction of *municipium ſine ſuffragio*, and *municipium cum ſuffragio*. The inhabitants of the *municipium ſine ſuffragio* were called barely *Romani*, but thoſe of the *municipium cum ſuffragio* were called *cives Romani*.

The difference between proper citizens of Rome and the inhabitants of the municipium may be thus expreſſed. The proper citizens of Rome were, 1. Regiſtered in the cenſus; 2. Had the right of ſuffrage and of bearing honours; 3. Were aſſeſſed in the poll-tax; 4. Served in the legions; 5. Uſed the Roman laws and religion; 6. Were called *Quirites* and *populus Romanus*. Whereas the municipes enjoyed the three firſt of theſe privileges, but were denied the three laſt.

MU'NIE, a town of Hindooſtan, in the circar of Hiſſar: fifteen miles north of Hiſſar.

MUNIF'EROUS, *adj.* [from the Lat. *munus*, a gift, and *fero*, to bring.] Bringing gifts. *Bailey.*

To MUNIF'ICATE, *v. a.* [*munifico*, Lat.] To enrich. *Cockeram.*

MUNIF'ICENCE, *ſ.* [Fr. from *munificentia*, Lat.] Liberality; the act of giving.—A ſtate of poverty obſcures all the virtues of liberality and *munificence*. *Addiſon.*—In Spenſer it is uſed, as it ſeems, for fortification or ſtrength, from *munitiones facere*:

A nation ſtraunge with their importune ſway
This land invaded with like violence,
Until that Locrine, for his realm's defence,
Did head againſt them make, and ſtrong *munificence*. *F. Q.*

MUNIF'ICENT, *adj.* Liberal; generous.—Is he not our moſt *munificent* benefactor, our wiſeſt counſellor, and moſt potent protector? *Atterbury.*

MUNIF'ICENTLY, *adv.* Liberally; generouſly.

MUNIL'LA, a town of Spain, in Old Caſtile: eight miles ſouth of Calahorra.

MU'NIMENT, *ſ.* [*munimentum*, Lat.] Fortification; ſtrong hold. Support; defence:

The arm our ſoldier,
Our ſteed the leg, the tongue our trumpeter;
With other *muniments* and petty helps
In this our fabrick. *Shakeſpeare's Coriolanus.*

Record; writing upon which claims and rights are founded; evidences; charters.—The more ancient *muniments* of Winchcombe were deſtroyed by fire in the reign of king Stephen. *Warton's Hiſt. of Kiddington.*

MU'NIMENT-HOUSE, or MUNIMENT-ROOM, *ſ.* in cathedrals and collegiate churches, caſtles, colleges, or public buildings, is a houſe or little room of ſtrength; purpoſely made for keeping the ſeal, evidences, deeds, charters, writings, &c. of ſuch church, college, &c. Such evidences of title to eſtates, whether of public bodies or private perſons, being called *muniments*, from *munio*, to defend; becauſe inheritances and poſſeſſions are defended by them. *Jacob's Law Dict.*—The venerable Gothic vaulting of the ancient *muniment-room* in Redcliffe-cheſt, and the maſſy monumental cheſt which preſerved theſe ineſtimable remains. *Warton's Rowley Enq.*

MUNIM'INA, *ſ.* [of the Latin *munio*, I defend or ſtrengthen.] The grants or charters of kings and princes to churches: ſo called, becauſe *cum eis muniuntur* againſt all thoſe who would deprive them of thoſe privileges.

To MUNI'TE, *v. a.* [from *munio*, Lat.] To fortify; to ſtrengthen. *Not in uſe.*—Heat doth attenuate, and the more groſs and tangible parts contract, both to avoid vacuum, and to *munite* themſelves againſt the force of the fire. *Bacon's Nat. Hiſt.*—Men, in the procuring or *muniting* of religious unity, muſt not diſſolve the laws of charity and human ſociety. *Bacon.*

MUNI'TION, *ſ.* Fortification; ſtrong hold.—All that fight againſt her and her *munition*. *Iſa.* xxix. 7.—Keep the *munition*; watch the way. *Nahum*, ii. 1.—Authority is to be a fenced as well as a brazen wall. The inward firmneſs of one muſt be corroborated by the exterior *munitions* of the other. *South.*—Ammunition; materials for war; materials for commerce.—He provided victuals for the cities, and ſet in them all manner of *munition*. 1 *Macc.* xiv. 10.—The bodies of men, *munition*, and money, may juſtly be called the ſinews of war. *Ralegh's Arts of Emp.*

Maſter Picklock, ſir, your man o'law
And learn'd attorney, has ſent you a bag of *munition*.
—What is't?—Three hundred pieces. *B. Jonſon.*

MU'NITY, *ſ.* [from *munite*.] Security; freedom. *Not in uſe.*—Devotion doth rather compoſe the *munity* than infringe the true liberty of our affection. *W. Mountague's Dev. Eſſ.*

MUNKAT'ZKOE, a town of Ruſſia, in the government of Kolivan, on the Torn: 180 miles eaſt of Kolivan, and 640 eaſt-ſouth-eaſt of Tobolſk. Lat. 54. 52. N. lon. 86. 50. E.

MUN'KER, ſ. With the Mahometans, one of the two angels who are ſuppoſed to examine the ſouls of the departed.

MUNK'HOLM, a town of Norway, in the province of Drontheim: three miles north of Drontheim.

MUN'KOES, a town of Hungary, the caſtle of which, ſeated on a ſteep rock, and artificially fortified, is deemed impregnable. The town is ſituated on the river Latortza, and it is the reſidence of a Greek biſhop, united with the Roman church, and a convent of the order of St. Baſil. It is fifty-two miles eaſt-ſouth-eaſt of Caſkau. Lat. 48. 29. N. lon. 20. 14. E.

MUN'KORP, a town of Sweden, in Weſtmanland: ſeven miles weſt of Stroemſholm.

MUN'KY, a town of Hindooſtan, in Canara: ſeven miles ſouth of Onore.

MUN'NERSTADT, a town of the duchy of Wurzburg, on the Lauer: nine miles north of Schweinfurt, twenty-eight north-north-eaſt of Wurzburg, and thirty-one north-weſt of Bamberg. Lat. 50. 18. N. lon. 10. 24. E.

MUN'NION, ſ. [*mullion* is probably the true word. See Mullion.]—The upright poſts, that divide the ſeveral lights in a window-frame, are called *munnions*. *Moxon.*

MUN'NOW. See Monnow.

MUNNYPOU'R, a town of Aſia, capital of Caſſay. In 1774 it was taken by the king of Burmah. It is 264 miles north-north-eaſt of Aracan. Lat. 24. 40. N. lon. 95. E.

MUNOOCA'RY, a town of Hindooſtan, in the Carnatic: ſeven miles ſouth-weſt of Arnee.

MU'NOS (Don Juan Baptiſta), a moſt voluminous Spaniſh writer, who publiſhed 130 volumes of hiſtorical and other works, many original documents and letters of Columbus, Ximenes, &c. and other productions relating to America, and was employed in 1779 by the king of Spain to write the Hiſtory of the New World. He died at Madrid about December 1799. *Jones's Biog. Dict.*

MU'NOZ (Jerome), an able Spaniſh mathematician and oriental ſcholar in the ſixteenth century, was a native of Valentia, but of the date of his birth or death we have ſeen no account. He appears to have riſen into fame firſt of all in Italy, as a teacher of the Hebrew language at Ancona, where the Jews themſelves beſtowed the higheſt commendation on his intimate knowledge of their ſacred tongue. Nor was he leſs applauded for his profound ſkill in the Greek language, polite literature, and the mathematical ſciences. The reputation which he had acquired rendered his countrymen deſirous of ſecuring the benefit of his inſtructions to his native land, and he accepted of their invitation to repair to the univerſity of Salamanca. In this ſeminary, he was at the ſame time appointed profeſſor of Hebrew, and of the mathematics, with a very ample ſtipend; and he ſpent the remainder of his days in the aſſiduous diſcharge of the duties of his double office. He was the author of, 1. Inſtitutiones Arithmeticæ ad Percipiendam Aſtrologiam et Mathematicas Facultates neceſſariæ, 1566, 4to. 2. Alphabetum Hebraicum, cum ratione legendi cum punctis. 3. Lectura Geographica. 4. Treatiſe on the new Comet, and its Prognoſtics, of which a French tranſlation was publiſhed at Paris in 1574, in 8vo. *Gen. Biog.*

MUNRE'E, a river of Ireland, which runs into Tullaghan Bay in lat. 54. 5. N. lon. 9. 42. W.

MUNS, ſ. [*mund*, Germ. and Dan. *munnr*, Icel.] A term for the mouth and chops, noticed by Ray; and ſtill uſed in vulgar language.

MUNSA'LA, a town of Sweden, in the government of Waſa: fifteen miles ſouth of Jacobſtadt.

MUNSAPET'TA, a town of Hindooſtan, in the Carnatic: five miles north of Tritchinopoly.

MUN'SEN, a town of Hindooſtan, in the country of Viſiapour: twenty-ſeven miles north of Poonah.

MUN'SESKIRCHEN, a town of France, in the department of the Moſelle: five miles weſt of Bouzonville, and twelve eaſt of Thionville.

MUNS'HOLM, a ſmall iſland of Denmark, in the Great Belt: ten miles north-north-weſt of Corſoer. Lat. 55. 29. N. lon. 11. 6. E.

MUNSIN'GEN, a town of Wurtemberg: twenty-ſix miles ſouth-ſouth-eaſt of Stuttgart, and twenty weſt of Ulm. Lat. 48. 25. N. lon. 9. 33. E.

MUN'STER, formerly a biſhopric of Germany, bounded on the north by Eaſt Frieſland and Oldenburg; on the eaſt by the biſhopric of Oſnabruck, and counties of Diepholz, Tecklenburg, Lingen, and Ravenſberg; on the ſouth by Weſtphalia, the counties of Mark and Recklinghauſen, and duchy of Cleves; and on the weſt by Holland, and the county of Bentheim. This country is level, with ſome agreeable heights, but no mountains. The extenſive heaths here ſerve for the breeding of cattle. In it are alſo fruitful plains, fine woods and turf, together with good quarries of ſtone, and rivers abounding in fiſh. The moſt remarkable are the Embs, the Lippe, the Vecht, and the Berkel. The Dummer Lake, which is one German mile in length, and half a one broad, lies between the biſhopric and the county of Diepholz, and in part belongs thereto. At the time of the reformation, the Lutheran doctrine found here, indeed, many adherents; but it was afterwards ſuppreſſed, and the exerciſe of the Lutheran religion, which had been permitted in the quarter of Embſland, in the years 1613 and 1614, was again put down. In the year 802, the emperor Charlemagne created Ludgern, of Frieſland, firſt biſhop of Mimigernford, inſtead of which name was afterwards uſed that of Munſter. Biſhop Louis I. ſet this biſhopric free from the hereditary right of protection from the counts of Tecklenburg. Biſhop Hermann II. who governed in the 12th century, was, by the emperor Otto IV. made a prince of the empire. Biſhop Otto, a count of Bentheim, was the firſt prelate who was elected by the chapter, on whom the emperor Frederic II. conferred a power for this purpoſe. Biſhop Louis II. a landgrave of Heſſe, was the firſt who was confirmed by the pope. Biſhop Chriſtopher Bernhard, a baron of Galen, who died in the year 1678, is celebrated as a great warrior. In 1802, the biſhopric was ſeculariſed and given to the king of Pruſſia; by whom, at the peace of Tilſit, 1807, it was ceded to the kingdom of Weſtphalia.

In the year 1810, it was thought fit by Bonaparte to unite the kingdom of Holland, the Hanſe-towns, the grand duchy of Berg, and the territory of Munſter, to the French empire. The following is a part of the proclamation iſſued upon that occaſion by the general ſent to take poſſeſſion.

To the Inhabitants of the County of Munſter. Feb. 24, 1811.

"An imperial decree of the 22d of January laſt, iſſued in conſequence of the ſenatus conſultum of the 13th of December, 1810, which unites you to the empire, authorized the giving up of your country, of which I have taken poſſeſſion in the name of his majeſty the Emperor of the French, King of Italy, &c. Called to partake of the deſtinies of the grand people, happy for the future under the ſafeguard of the eagles who are coming to ſurround your territory, and render it inviolable; be worthy of the protection which our invincible monarch offers you. When you were only the neighbours of his vaſt empire, you could reckon upon this powerful protection; but now, ſubjects of the greateſt, beſt, of ſovereigns, you will more particularly intereſt his magnanimous heart. Admire his glory; cheriſh his paternal goodneſs."

Accordingly, this country was formed into a department called La Lippe; and on the 19th of Auguſt following, the emperor replied to the perſons who brought him an addreſs from the capital in the following terms.—"Gentlemen, Deputies of the Department of La Lippe; The town of Munſter belonged to an eccleſiaſtical ſovereign; deplorable effect of ignorance and ſuperſtition! You were without country. Providence, who willed that I ſhould reſtore the throne of Charlemagne, has made you naturally enter, with Holland and the Hanſe-towns, into the boſom of the empire. From the moment in which you became French, my heart made no difference between you and other parts of my ſtates. As ſoon as circumſtances ſhall permit me, I ſhall feel a lively ſatisfaction in being among you."

Addreſſes of this kind now appear ſtrange to us, though we have been diſuſed to them but for a very few years. However, it ſhould not be forgotten that ſuch things were. By the xxiiid article of the Treaty of Vienna, (1815.) it is ſtated, that "the king of Pruſſia ſhall poſſeſs anew, as formerly, in full property and ſovereignty, the principality of Munſter; that is to ſay, the Pruſſian part of the former biſhopric of Munſter, with the exception of that part which has been ceded to his Britannic majeſty, king of Hanover, in virtue of the xxviith article." The 4th ſection of that article declares, that there ſhall belong to the kingdom of Hanover "The lower county of Lingen, and the part of the principality of Pruſſian Munſter which is ſituated between this county and the part of Rheina Wolbeck occupied by the Hanoverian government; but, as it has been agreed that the kingdom of Hanover ſhall obtain by this ceſſion an acceſſion of territory compriſing a population of 22,000 ſouls, and, as the lower county of Lingen, and the part of the principality of Munſter here mentioned might not come up to this condition, his majeſty the king of Pruſſia engages to cauſe the line of demarcation to be extended into the principality of Munſter, as far as may be neceſſary to contain that population."

MUN'STER, capital of the above territory, ſituated in a very fruitful and pleaſant ſpot, on the rivulet Aa, not far from the Embs. Munſter is environed by double ditches and ramparts; and contains in it a citadel, which is called the *Brille*, and was erected by biſhop Chriſtopher Bernhard, of Galen, in order to curb the town. Among others, is the pariſh-church of St. Lambert, on the tower of which John of Leyden, king of the anabaptiſts, together with both his princes, were hung up in iron baſkets. The town itſelf has undergone many calamities, among which that is in particular worthy of notice which it underwent in the time of the anabaptiſts, in the years 1535 and 1536. This city is remarkable for a famous treaty of a general peace, which was ſettled in the year 1648. It is ſometimes called the treaty of Munſter, and ſometimes the treaty of Weſtphalia, becauſe the plenipotentiaries were divided, and laboured at two places at the ſame time; the Swedes at Oſnabruck, and the French at Munſter. Thus, from the two treaties of Munſter and Oſnabruck, they have given it the general term of the Treaty of Weſtphalia. It is ſixty-five miles north-north-eaſt of Cologne. Lat. 51. 49. N. lon. 7. 44. E.

MUN'STER, a village of Bavaria, in the duchy of Neuburg, where the allies were encamped before the battle of Blenheim: ſeven miles north-eaſt of Hochſtatt.

MUN'STER, a town of the duchy of Wurzburg: eleven miles eaſt-north-eaſt of Schweinfurt.

MUN'STER, a town of France, in the department of the Upper Rhine: fourteen miles ſouth of Lauffen.

MUN'STER, a town of the county of Tyrol: two miles ſouth-weſt of Rattenburg.

MUN'STER, a town of Swiſſerland, and capital of a bailiwick, in the canton of Lucerne: twelve miles north-north-weſt of Lucerne.

MUN'STER, a town of the Griſons, which gives name to a valley, called *Munſterthal*, in the League of God's Houſe: fifteen miles north of Bormio.

MUN'STER, late a town of France, in the department of the Rhine and Moſelle: one mile ſouth of Creutznach.

MUN'STER, or MUNSTERROTH, a town of the principality of Heſſe: four miles ſouth-ſouth-weſt of Butzbach, and fourteen miles north of Frankfort on the Maine.

MUN'STER, or MASMUNSTER, a town of France, in the department of the Upper Rhine. This town was formerly imperial. It was taken by count Montecuculi, and fortified in the year 1633; but the Swedes, taking it ſoon after, deſtroyed the fortifications, and put it into the hands of the French. It is eight miles north-weſt of Ruffach, and nine weſt-ſouth-weſt of Colmar.

MUN'STER, in Latin *Monomia*, and in Iriſh *Moun*, the moſt ſoutherly province of Ireland; bounded on the north by Leinſter and Connaught, and on the eaſt, weſt, and ſouth, by the ocean. It contains the counties of Cork, Clare, Kerry, Limerick, Tipperary, and Waterford; and 3,289,932 Iriſh plantation acres, 740 pariſhes, 63 baronies, and 26 boroughs. It is about 125 miles long, and 120 broad; and its principal town is Cork. Its ancient name was *Mumhan*; and in latter ages it was divided into *Deſmond* or South Munſter, *Ormond* or Eaſt Munſter, and *Thomond* or North Munſter. It lies between lat. 51. 15. and 53. 0. N. and lon. 7. 10. and 10. 40. W.

MUN'STER (Sebaſtian), a diſtinguiſhed mathematician and linguiſt, was born at Ingelheim, in the Palatinate, in 1649; after ſuſtaining ſome time the character of a Franciſcan monk, he quitted that order, and embraced the reformed religion. He became profeſſor of the Hebrew language and theology at Heidelberg, whence he afterwards removed to Baſle to hold the like offices, where he died of the plague in 1552. He was one of the firſt among the German literati who attempted to improve the ſcience of geography; and compoſed a book entitled *Coſmographia Univerſalis*, which was printed in 1550, and tranſlated into the Italian and other languages. A French edition was publiſhed at Paris in 1575, in two vols. folio, with corrections and additions. He was ſo celebrated as a geographer, and alſo for his knowledge in theology, that he was ſtyled the Strabo and Eſdras of Germany. He conſtructed a map of the territory of Baſle, and another of Germany, which was corrected and enlarged by Tilleman Stella in 1567. Munſter was likewiſe great as a mathematician and aſtronomer. Montucla ſpeaks of a treatiſe of geometry written by him, entitled "Rudimenta Mathematica;" and he compoſed another on gnomonics, which the ſame author ſays is the foundation of the modern art of dialling. It was printed at Baſle, under the title of *Compoſitio Horologiorum*. In addition to theſe works, another is mentioned, viz. *Organon Uranicum*, in which the author gives a theory of the planets, with their various motions, for more than 100 years. As a linguiſt, the following works are mentioned: 4. A Latin Tranſlation of the Hebrew Bible. 5. Grammatica Hebraica. 6. Dict. Hebraicæ Chaldaico-Latinum. 7. Calendarium Hebraicum. 8. Grammatica Chaldaica. 9. Tabulæ novæ ad Geog. Ptolemæi, &c. *Gen. Biog.*

MUNSTER BIL'SEN, a town of France, in the department of the Lower Meuſe: one mile north of Bilſen.

MUNSTER EY'SSEL, a town of France, in the department of the Roer: twenty-four miles ſouth-eaſt of Juliers, and thirty-four north-weſt of Coblentz. Lat. 50. 38. N. lon. 6. 41. E.

MUNSTER MEI'NFELD, late a town of France, in the department of the Rhine and Moſelle: eleven miles weſt-ſouth-weſt of Coblentz, and forty-two north-eaſt of Treves. Lat. 50. 16. N. lon. 7. 19. E.

MUN'STERBERG, a principality of Sileſia, environed by the principalities of Schweidnitz, Brieg, Neiſſe, and the county of Glatz. It is a good ſoil; and, beſides flax, hemp, and wood, produces all ſorts of grain; and the neighbourhood of Munſterberg yields great quantities of hops. Here are likewiſe large breeds of horned cattle and ſheep. To the weſt and ſouth, or near the county of Glatz, it is very mountainous; the Bohemian chain ending in thoſe parts, and the Moravian chain of mountains beginning there. In this principality are three boroughs, and one market-town. Its firſt princes were of the line of the dukes of Schweidnitz. In 1653, the principality of Munſterberg, with the diſtrict of Frankenſtein, was, by the emperor Ferdinand, conferred as a fief on John Weichard, of Auerſberg, whoſe deſcendants ſtill enjoy it.

MUN'STERBERG, a town of Sileſia, and capital of the above principality, ſituated on the Ohlau. The principal employment of the inhabitants is the culture of hops: thirty-one miles ſouth of Breſlau, and ſixty-ſix north of Olmutz. Lat. 51. 26. N. lon. 16. 56. E.

MUN'STERBERG, a town of Pruſſia, in the province of Oberland: eighteen miles eaſt-north-eaſt of Marienwerder.

MUN'STERBERG, a town of Pruſſia, in the province of Pomerelia: twelve miles north-north-weſt of Marienburg.

MUN'STERBERG, a town of Pruſſia, in the province of Ermeland: ſixteen miles ſouth-weſt of Heilſperg.

MUN'STERDORF, a town of the duchy of Holſtein: two miles eaſt-ſouth-eaſt of Itzehoa.

MUNSTERLIN'GEN, a town of Swiſſerland, in the Turgau: three miles ſouth-eaſt of Conſtance.

MUN'STERTRENTZ, a town of Pomerelia, on the Motlaw: five miles ſouth-ſouth-eaſt of Dantzick.

MUNSURABAD', a town of Hindooſtan, in Allahabad: twelve miles north-weſt of Allahabad.

MUN'TER (Balthaſar), a celebrated German divine, was born, in 1735, at Lubeck, where his father reſided as a merchant. He was well educated; and obtained a high reputation at ſchool, as well by his German poetry in general, as by two odes in praiſe of the Deity, which were regarded as happy preſages of that celebrity to which he afterwards attained in ſacred poetry. In 1754, he went to ſtudy at Jena, and in 1757 became a private teacher in philoſophy. He entered his new career with great ſucceſs, and the ſcantineſs of his means induced him to make great exertions. He devoted himſelf to the church, acquired much popularity by his ſermons, and was ſoon patronized by the duke of Gotha, who appointed him dean of the court. He now diſtinguiſhed himſelf in print by ſome volumes of ſermons, and by a treatiſe "On the Tree of Knowledge," which was written in anſwer to an accuſation made againſt him for hereſy. He was next appointed ſuperintendant at Tonna; and in a ſhort time he accepted an invitation to become paſtor of a German congregation at Copenhagen. Here he publiſhed his "Converſations of a reflecting Chriſtian with himſelf, on the Truth and Divine Origin of his Belief," a work which was extremely well received, even by thoſe who thought differently from him in regard to many controverted points. He was exceedingly attentive to the religious inſtruction of youth, and compoſed a treatiſe expreſsly with this view, entitled "An Introduction to the Knowledge and Practice of Religion," which was ſaid to be diſtinguiſhed for its perſpicuity and practical utility. In the year 1772, he attended the unfortunate count Struenzee during his impriſonment; and revived in his mind thoſe ſentiments of religion which he had imbibed in his youth, and which had not been entirely eradicated by a life of vicious indulgence. Munter publiſhed an account of Struenzee's converſion, which bears the ſtrongeſt marks of the moſt diſintereſted attachment, and no work of modern times was read with ſo much avidity: it was circulated with the utmoſt zeal in foreign countries, and tranſlated into the Daniſh, Swediſh, French, and Dutch, languages. In the year 1786, Munter ſuſtained a ſevere ſtroke by the loſs of his ſecond ſon, who had been brought up to the ſea-ſervice, and who was drowned in the harbour of Bourdeaux: he died himſelf in 1793, leaving behind him the character of an excellent huſband, an affectionate father, and a ſincere friend. Modeſty and benevolence were the moſt ſtriking features in his character. *Gen. Biog.*

MUNTERKIN'GEN, a town of Wurtemberg, on the Danube: thirty-five miles ſouth-ſouth-eaſt of Stutgard, and ſixteen miles ſouth-weſt of Ulm.

MUNTERLO'NEY MOUNTAINS, mountains of Ireland, in the county of Tyrone: ten miles ſouth-eaſt of Strabane.

MUN'TING (Henry), a phyſician and botaniſt, was born about the beginning of the ſeventeenth century at Groningen. After ſpending eight years in foreign travel, during which he particularly attended to botanical reſearches, he ſettled in his native place, and began to form a garden of curious native and foreign plants. The expenſe of this eſtabliſhment abſorbed his patrimonial and profeſſional income, ſo that he would have been reduced to indigence, had not the ſtates of the province patroniſed a deſign which promiſed to be ſo uſeful to the univerſity of Groningen, and beſtowed upon him, in 1641, a penſion with the title of their botaniſt. In 1654 he was nominated to the chair of chemiſtry and botany, with a conſiderable augmentation of his penſion. He died in 1658. This phyſician publiſhed "Hortus & Univerſæ Materiæ Medica Gazophylacium," 1646, 12mo. which is a catalogue chiefly of exotic plants and their varieties.

MUN'TING (Abraham), ſon of the preceding, was born at Groningen in 1626. He ſtudied under his father, and at the univerſities of Franeker, Leyden, and Utrecht; and then made an abode of two years in France, and took his degree of M. D. at Angers. On his return he aſſiſted his father in his botanical lectures, and was appointed to ſucceed him in his chair at his death in 1658. He occupied this poſt with reputation, became rector of the univerſity, and died in 1683. Abraham publiſhed in the Dutch language, 1. The Genuine Culture of Plants, Amſt. 4to. 1672. 2. Aloedarium, 1680, 4to. with figures. 3. De vera Herba Britanica, (which he conſiders as a ſpecies of water-dock,) 1681, 4to. After his death appeared, in 1696, his "Curious Deſcription of Plants," the writing of which is the ſame as that of his firſt Dutch work; but the plates are new and ſplendid, amounting to 245; they have been publiſhed ſeparately, under the title of *Phytographia Curioſa*, with the names in various languages, at Amſterdam, in 1702, 1713, and 1727, folio. *Gen. Biog.*

MUNTIN'GIA, *ſ.* [named by Plumier, from the ſubject of the preceding article.] In botany, a genus of the claſs polyandria, order monogynia, natural order of columniferæ, (tiliaceæ, *Juſſ.*) Generic characters—Calyx: perianthium one-leafed, five-parted, concave at the baſe; ſegments lanceolate, acuminate, large; deciduous. Corolla: petals five, roundiſh, ſpreading, inſerted into the calyx. Stamina: filaments very many, capillary, very ſhort; antheræ roundiſh. Piſtillum: germen globular, clothed with villoſe hairs; ſtyle none; ſtigma headed, pentagonal, rayed, permanent; (pyramidal, five-grooved, ſeſſile. *Gærtner.*) Pericarpium: berry globular, umbilicate with the ſtigma, five celled, (frequently more. *Gærtner.*) Seeds; numerous, roundiſh, very ſmall, neſtling.—*Eſſential Character.* Calyx five-parted; corolla five-petalled; berry five-celled; (many-celled, *Gærtner.*) Seeds many, neſtling.

Muntingia calabura, or villoſe muntingia, the only ſpecies known. This ſhrub, or ſmall tree, riſes from a fathom to ten or twelve feet, or according to Sloane thirty feet, in height, ſending out many irregular, ſpreading, long, round, hairy branches, covered with a ſmooth dark purple bark. Leaves alternate, flat, ſpreading horizontally, oblique, ovate lanceolate, acuminate, unequally ſerrate, nerved, green and hirſute above, hoary-tomentoſe and viſcid underneath; three, four, or five, inches long, and three quarters of an inch broad at the baſe; the upper ones more oblique, or ſtretching much farther back on one ſide of the petiole than they do on the other. Petioles ſhort, round, hirſute; ſtipules ſolitary, the length of the petioles, filiform, hirſute in front at the baſe of the leaves; peduncles two to four, between the petioles, and not axillary, cluſtered, longer than the petiole, ſhorter than the leaf, one-flowed, round, villoſe-viſcid: Jacquin remarks, that they ſucceſſively turn the flower when it is about to expand to the face of the leaf, which before was reflexed to the back of it. Flowers without ſcent, but handſome, an inch in diameter, reſembling thoſe of the bramble, according to Sloane; the calyx is aſh-coloured, and the petals are white: the former is five or ſix parted; the parts the ſame length with the petals, hirſute, and viſcid: the latter five or ſix in number with a very ſhort claw, and plaited. Berry ſpherical, crowned with the ſeſſile ſtigma, which has from four to ſix grooves, ſucculent, many-celled: partitions membranaceous, very thin, ſubdivided towards the periphery, when the cells are unequal and irregular. Seeds very ſmooth and ſhining, whitiſh or pale ſtraw-colour, neſtling in the pulp, without any receptacle. According to Jacquin, the berry is roſe-coloured with a tinge of yellow, and when cut tranſverſely ſeems to be one-celled, but, if the pulp and ſeeds be gently preſſed out in water, it appears very clearly to be five-celled. Sloane ſays, the fruit is as big as a cherry; and Miller, that it is as large as that of the cockſpur hawthorn; of a dark purple colour, when ripe. Native of Jamaica, on the calcareous ſubalpine hills, flowering in the ſpring; and of St. Domingo, in the wet parts of woods, flowering in Auguſt and September. This is not the *mullam toddali* of Rheede Hort. Malab. as Linnæus thought it was; for that is of a different genus, and has nothing in common with Muntingia calabura, but a ſlight agreement in the leaves.

The ſeeds of this plant were ſent by Mr. Robert Millar from Jamaica, which ſucceeded in ſome of the Engliſh gardens, being ſown in pots filled with light rich earth, and plunged into a moderate hot-bed of tanner's bark. In warm weather the glaſſes ſhould be raiſed to admit freſh air; but the ſeeds will often remain in the ground a whole year before the plants will appear; in which caſe the pots muſt be kept conſtantly clear from weeds, and ſhould remain in the hot-bed till after Michaelmas, when they may be removed into the ſtove, and plunged into the bark-bed, between other pots of tall plants, where they may remain during the winter ſeaſon. Theſe pots ſhould be now and then watered, when the earth appears dry; and in the beginning of March the pots ſhould be removed out of the ſtove, and placed in a freſh bark-bed under frames, which will bring up the plants ſoon after. When the plants are come up about two inches high, they ſhould be carefully taken out of the pots, and each planted into a ſeparate ſmall pot filled with light rich earth, and then plunged into the hot-bed again, obſerving to ſhade them from the ſun until they have taken new root, after which time they ſhould be duly watered, and in warm weather they muſt have a large ſhare of freſh air. In this hot-bed the plants may remain until autumn, when the nights begin to be cold; at which time they ſhould be removed into the ſtove, and plunged into the bark-bed. During the winter ſeaſon theſe plants muſt be kept warm, eſpecially while they are young, and frequently refreſhed with water; but it muſt not be given to them in large quantities, leſt it rot the tender fibres of their roots. It will be proper to continue theſe plants in the ſtove all the year, but in warm weather they ſhould have a large ſhare of freſh air; but, as the plants grow in ſtrength, they will be more hardy, and may be expoſed in ſummer for two or three months, and in winter will live in a dry ſtove, if kept in a moderate degree of heat.

MUNTISSUR', a town of Bengal: twenty miles north-eaſt of Burdwan.

MUNYCH'IA, or MUNICH'IUS POR'TUS, in ancient geography, a village and port of Attica, between the Piræus and the promontory of Sunium, called after king *Munychus*, who built there a temple to Diana, and in whoſe honour he inſtituted feſtivals called *Munychia*. The temple was held ſo ſacred, that whatever criminals fled there for refuge were pardoned. During the feſtivals they offered ſmall cakes which they called *amphiphontes*, or "ſhining all round," becauſe there were lighted torches hung round when they were carried to the temple, or becauſe they were offered at the full moon, at which time the ſolemnity was obſerved. It was particularly in honour of Diana, who is the ſame as the Moon, becauſe it was full moon when Themiſtocles conquered the Perſian fleet at Salamis. The port of Munychia was well fortified, and of great conſequence; therefore the Lacedæmonians, when ſovereigns of Greece, always kept a regular garriſon there.

MUNYCH'IA, an anniverſary ſolemnity obſerved at Athens, in honour of Diana, on the 16th of the month Munychion.

MUNYCH'ION, the tenth month of the Athenian year, containing twenty-nine days, and anſwering to the latter part of our March and the beginning of April. It was ſo called from the feſtival Munychia, juſt mentioned.

MUN'ZENBERG, a town of Germany, in the county of Hanau Munzenberg: nineteen miles ſouth-eaſt of Wetzlar, and ſeventeen north of Hanau.

MUODGUR', a town of Hindooſtan, in the circar of Cicacole: eighteen miles north-north-weſt of Ganjam.

MUO'NIO, a river which riſes in the mountains of Norway, and, paſſing ſoutherly through Swediſh Lapland, joins the Tornea in lat. 67. 12. N.

MUPH'TI. See MUFTI, p. 165, 6.

MUR, a town of France, in the department of the North Coaſts: nine miles weſt of Loudeac, and twenty-one ſouth of Guingamp.

MUR DE BAR'RES, a town of France, and principal place of a diſtrict, in the department of the Aveiron: thirty miles north of Rhodez, and thirty north-eaſt of Figeac. Lat. 44. 51. N. lon. 2. 44. E.

MU'RA, a river of Ruſſia, which runs into the Tunguſka nearly oppoſite Mureka.

MU'RA, a town of Sicily, in the valley of Noto: fifteen miles ſouth of Modica.

MURABA', a Brahman of the city of Poona, the capital of the Mahratta empire, in whoſe perſon and deſcendants is exhibited an extraordinary inſtance of prieſtcraft and ſuperſtition. He was of the ſect of Guſſain, or more correctly Goſwami; and is reported to have been ſo pious, that the god Ganeſa rewarded him by incarnating himſelf in his perſon, and covenanting that the divinity ſhould deſcend to his children to the ſeventh generation: empowering the incumbent to work miracles, and, in a limited degree, to look into futurity. With this divine patrimony is inherited the guardianſhip of a ſacred ſtone, a type of the Deity. In the year 1800, the venerated incumbent was viſited by lord George Bereſford, field-marſhal Bereſford, and Mr. Moor, the author of the Hindu Pantheon. The latter furniſhed a detailed account of this perſon, family, and viſit, to the Aſiatic Society, which is publiſhed in the 7th volume of their Tranſactions, under the title of "Account of an hereditary living Deity, to whom devotion is paid by the Brahmans of Poona and its neighbourhood." The incarnation is repreſented to have taken place about the year 1640, and at the period of the above viſit five generations had paſſed away. Gabaji Deva, that is, the Divine Gabaji, was the then incumbent. He has ſince died; and it is agreed by the Brahmans, that the avatara, or manifeſtation, (ſee MAYA,) will end with the life of the next inſpired portion of carnality, unleſs perpetuated or renewed by a farther miraculous interpoſition of the divine will. Great reſpect, indeed adoration, is paid by the Peſhwa, and of courſe all other Brahmans about Poona, to this ſanctified inheritor of the gift of prophecy, as related at length, with many other particulars of groſs ſuperſtition, in the article above referred to. Lord Valentia has more recently viſited this venerated perſonage, who reſides in the abode of his anceſtors at the town of Chincur, about a dozen miles from Poona; and has given the particulars of his viſit in the ſecond volume of his Travels. The Hindoo deity Ganeſa, thus incarnated, is the god of prudence and policy: he is otherwiſe called *Pollear*, or *Poleyar*; and is always repreſented with the head of an elephant, generally with four arms, but otherwiſe as a man; ſometimes mounted on a rat or mouſe, or with that animal beſide him, it being deemed in India a very ſagacious animal, and the elephant proverbially ſo. He is deemed the offspring of Siva and Parvati; and is often ſeen with the ſectarial marks on his forehead that diſtinguiſh the grand diviſion of Saivas; ſuch as horizontal lines, a creſcent, &c. His commoneſt name is Ganeſa; that of Pollear being of local uſage, on the coaſt of Coromandel chiefly. He is alſo claſſically called *Ganyaka*; and vulgarly, among the Mahrattas and low people, *Ganpatty*. His name of Ganeſa is derived by ſir W. Jones from *gana*, an aſſemblage of gods, and *iſa*, meaning lord; denoting him to be the ſuperior of ſuch aſſemblages, of which Hindoo books enumerate nine, each conſiſting of eight deities. He is invoked by Hindoos of many, if not of all, ſects in the outſet of any buſineſs: if a perſon build a houſe, an image of Ganeſa is previouſly propitiated by ceremonies detailed in their rituals, and ſet up at or near the ſpot: if he write a book, Ganeſa is ſaluted at the commencement, as he is alſo at the top of a letter, with *Sri Ganeſa namah*, "Praiſe to the divine Ganeſa," or ſome ſuch phraſe, or a character denoting it. Setting off on a journey, Ganeſa is implored for protection; and for the accommodation of travellers his image is frequently ſeen by the road-ſide, eſpecially where two roads croſs; but ſometimes it is little elſe than a ſtone rudely chiſſelled into ſomething of a conical form, or like an elephant's head, with oil and red ochre daubed over it, decorated perhaps with a chaplet of flowers by ſome pious neighbour or traveller. It is common to ſee a figure of the god of prudence over bankers' and other ſhops; and upon the whole there is perhaps no deity in the Hindoo Pantheon, as copious as that of Rome, oftener ſeen and addreſſed.

There are ſeveral coincidences in the characters of Ganeſa and Janus: to both were aſcribed a character of wiſdom; and, when he is deſcribed as conſidered by the Romans "the god who preſided over the beginning of all undertakings, receiving the firſt libations of wine and wheat, and the preface of all prayer," the deſcription anſwers to both.

Beſides the uſual adoration paid to Ganeſa aſſociated with other gods, there is, it is ſaid, a ſect of people who excluſively or chiefly worſhip him. They are called *Ganapatya*. He has been frequently incarnated; and Hindoo books contain numerous legends of his metamorphoſes and adventures, heroic and amorous. The worſhip of Ganeſa we may conclude to have been long as well as extenſively practiſed, for he is ſeen frequently ſculptured in the Elephanta and other ancient caves. In the Puranas are many extravagant relations reſpecting him. Although uſually conſidered as the offspring of Siva, it is ſaid in the Siva Purana that he was formed by Parvati of fair proportions, of the excrementitious particles and impurities of her own body, without the intervention of her lord, which ſo enraged him, that on one occaſion he cut off the head of Ganeſa, in place of which an elephant's was ſubſtituted. Sometimes he is ſeen in pictures with but one tuſk; and legends, ſimilarly extravagant, are given to account for this. Such of our readers as deſire more of theſe fables, we refer to the Hindoo Pantheon, where many particulars and plates of Ganeſa are given.

MU'RACH, a river of Bavaria, which runs into the Schwarzach at Schwarzhofen.

MU'RACH, a town and caſtle of Bavaria, in the Upper Palatinate: ſeven miles eaſt of Nabburg.

MURADAL', a paſs of Spain, in the Morena Mountains, between New Caſtile and Andaluſia, where the Spaniards obtained a victory over the Moors in the year 1202.

MURÆ'NA, *ſ.* [*μυρειν*, Gr. to ſlide away, or eſcape; its ſlipperineſs being proverbial.] The EEL; in ichthyology, a genus of fiſhes of the order apodes, of which the generic characters are—Head ſmooth; noſtrils tubular; gill-membrane with ten rays; eyes covered with a common ſkin; body round, ſmooth, mucous; caudal, dorſal, and anal, fins united; a ſpiracle behind the head or pectoral fins.

This genus ſeems to make a very near approach to the reptile claſs; for in the eel, as in reptiles, the body is long, ſlender, and flexible; and, excepting the ſmall pair of pectoral fins, it may be ſaid to be without fins, inaſmuch as the dorſal, anal, and tail, fins are united in one web, which ſurrounds a large portion of the body.

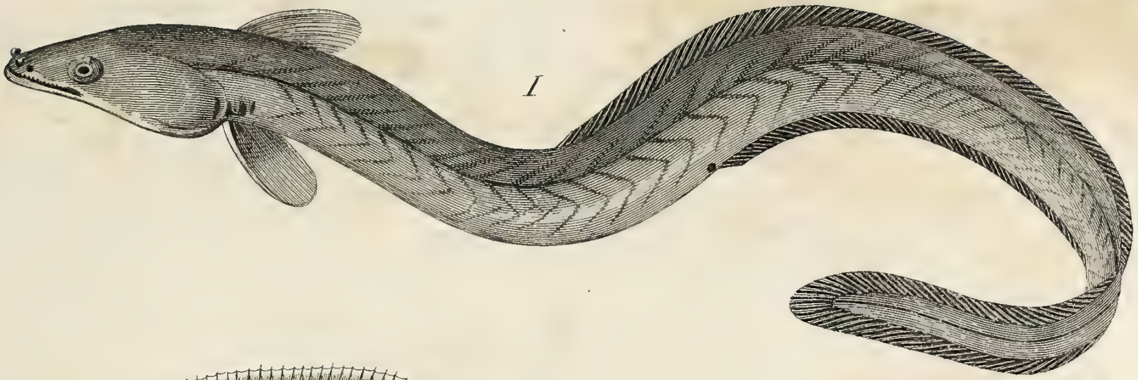
Nine ſpecies only are deſcribed by Gmelin; and even from theſe ſome later naturaliſts have cut off five, and formed them into a diſtinct genus, Anguilla. On the other hand, many ſpecies have been lately diſcovered by Bloch, Cepede, &c. ſome of which have been placed here; others in a newly-created genus called Gymnothorax, from wanting the pectoral fins; and ſome in other new genera for which ephemeral names have been invented. We have always endeavoured to follow the Linnæan ſyſtem as cloſely as poſſible, and to avoid adopting new genera where it could be avoided; and upon that principle the following enumeration of ſpecies is formed.

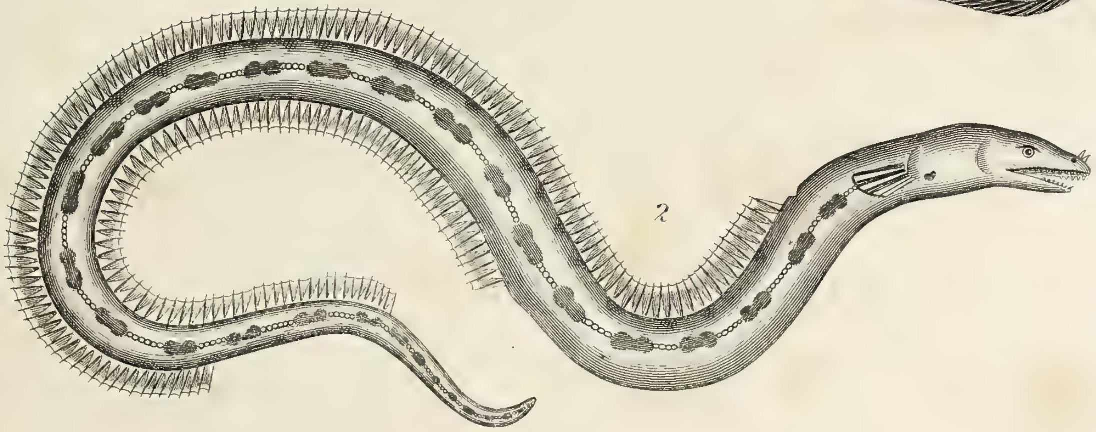
1. Muræna anguilla, the common eel: body without ſpots, and the under jaw protruded. There are ten rays in the membrane of the gills, nineteen in the pectoral-fin, 100 in the anal, in the tail and dorſal together 1000. The body of this fiſh is long, narrow, ſmooth, and covered with ſlime. The head is ſmall, ending ſharp; the noſtrils are cylindric, and placed in the upper jaw; and near the eye are two other apertures, long and round, which are probably the organs of hearing. The aperture of the mouth is ſmall; the jaws and palate are armed with ſeveral rows of ſmall teeth; and there are little apertures in each jaw whence a viſcous matter is expreſſed. The eyes are ſmall, and furniſhed with a membrane; the pupil is black, the iris gold-colour. The gill-coverts unite with the body by means of a ſkin; and the ſmall aperture is creſcent-ſhaped, and lies cloſe to the pectoral fin. The body, which is narrow and long, is round at the back and belly, and a little compreſſed at the ſides. The lateral line, which is in the middle, has a ſtraight direction and ſome white dots. The colour depends on the kind of water it inhabits: it is black when the water has a muddy bottom, and then the belly only is yellowiſh; where the bottom is ſandy, the eel is green or browniſh, with the belly of a ſilver colour; ſuch is our common eel, which is called the *ſilver eel*. Haſſelquiſt ſaw an eel the back of which was marked with brown ſtripes, which formed ſpots where they communicated. The ſkin is very ſupple, and is furniſhed with long ſoft ſcales, which however are only viſible when the eel is dry. On this ſubject ſee the article ICHTHYOLOGY, vol. x. p. 748. and Plate II. The dorſal and anal fins are long and narrow; the former, which is united to that of the tail, is reddiſh at the edges; the other is white. The pectoral fins are ſmall, round, and of a lighter colour than the body. See the annexed Engraving, fig. 1.

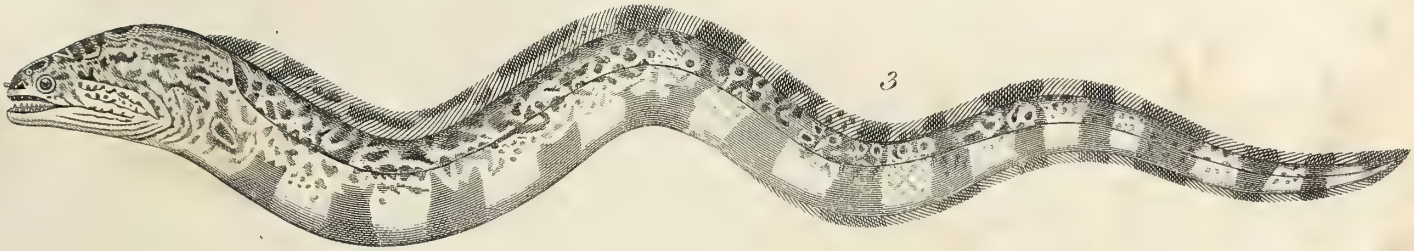
The eel by its form approaches to the creeping amphibia, particularly to the vipers, by its outward ſhape, movements, viſcous body, and ſleeping all the winter: it is on this account probably that Homer (Il. xxi.) ſeems inclined to cut it off from the race of fiſhes; for the ſame reaſon no doubt the Greenlanders will not eat it, but only uſe the ſkin, of which they make bags for their ſhot; the Romans, according to Juvenal, held it in no eſteem; on the other hand, the Bœotians prized it ſo much, that they crowned it with garlands, and ſacrificed it to the gods. The Jews do not eat it, becauſe it is ſuppoſed to have no ſcales: ſee Deut. xiv. 10.

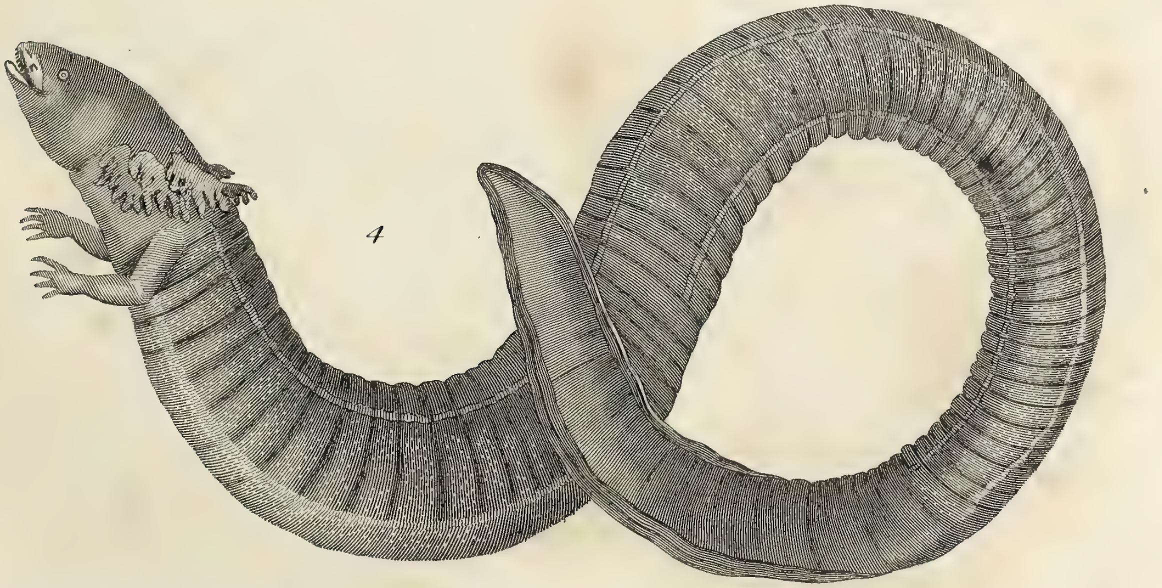
The eel is found in all climates, from Jamaica and the Eaſt Indies to Iceland and Greenland. There are but two ſtreams in Europe, otherwiſe well furniſhed with fiſh, in which eels are very rare, namely, the Danube and the Volga. Willoughby ſays they are *never* found in the Danube, and they die immediately if thrown in; but Marſigli and Kramer contradict this from ocular demonſtration. According to Pliny, they are found in the Ganges; and Sloane ſays they are known in Jamaica, at leaſt he remarks no difference between the eel of that country and that of Europe. Ariſtotle remarked, that the eel paſſes from the rivers into the ſea; which obſervation is confirmed

MURÆNA.









J. Pass sc

1. The Common Eel. 2. The Sea Serpent. 3. The Netted Eel. 4. The Siren.

by Gronovius and Richter: the firſt of whom ſays that they fiſh for them in Holland in the North Sea; and the laſt, that in the ſpring they are fond of getting to the ſea, and that they are taken in plenty in the Baltic, gaining a pleaſant taſte from the ſalt-water. During winter they hide themſelves in the mud, where they remain in cluſters; in ſpring, they quit the lakes, and ſeek the rivers. In May they are found in Germany in the Oder, the Varthe, the Sprey, the Havel, and the Elbe, and in the lakes communicating with thoſe rivers. The noiſe of a mill does not frighten them; they follow the ſpout of the mill-hopper, ſo that the millers catch them by placing purſe-nets behind the mills. At that time the eel-fiſhery is very conſiderable in many places, particularly near the mouth of the Schwinemunde in the Baltic, and in the Sonnenburg, Limmritz, Kriſchetz, and Kuſtrin: they take ſuch quantities in theſe countries, that they cannot ſell them while freſh, ſo that they dry and ſmoke the greater part; thus they ſell them to foreigners, who take waggons full of them to Saxony, Sileſia, &c. five or ſix waggons full are ſometimes brought into Berlin at a time, whence it may be judged of what importance this fiſhery is of to thoſe countries; yet, ſince banks have been conſtructed on the Oder, they do not catch ſo many as formerly. In Jutland they are very plenty, there being a place in that country where they ſometimes take more than two thouſand at one haul, ſome of which weigh nine pounds and more. This fiſh is alſo very plentiful in France: in the Garonne, 60,000 have been taken in one day with a ſingle net. In England they are not leſs abundant: a ſtory is told of the marquis of Rockingham's producing thirteen tons of eels for one large feaſt on his being choſen a member of parliament. In this country they often grow to a pretty large ſize, ſome weighing ſeventeen pounds; there is indeed an inferior kind in the Thames, and about Oxford, which neither attain to the ſame ſize nor fatneſs; they are known by the largeneſs of the head, and the roundneſs of the ſnout, and have there received the appellation of *grigs*. Near Workum, in Frieſeland, they catch ſuch quantities that veſſels are employed to carry them to England, "which they do annually," ſays Bloch, "to the amount of 100,000l. ſterling." They are found alſo in the Nile.

The eel attains a large ſize in foreign parts: for inſtance, in ſome of the lakes near Prenzlow, they are caught ſeveral feet long, and as thick as a man's arm; in Albany, ſome are caught as thick as a man's thigh. On the frontiers of China they grow alſo very large; Dr. Melle, at Peterſburgh, received an eel from China which was five feet long and three thick. At Gibraltar, they grow four feet ſeven inches long, and weigh ſeventeen pounds. In England they ſometimes weigh from fifteen to twenty pounds; and one was caught on the Norfolk coaſt which was five feet ten inches long, and weighed between fifty and ſixty pounds; another was caught in the Solway, near Annan in Scotland, in October 1816, which was twelve feet long and eighteen inches thick. An eel is now (Oct. 23, 1817.) exhibiting at Lincoln as a ſhow, which is ſix feet five inches long, and twenty-one inches round, and weighs forty-five pounds; it was caught in the river Witham, near Boſton. In Italy they ſometimes weigh twenty pounds; and Pliny ſays thoſe of the Ganges are ſometimes thirty feet long. Theſe ſtatements will be received with grains of allowance; and we may ſay, in general, that the large eels actually caught were probably conger-eels.

The ſkin is ſupple and tranſparent: the Tartars on the confines of China employ it inſtead of glaſs for window-light; in other places it is cut in ſlips, and the peaſants uſe it in making their flails, being ſtronger than the beſt leather.

The eel is a rapacious and greedy fiſh; but its mouth is ſo ſmall, that it can only catch ſmall fiſh; it will alſo eat inſects, worms, and carrion: it is particularly fond of ſpawn; and follows fiſh in ſpawning time, and greatly hinders the multiplication of other ſpecies. It is known that they are very tenacious of life, and will live long, and may be carried a great way, in a veſſel with water, graſs, and ruſhes: they will live many days out of the water. Muſchenbroek found by experiment that an eel kept moving for ſome time in a place deprived of air, and lived a full hour; another lived two hours in water whence the air was drawn out. It will alſo ſurvive blows that would have killed an animal ten times its ſize; and even after it is cut aſunder, the different parts are ſeen to move. It is, however, ſo eaſily deſtroyed by cold, that, to avoid it, it beds itſelf deep among the mud; and continues, like the ſerpent tribe, in a torpid ſtate during winter. Some have been known to take ſhelter under a rick of hay in ſevere weather, and, even there, have all periſhed from exceſs of cold. Though fond of hiding themſelves in the mud, they are incapable of living in thick turbid water; and hence, when a river is diſturbed by a flood, they are frequently ſuffocated by the impurity of the ſtream.

The eel is produced from a real egg, like all other fiſh; but this egg is commonly hatched within the body, as in the ray, the ſhark, ſome ſpecies of blenny, and ſome ſilures; the female, preſſing and rubbing her belly at the bottom of the water, ſets the young ones at liberty ſoon after they are hatched, and then they are ſeen wriggling about in the mud, which made Ariſtotle conceive that they were produced from ſlime. Pliny, alſo who refuſes to eels any diſtinction of ſex, and who had obſerved them to rub their bellies againſt rocks and ſtones, ſays boldly, that eels, by rubbing themſelves againſt hard ſubſtances, tear off little parts of their bodies, which afterwards become eels: his words are, *Anguillæ atterunt ſe ſcopulis ea ſtrigmenta viveſcunt, nec alia eſt earum procreatio;* lib. ix. cap. 57.

Some would have it that they are generated by the dew in the month of May; and they endeavour to prove it by the following experiment: Take two pieces of turf; place them together, ſo that the two ſides covered with graſs may come in contact; cover the whole with graſs, and towards night put it into water, ſo that the graſs may be even with the ſurface of the water; if a plentiful dew falls during the night, young eels will be found in the turf in the morning. Abſurd as this ſtatement is, yet Leeuwenhoek has thought it worthy at leaſt of examination and refutation; and he explains the phenomenon as follows: The dew ſeldom falls but in calm ſtill weather; theſe fiſh generally remain at the bottom of the water; but in fine mild weather, the young in particular riſe to the ſurface, which is the warmeſt; now, as the young eels find nouriſhment alſo among the turf, it is eaſily accounted for why they remain there. Van Helmont, who attributes ſo much efficacy to the May-dew, thinks it not however ſufficient to produce eels, but adds honey thereto. Another writer will have eels to be produced from the corrupted ſkins of other eels thrown into the water; and Leeuwenhoek has taken the unneceſſary pains to refute this opinion alſo. Schwenckfeld, a phyſician at Breſlau, thought he diſcovered young eels in the gills of the bley, a kind of carp; in which Ray has followed him exactly. Schonevelt, a phyſician at Keil, derives their generation from under the ſkin of the ſmelt, the cod, and other fiſh. Some animalcules ſhaped like eels have certainly deceived theſe authors. The firſt takes leeches for young eels; for theſe animals lie in the gills and mouths of many ſpecies of river-fiſh; the ſecond miſtook for eels the Gordius harengus, a kind of worm which is often found about ſea-fiſh.

Willughby freely confeſſed that the generation of eels was unknown to him. Dr. Elmer inſiſts that an eel excludes ſeveral young encloſed in little membranes or bladders; Charleton ſays the ſame, and profeſſes to have ſeen eleven young in the matrix of an eel. Fahlberg, in February 1750, ſaw a young one coming out at the navel of an eel; this he opened, and found in the matrix forty others, which he put into water; and they moved for about an hour like other eels. Birckholtz informs us, that the old experienced fiſhermen would ſqueeze live eels out of the bodies of the full-grown ones; and that he himſelf had ſeen young ones in the bodies of the ſame fiſh afterwards. Bloch had been told alſo, by old fiſhermen of Pruſſia and Germany, that, by ſqueezing an eel at that ſeaſon, (June and July,) the young would come out in ſhape of ſerpents, very ſmall and extremely thin; and that they have often obſerved theſe young eels when their boats had been ſo full that the eels preſſed much againſt each other. This is the true mode of production.

Geſner firſt aſſerted that the eel is viviparous; and he reſts on the teſtimony of two experienced fiſhermen, who ſaw a number of little eels, three inches in length, come out of a large one. Muller, a very celebrated naturaliſt of Copenhagen, ſays that he found eggs in four eels; the ovaries were an inch long, and filled with eggs of different ſizes, lying near the air-bladder and kidneys. The milt, or impregnating liquor, has been diſcovered alſo.

But the very recent information and experiments detailed by Cepede in his Hiſtory of Fiſhes, leave no room to doubt but the eel is produced from an egg like other fiſh, but this egg is fecundated within the body of the mother; ſo that there muſt be a real coupling, as in the ſerpent tribe, and the rays, ſharks, &c. The eggs of the eel are much larger, in proportion, than in thoſe fiſhes which exclude them unhatched, and much fewer in number. "The eel," ſays Cepede, "begins to produce from the twelfth year, and enjoys at leaſt eighty-two years of fecundity, for ſhe has not done growing till her ninety-fourth year or thereabouts. This accounts for the vaſt multiplication of eels, conſidering the ſmall number which can be produced by a female each year." Some authors allow the eel to live but twelve or fifteen years at moſt; but the above remarks are founded upon the late experiments and calculations of Spallanzani relative to their growth in a given time. Sometimes a part of the eggs are voided before they are hatched, as happens to the other viviparous fiſhes.

There are various ways of catching eels, with nets, ground-lines, baſkets, &c. the ſmall ones may be taken with a hook and line; they will bite greedily at a gudgeon, though a rud or many other baits will do almoſt as well. If you lay baits for them at night, they muſt be drawn very early in the morning, as otherwiſe the eels in their ſtruggles often break the lines and eſcape. In winter they may be drawn out from under the ice with a forked ſtick; and, as they commonly lie in cluſters in the mud, there are taken ſometimes from 150 to 200 in a hole of two feet ſquare. The moſt favourable time to catch eels is in a dark night in warm weather. The eel is delicate food; and, being generally eſteemed, is worth the trouble of breeding: for this purpoſe a large pond is neceſſary, with a bottom of ſand or marl, and furniſhed alſo with mud or ſlime for their winter retreat. If kept in fiſh-ponds for amuſement, Ariſtotle ſays, the ponds ſhould be ſo choſen or placed as to communicate with a ſtream of freſh water. According to Pliny, the eel may be ſo tamed as to come and eat out of your hand.

The following deſcription of the manners and habits of the common domeſtic eel are from Bingley's Animal Biography, a moſt uſeful and entertaining work.

The uſual haunts of eels are ſtill or tranquil waters, where the bottom is muddy, or where there are roots or ſtumps of trees, rocks or ſtones, under which they are ſheltered from their foes, and where they can lie in ſecurity and ambuſh in wait for their prey. They feed with almoſt equal avidity on almoſt every ſpecies of animal ſubſtance, whether dead or living: water-ſnails, worms, the larvæ or grubs of water-inſects, the ſpawn and young fry of fiſh, and ſuch larger fiſh themſelves as they are able to ſeize, as well as even the moſt putrid garbage, are all acceptable food to the eel; and it is not improbable, where there is a ſcarcity of theſe, that they may devour even aquatic plants or mud. M. Septfontaines once ſaw an eel, about two feet long, ſeize and devour two young ducks; and it is well known, that, in the ſtomachs of ſome large eels caught in a canal near Twickenham about thirteen years ago, there were found, undigeſted, the limbs and parts of the bodies of ſeveral ſmall ducks which had been ſuffered to ſwim about on that water. Of the carnivorous propenſity of eels I have an inſtance ſtrong in my own recollection. When I was a boy, I ſaw expoſed for ſale, at Retford, in Nottinghamſhire, a quantity of eels that would have filled a couple of wheel-barrows, the whole of which, as I afterwards learnt, had been taken out of the body of a dead horſe, thrown into a ditch near one of the adjacent villages; and I can aſſure the reader that they did not diſgrace their food: they were, upon the whole, as large and fine eels as any perſon would deſire to purchaſe.

Careful as eels may be to expoſe themſelves as little as poſſible, yet they are not always able to eſcape that danger in which they are conſtantly involving their fellow fiſh. It is true they have not, in general, much to fear from the predatory tribes of the water. The pike and the perch, however enormous their ſize, are uſually outwitted in their attacks, by the eel ſuddenly ſinking itſelf into the mud: but this precaution does not equally ſecure it from the attack of the otter and cormorant. The heron, the crane, and the ſtork, likewiſe, ſucceſsfully make war upon it. Theſe birds will often remain for hours on the watch for eels; and, when they ſee one of them move in the mud, they in a moment ſtrike at and ſecure it.

From the great agility and muſcular ſtrength of theſe fiſh, they are enabled to make long voyages, and to ſurmount numerous obſtacles, which to many other fiſh would be inſuperable. It will not, perhaps, be generally credited, though it is a well-aſcertained fact, that, in moiſt evenings, they oftentimes leave the water, and travel to conſiderable diſtances over land. Several inſtances, and thoſe moſt ſatisfactorily authenticated, have been mentioned of this. A gentleman of my acquaintance, (ſays Mr. Bingley,) who reſided ſome years at Carſhalton, has more than once ſtumbled over them in the meadows, as he has returned from fiſhing in the river Wandle. The intention of theſe ſtrange excurſions is, no doubt, for the purpoſe chiefly of changing their reſidence. This alone will account for the circumſtances of eels being often found in ponds that were never ſtocked with them, and that have no immediate communication whatever with any ditch or river. Their faculty of continuing out of water for a long time together without injury is owing to the peculiar ſtructure of their gills. They are able, whenever occaſion requires it, to cloſe the orifices of theſe with ſuch nicety, that the air cannot penetrate to injure them.

The extenſive migrations of eels have been more noticed on the continent than in England. In theſe migrations they obſerve an order different from that of moſt other migratory fiſh. Whilſt the greater part of theſe paſs from the ſea up the rivers, in order to depoſit their offspring; the eels, on the contrary, in all maritime countries, ſhape their courſe downward, for this purpoſe, to the ocean. It has been remarked, that in their migrations they travel only in the night, and fartheſt when it is darkeſt and moſt cloudy. A bright moonlight night, or even fires lighted on the banks, it is ſaid, will for a while arreſt their progreſs. In the ſpring of the year, and at no other ſeaſon, eels are caught in the Baltic in great abundance; and they are then conſidered to be in the higheſt perfection. The perſons occupying mills on the river Avon, in Hampſhire, have diſcovered that, during every flood that happens in the month of October, great numbers of eels go down the river. Turning this to advantage, they have deviſed a kind of box, which they call an eel-ſtage, and which they place in a convenient part of the ſtream for the purpoſe of catching them; and they find that no eels worth mentioning can be caught in this way at any other ſeaſon of the year. It is more than probable that the eels which are thus caught are near their breeding-time; and that they paſs to the ſea, or the mouths of rivers in the neighbourhood of the ſea, for the very purpoſe that the ſalmon paſs from the ſea upward toward the ſource of rivers. One inſtance in proof of this is given in a remark of profeſſor Bradley, written near eighty years ago, that "about the buoy in the Nore, the fiſhermen take an eel-like fiſh about Chriſtmas, that has its belly full of live young ones, almoſt as ſmall as hairs." Mr. Allen, in the Philoſophical Tranſactions, obſerves, that eels breed for the moſt part about the month of February, a time of the year when few are caught, except where they are preſerved in ponds. This gentleman opened two; and in one he found eggs, and in the other living offspring.

In ſome countries, and particularly about the canals of Venice, the eels return about the beginning of ſpring. This is peculiarly the caſe from the Adriatic ſea, towards the lakes and marſhes of Comachio, which are celebrated for eels. They arrive at the Po, though very young; but they do not iſſue thence to return to the ſea, ſays Spallanzani, until they have acquired a ſufficient growth, and are almoſt become adults. If the weather have been warm, and favourable to their development and growth, the young ones uſually commence their voyage from the ſea up the rivers about the middle or latter end of April, by which time ſome of the largeſt have attained the length of more than two inches: the greater part, however, are ſmaller. They keep cloſe to the banks, and in appearance form near the ſurface a band of three or four inches long. Their motions are performed with conſiderable rapidity, and they follow all the bendings of the river, by which, although the length of their voyage is greatly increaſed, they avoid the current, which, at this period of their growth, they would not have the power to ſtem. Where the water is tolerably ſtill, they expand their width; but, wherever the current runs ſtrongly round a cape, they occupy as little ſpace as poſſible, preſs cloſely to the ſhore, and ſtruggle hard till they have paſſed it. When by accident their line is broken, and they are thrown towards the middle of the ſtream, as ſoon as the impediment is removed or overcome, they immediately make for the bank again. In this manner they proceed, in continual motion, night and day, for three weeks or a month. If we eſtimate their progreſs at the average rate of about half a mile in an hour, (though, were there no impediments, it would be conſiderably more than this,) and that they are only twelve in breadth, it will follow that the whole number paſſing up one ſide of the river alone in the courſe of thirty days would be near one hundred and forty millions! What an enormous annual increaſe if we multiply this ſum by the whole number of rivers in Great Britain!

During their progreſs theſe little animals meet with numerous obſtacles, but particularly from weirs and flood-gates, where, no doubt, great multitudes periſh. With reſpect to the latter, it is known that they are able to aſcend, by means of the viſcidity of their ſkin, up the perpendicular boards and poſts to the height of ſeveral feet above the ſurface of the water. But whoever, at this ſeaſon of the year, examines theſe places, will find a great number which, not having had ſtrength to ſurmount the obſtacle, are adhering to the wood, and dead. In ſome places it is cuſtomary to hang ſtraw ropes in ſuch ſituations as may aid their aſcent; and, if this were a general practice, it would tend very materially to the increaſe of the breed. I preſume that it muſt have been much larger eels than theſe that Mr. Arderon ſpeaks of having ſeen aſcend the flood-gates of the water-works at Norwich to the height of five or ſix feet, although the boards and poſts of theſe were in many places perfectly dry and ſmooth. He ſays that the animals firſt thruſt their heads and about half their bodies out of the water, and, for ſome time, held them againſt the wood-work, till, as Mr. Arderon imagines, they found the viſcidity of their bodies ſufficiently thickened, by expoſure to the air, to ſupport their weight. They then began their aſcent; and, ſays this gentleman, proceeded upward with as much apparent eaſe, as if they had been ſliding along level ground, till they got into the dam above. *Phil. Tranſ.* vol. xliv. p. 395.

Profeſſor Bradley attempted, in earthen pans, to breed and keep young fiſh. Amongſt many others, he procured ſome eels which were not thicker than a coarſe thread. For ſix months they were always immerſed in the mud or earth at the bottom of the pans, having only a ſmall hole open where their mouths were. Various other kinds of fiſh were at firſt kept in the ſame veſſels; Mr. Bradley has often ſeen the eels ſeize a fiſh as it paſſed by them; and, he ſays, if he had not removed ſeveral which he had put into other pans, he ſhould ſoon have loſt them all.

There is at preſent not much known reſpecting the growth of fiſh. Numerous attempts to rear them in cloſe veſſels under immediate inſpection have been made, but none of theſe have been attended with the deſired ſucceſs, ſince, in this confined ſtate, and deprived of their natural food, their development muſt neceſſarily be much ſlower than in the open waters. There cannot be a ſtronger illuſtration of this circumſtance than that which was afforded by the eels that were kept by M. Septfontaines. In the month of June 1779, he procured ſixty eels, each about ſeven inches in length, which he put into a large reſervoir. At the end of more than four years, namely, in September 1783, they had only increaſed to the length of about ſeventeen inches; in October 1786, they meaſured about twenty inches; and laſtly, in July 1788, after a confinement of upwards of nine years, not more than about twenty-one inches.

The hybernation, or winter retirement, of eels, is not a little curious. I am credibly informed that they do not merely ſink themſelves deep into the mud, but that they oftentimes make their way to the diſtance even of three or four yards under the bank of the river or ditch which they frequent. In ſuch ſituations they have been dug out in immenſe numbers, coiled together in one great maſs. An inſtance of this took place near Waltham, ſome years ago, in which there was as many diſcovered as would have filled a buſhel.

Theſe fiſh are uſually conſidered in higheſt perfection for the table from the commencement of ſpring till about the end of July: yet they continue good till the end of September or beginning of October.

Cepede mentions five varieties of the common eel; two differing in colour, the other three in ſhape; the firſt obſerved by Spallanzani, the reſt by citizen Noel of Rouen.

β. The firſt variety is called *acerina*, and was found by Spallanzani in the marſhes of Chiozza, near Venice. It is yellow on the belly, ſmaller than the common eel, and never quits the marſhes in autumn to paſs into the ſea.

γ. The fiſhermen of Rouen obſerve, that the firſt eels they catch in the Seine are whiter than thoſe caught afterwards; that they are of a redder colour on a rocky bottom, and take a darker ſhade in a few days after they are put into ponds or reſervoirs; that they are of a whiter colour where the bottom is ſandy. But, beſides theſe varying ſhades of the common eel, an eel comes into the Seine from the ſea at ſpring-tides, and returns at the ſame time with the whitings: its head is rather ſmaller; but it is a handſome fiſh, and pretty large.

δ. The *pimperneau* is another variety found in the Seine, with a ſmall head, but the ſnout is long; and the fiſh is of a brown colour.

ε. The *guiſeau* is found in the ſame river: the head is ſhorter and thicker than the common eel, the body ſhorter, the eye larger, the fleſh firmer, and the fat more delicate; the colour varies from black to brown, dirty grey, and reddiſh. It is caught from Hock to Vallequier, but ſeldom higher up. Noel thinks the agreeable taſte of the fleſh is derived from the plenty of good food which it finds at the mouth of the Seine, or the quantity of young ſmall fiſh in the parts of the ſea which runs into it; he ſays it reſembles in flavour the eel caught in the Euras, called *breteau*. The *guiſeaux* ſometimes go in ſhoals unmixed with any other ſpecies or variety of eel; at other times they are caught in equal quantities among the common eels: five hundred were drawn up unmixed in one net, near Orcheb-caſtle, by a fiſherman of Villequier.

ζ. The *dog-eel* has a larger head than the common eel, but broader at the ſame time, and flatted; the eyes are large. The fiſh is pretty big, but it is not a handſome variety, and the fleſh is ſtringy. It is very greedy, and hence its name: it devours the ſmall fiſh it finds in the nets, tears the nets, and gnaws the iron wires belonging to the lines: when caught with a hook, the hook is generally found in the gullet, while the common eel is generally caught by the front part of the palate.

2. Muræna conger, the conger-eel: lateral line made up of white dots; the anal, tail, and dorſal, fins, united. There are ten rays in the membrane of the gills, nineteen in the pectoral fin, 306 in the united fins of the anus, tail, and back. The conger differs from the common eel, in having the eyes larger in proportion; the irides of a bright ſilvery colour, the lateral line marked with a row of ſmall ſpots; the edges of the dorſal and anal fin black, and in having a greater number of bones. See Ichthyology, Plate I. fig. 1. vol. x. It often grows to an enormous ſize; ſome are taken eighteen inches in circumference, and ten feet long, weighing upwards of an hundred pounds. A fiſhery of congers eſtabliſhed at Mount's Bay, in Cornwall, forms a very conſiderable article of commerce. They are annually exported to Spain and Portugal in a dried ſtate, where they are ground down into a kind of powder, and are uſed in enriching their ſoups. They are caught by a ſort of line called a *bulter*, baited with pilchards; when taken, they are ſlit up, that a part of the fat may exude from them before they are ſalted, and fit for uſe; and ſo conſiderable is the quantity of juice which thus eſcapes, that a fiſh of a hundred-weight will not dry to above twenty-five pounds. Pennant ſuppoſes that a fiſhery of congers might be eſtabliſhed with advantage in the Hebrides, could the averſion of the natives to this tribe be overcome. This ſpecies is diſtinguiſhed by the ſame voracity as the former; it devours other fiſh, crabs, and even carcaſes. The mode of its generation is probably the ſame with the common eel; but, however this be, it is certainly prolific, for the number of its young that annually aſcends the Severn is prodigious; they are there called *elvers*, and during the month of April they ſwarm in ſuch ſhoals, that they are thrown out upon the ſhore with ſmall ſieves made of hair, and fixed to the end of a pole; a man will in this manner take out as many at one tide as will fill a buſhel.

3. Muræna ophis, the ſea-ſerpent: body ſlender, with dark round ſpots (in twos) on a white ground; tail naked, or unprovided with any fin. There are ten rays in the membrane of the gills, ten in each pectoral fin, ſixty-nine in the anal, and 136 in the dorſal; theſe fins are high, and beautifully tranſparent. See the Plate, fig. 2.

This and the following are made a diſtinct genus by Cepede, under the name of Ophiſurus, or ſerpent-tail, becauſe they have no fin at the extremity of the tail. The body is long, round, ſmooth, and covered with mucilage. Without the fins, it would exactly reſemble a ſnake. The head is ſmall; the mouth large; the jaws of equal length, each armed with two rows of ſharp teeth ſhutting into each other, and thereby enabling the animal to hold his prey very faſt; upon the upper-jaw are four holes, the two in front of a cylindrical ſhape. The eyes are ſmall; the pupil black, iris yellow. On the back are many brown ſpots, of an indeterminate form. The belly is ſhort, ſo that the anus is much nearer to the head than to the tail; the ſnout is blunt. The lateral line runs along the middle of the body; it is compoſed of little black rings, with large brown ſpots all the way. The pectoral fin is ſmall; below this, is the aperture of the gills as in the eel; the dorſal fin begins near the head, and reaches within two or three inches of the tip of the tail; the rays of both are ſimple, and are united by a thin tranſparent membrane. This fiſh haunts the Eaſt Indian ſeas; Linnæus deſcribes it as natural to thoſe of Europe; and Forſkal ſaw it in Arabia. The form of its mouth places it in the voracious tribe; it lies commonly among the ſea-weed, where it catches the polypes and little fiſh. It grows to a pretty conſiderable ſize: Liſter, who firſt deſcribed it, ſays it is three feet long; Leguat ſpeaks of one that he found near the iſland of St. Maurice, which ſeems to have been this ſpecies, and it weighed ſixty pounds; he cooked it, but found it very bad eating, as it made both him and his fellow-travellers ſick.

4. Muræna ſerpens, the ſnake-eel: tail ending in a point, and naked; body round. There are ſixteen rays in each pectoral fin, and ten in the membrane of the gills. This ſpecies is larger than the preceding; it attains a length of ſix feet and a half. It is found in ſalt water about the Campagna di Roma, and other parts of the Mediterranean and the ſouth of Europe. It was known to Ariſtotle, and by him and moſt of the ancients was called *ſea-ſerpent*. It reſembles the ophis in its manners and habits, but has not thoſe round or oval ſpots which diſtinguiſh that ſpecies. It is yellowiſh on the back, white on the belly; the dorſal and anal fins are edged with black.

5. Muræna faſciatus, the banded ſnake-eel: tail naked; twenty-five tranſverſe ſtripes or bands, broader than the intervals between them; the upper-jaw longeſt; ſnout rather pointed. This is given by Cepede from a collection brought out of Holland to Paris. Head black; eyes veiled with a tranſparent membrane; body very thin, and ſomewhat compreſſed; the pectoral fins rounded, but very ſmall.

6. Muræna guttata, the ſpotted eel: glaucous ſpeckled with black; a large black ſpot on each ſide near the head. Only ſix rays in the membrane of the gills, forty-three in the dorſal, nine in the pectoral, thirty-ſix in the anal, ten in the tail. This ſpecies was firſt deſcribed by Forſkal, who met with it in Arabia. The lower jaw is longeſt, as in the common eel, which it much reſembles; but there is a large calloſity riſing between the eyes, and the number of rays in the fins differs: the dorſal and anal fins reach to the beginning of the caudal. This fiſh is of a ſea-green colour with a great number of black ſpots, of which the largeſt are near the head on each ſide.

7. Muræna myrus, the ſharp-noſed eel: ſnout pointed; fins white edged with black. The membrane of the gills has ten rays, the pectoral-fins ſixteen each. This ſpecies has been found in the Mediterranean. The ſnout is pointed; round the jaws and in the middle of the palate there are two or three rows of ſmall teeth, there are two very ſhort tentacula or feelers at the upper lip. White ſtripes, croſſwiſe and lengthwiſe, appear on the head; the dorſal, anal, and tail, fins, are ſo united, that the number of rays belonging to each cannot be diſtinguiſhed; they are quite white, edged with gloſſy black.

β. Forſkal's *muræna tota cinerea*, which he ſuppoſes to be a variety of this ſpecies, is aſh-colour in its whole ſurface; and is ſaid to contain a poiſon in its head. If this point ſhould be eſtabliſhed, it muſt certainly be a ſpecies entirely diſtinct from all the eels hitherto known.

8. Muræna cæca, the blind eel: no fins; the ſnout very ſharp. This ſpecies is found in the Mediterranean near the coaſt of Barbary. The body is anguiliform, but totally deſtitute of fins, ſo that it ſeems cut off entirely from the

claſs of fiſhes. Gmelin doubts whether it ſhould not at leaſt be a diſtinct genus; and Cepede has made it one, by the name of Cæcilia, adding *Branderiana* for the ſpecific appellation, becauſe it was firſt noticed by Brander on the Barbary coaſt. No organ of ſight has yet been diſcovered in this fiſh; the apertures of the gills are under the neck. It exudes a large quantity of viſcous matter, for which purpoſe it has eight ſmall holes in the front part of the head, ſeven at the top, and ſeven more at the hinder part of head. In theſe reſpects it greatly reſembles a genus of worms called Myxine by Linnæus, but which Bloch and Cepede have ranked among the fiſhes by the name of Gaſtrobranchus. The ſnout is very long and pointed, and the jaws are furniſhed with very ſharp teeth; the noſtrils appear underneath the ſnout.

9. Muræna colubrina, the adder-eel: no pectoral fins; the body marked with yellow and black rings. It is a native of Amboyna, having the outward appearance of a ſnake; the ſcales are very minute. The ſnout is ſharp; the eyes very ſmall; the dorſal-fin conſiſts of a vaſt number of very ſmall rays. Length, two feet.

β. There is a variety, of which the irides are brown with black ſpots.

10. Muræna echidna, the viper-eel: no pectoral fins; the head depreſſed; the body variegated brown and black. This was found at Palmerſton Iſland, and is deſcribed by Ellis in Cook's and Clarke's Voyage. Gmelin and Forſter doubt whether it be properly placed here. It is ugly to the ſight, and like a ſerpent; four or five feet long, ten or twelve inches thick. The head is ſmall; the lips ſmooth; the mouth armed with teeth, opens horizontally, and there are two barbles or cirri near the noſtrils; the eyes are ſmall, but very bright.

11. Muræna Javanicus, the Java eel: only one fin, and that a very ſmall one round the tail; the body longer than the tail; ſcales hardly viſible. This fiſh is made a ſeparate genus by Cepede, under the name of Monopterus, or ſingle-finned. It was found by Commerſon in the Strait of Sunda, near the Iſle of Java; he conſidered it as an eel, and has given a very particular deſcription of it. It is very good food; and ſo plentiful, that quantities of them were brought every day on-board Commerſon's ſhip by the natives. In taſte and ſhape it could hardly be diſtinguiſhed from the conger-eel. The head is thick, compreſſed, but ſwelling out towards the occiput; and the ſnout is rounded. The mouth is wide; the upper jaw ſcarcely protrudes beyond the lower; both are furniſhed with ſhort teeth as cloſe as a file, and a ſimilar row within the gullet and round the palate. The root of the tongue, which is griſtly, is hollowed out underneath, and preſents two whitiſh tubercles. The noſtrils do not open at the extremities of tubes before the eyes, as in moſt of the ſpecies, but over the eyes. The operculum of the gills, which is ſoft and flabby, appears like a duplicature of the common ſkin; the membrane is ſuſtained by only three rays, and theſe are not viſible but upon diſſection: the gills alſo are but three on each ſide; the bones which ſupport them are very little curved, and on their concave ſide have neither ſerrature nor aſperity. The rays of the caudal fin cannot be diſtinguiſhed in the recent ſubject; the tail is very flat, like a two-edged blade. The lateral line, which is nearer the back than the belly, reaches from the gills to the tip of the tail, and is of a gold yellow. The back is livid brown and blackiſh; the ſides have ſimilar ſhades, with tranſverſe ferruginous bands; there are no ſpots on the belly. The uſual length of this fiſh is twenty-eight inches, their greateſt circumference four; weight about four ounces.

12. Muræna helena, the Roman eel. This ſpecies is known by an adipous fin, which originates at the anus, ſurrounds the tail, and goes more than half way up the back; this fin, like the adipous membranes of other fiſhes, conſiſts of a continued ſkin covering the fleſh. As this fiſh has neither pectoral nor ventral fins, it forms a link between the fiſh and ſerpent tribes. Bloch has placed it in a genus apart, by the name of Gymnothorax, or bare-breaſted, and has added the three following, which in like manner want the pectoral fin; but the diſtinction is unneceſſary, as we have already two or three other bare-breaſted muræna.

The head is ſmall, the mouth large; the jaws are armed with ſharp teeth, ſtanding apart, and ſo ſhutting into each other; there are alſo teeth in the roof of the mouth. The eyes are ſmall, with a black pupil and yellow iris. Not far from the eyes and mouth are two hollow barbles. The aperture of the gills is narrow, and not placed acroſs the neck, as in moſt fiſh, but lengthwiſe; there is neither gill-covert nor membrane that can be perceived. The colours are very various in different places, according to the nature of their food and the waters they live in. Having no proper fins, the animal moves itſelf by the impulſe of the tail. They are found both in freſh and ſalt water, but moſtly in the ſea; hence Ariſtotle places it in the number of thoſe fiſhes who can live equally in freſh water or ſalt. They are found in the Antilles and the Mediterranean; in Sardinia, in particular, great quantities are caught. During winter they keep at the bottom of the water, but approach the ſhores in ſummer to regale on crabs and other little fiſh; they prefer the polype, and that is the beſt bait for them; they are ſo greedy, that, for want of food, they will gnaw the tails of each other, and death does not follow, which proves that they are a hardy fiſh; and in fact it is known that they can live ſeveral hours out of the water.

The ancients believed that this animal was endowed with a very acute ſenſe of hearing, and that the fiſhermen could allure it to the brink of the water by hiſſing, and by that means take it. The bite of the muræna was deemed ſo poiſonous by the fiſhermen, that, in taking the animal, they uſed every precaution to prevent its effects: they tumbled them immediately from the net into the boat, where they laid hold of the head with a forceps, rubbed its ſnout againſt ſome hard ſubſtance to deſtroy its teeth, and beat it on the tail, where the life was ſuppoſed to lie. That the principle of life, among eels in general, is placed in the tail, is ſtill a prevalent opinion; and, when taken, it is not by beating the head, but the tail, that the fiſher endeavours to deprive them of animation. Poiſonous as the bite of theſe animals was ſuppoſed to be, and hideous in their external figure as they certainly are, yet theſe circumſtances did not prevent the luxurious citizens of ancient Rome from adding them to the endleſs liſt of delicacies with which they pampered their appetites. This ſpecies, the baſſe, and a kind of mullet, formed that pride of Roman banquets, the *tripatinum;* ſo called, according to Arbuthnot, from their being ſerved in a machine of three bottoms. The fleſh of this animal muſt be various, according to the manner in which it is fed; it is ſaid, however, to be in general white, tender, and of an agreeable flavour. It was reared with much care in the fiſh-ponds of Italy, and ſold at a high price; of its eſtimation among the ancients, we have full evidence in all the claſſics, that have either praiſed good eating, or ridiculed gluttony. A ſenator of Rome, whoſe name will be tranſmitted with infamy to poſterity, was highly complimented for the delicacy of his muræna. Tigellinus, Manucius, and all the celebrated epicures of his time, were loud in his praiſes: no man's fiſh had ſo rich a flavour, were ſo nicely fed, or ſo exactly pickled. Auguſtus, hearing ſo much of this man's entertainments, deſired to be his gueſt; and ſoon found, that fame had been juſt to his merits; the man had indeed fine muræna, and of excellent flavour. The emperor was deſirous of knowing the method by which he fed his fiſh to ſo excellent a reliſh; and the glutton, making no ſecret of his art, informed him that his way was to throw into his pond ſuch of his ſlaves as had at any time diſpleaſed him. Auguſtus, it is ſaid, was not much pleaſed with his receipt; and inſtantly ordered all his ponds to be filled up. Goldſmith, who narrates this ſtory, adds, that it would have ended better, had he ordered the owner to be flung in alſo. When Cæſar was honoured with a triumph, he gave ſix thouſand of theſe fiſh to his friends to regale themſelves with. Pliny ſays, that the Romans were ſo fond of theſe fiſh, that they made earrings and other female ornaments in that ſhape. They may be eaſily brought up tame. Craſſus had ſome who came when he called them, and ſhowed their joy and gratitude by leaping about when he gave them any thing: ſo much did he love them, that he wept when any of them died, and beſtowed magnificent funeral rites upon them.

As this fiſh is very hardy, it might eaſily be brought from Italy into the reſt of Europe, and bred in our ponds both for beauty and uſe. Dr. Schæpf found them in plenty on the coaſt of Florida and the Bahama Iſles, but not often in the middle provinces of North America. Brouſſonet aſſerts, in Roſier's Journal, 1776, that the muræna has ſcales ſimilar to the eel; but theſe Bloch could never diſcover either in the freſh or dried ſpecimens.

13. Muræna catenatus, the chain-fiſh: body brown, with white ſpots like chain-work; pectoral fins none. The head and mouth are ſmall; the teeth are very ſmall, ſet cloſe together, and ſharp-pointed; the palate and tongue are ſmooth. The eyes are ſmall; the pupil blue, ſurrounded by a very narrow white iris. The noſtrils are ſingle, and very near the eyes; at the end of the ſnout there are two ſhort briſtly barbles. The aperture of the gills is ſmall, and naked. The lateral line is hardly viſible; it runs, however, in a parallel direction with the back. The back and belly are round, the ſides compreſſed; the dorſal, anal, and tail, fins, united. This ſpecies is from Surinam; eighteen inches long. Seba has placed it among the ſerpents; but his figure of it is faulty beſides.

14. Muræna reticularis, the netted eel: body white, with ſpots like net-work; the dorſal-fin the whole length of the back, pectorals none. The head and mouth are ſmall; no barbles. The eyes are near the upper lip, and the ſame colour as the preceding. The teeth ſtand apart from each other, and thoſe in front are the longeſt. The body is white, with brown tranſverſe ſtripes or bands, which however are viſible only on the back and belly, and not on the ſides, becauſe of the reticular ſpots. The dorſal-fin is brown ſpotted with yellow, and conſiſts of an infinite number of very ſoft tender rays; however, the three fins are united. This beautiful ſpecies was received by Bloch from Tranquebar; but little is known of its natural hiſtory. It is from two to three feet in length; and is ſhown on the Plate at fig. 3.

15. Muræna Afer, the African bare-breaſt: mouth wide; the dorſal-fin the whole length of the back, pectorals none. The teeth are ſtrong, and bent back; the hinder ones ſmaller than thoſe in front; there are alſo ſome large teeth in the palate, but none upon the tongue. The eyes, which are oval, are larger than in any of the other ſpecies; the pupil is black, iris blue. The body is compreſſed, terminating at each end in a point, and of a brown mottled colour. This ſpecies is found among the rocks on the coaſt of Guinea; it is good food; but the negroes, taking it for a ſerpent, will not eat it.

16. Muræna meleagris, the ſpeckled eel: body blackiſh, thickly ſpeckled with white. The body is of a deep brown or blackiſh colour, thickly ſet with ſmall round white ſpots; breaſt much paler. Inhabits the Southern Ocean; about two feet long. This and the two following were added by the late Dr. Shaw.

17. Muræna zebra, the zebra eel. This ſpecies, which grows to the length of two or three feet, is a native of the American ſeas, and is readily diſtinguiſhed by the ſtrongly-marked diſtribution of its colours; the rich brown, which conſtitutes the ground-colour, being ſurrounded, at conſiderable diſtance, by narrow white bands, which, on the lower part of the ſides and under the abdomen, unite or anaſtomoſe here and there, ſo as to form ſubtriangular markings in ſome parts, and rounded or ocellated ones in others. The head is rather large or tumid, and the mouth and eyes ſmall: there is no diſtinct appearance either of dorſal or caudal fins. This animal ſeems to have been firſt deſcribed by Seba. A beautiful ſpecimen occurs in the muſeum of Mr. John Hunter.

18. Muræna viridis, the green eel: graſs-green, with very numerous rufous-brown ſpots. This, which is ſufficiently deſcribed as to its general appearance by the ſpecific character annexed, is conſidered by Seba as a kind of marine ſnake, and is repreſented with a bifid or ſerpentine tongue; but this is probably an error of the engraver.

19. Muræna nigricans, the blackiſh eel: head flat, jaws long, the lower longeſt; ſnout rounded; teeth at the extremity of the lower jaw, larger than the reſt, a row of teeth on each ſide the palate. Inhabits South America; colour blackiſh. This and the five following are formed by Cepede into a genus, Murænophis, denoting that they partake of the qualities of the eel and of the ſerpent.

20. Muræna pantherinus, the panther eel: the aperture of the gills at a diſtance from the head equal to the length of the head; the dorſal fin as far from the gills as they from the head; colour yellowiſh, ſprinkled above with little black ſpots, occaſionally forming circles. The eyes are large, and veiled by a tranſparent membrane; jaws nearly equal. This ſpecies was firſt deſcribed by Cepede, from the Dutch collection yielded during the war to *republican* France.

21. Muræna ſtellata, the ſtellated eel: dorſal-fin very low, but beginning very near the head; teeth ſharp in the jaws and palate; two rows of ſtar-like ſpots along each ſide. This alſo is a new ſpecies, diſcovered by Commerſon among the rocks of New Britain. Length half a yard; colour, yellow mingled with white, top of the ſnout bluiſh; the ſtarry ſpots dark purple, the upper row containing twenty, the lower twenty-one. Iris golden; upper jaw longeſt; vent in the middle of the total length. Good food.

22. Muræna undulata, the undulated eel: head large; ſnout long and thin, eyes near the end of it; teeth very ſmall, and far apart; dorſal-fin high, and near the head; tranſverſe undulated ſpots on the body. This alſo was obſerved by Commerſon.

23. Muræna griſea, the grey eel: ſnout rounded; upper jaw thicker and longer; teeth bent and ſeparate in the front, a large upright one at the inner angle of the palate; dorſal fin beginning nearly over the aperture of the gills; vent nearer the head; colour brown and white mingled in very ſmall ſtreaks. Made known by Commerſon; found in New Britain. Size of the common eel. Irides golden with brown dots; ſcales and tongue hardly viſible. Commerſon adds, that the bite of this fiſh is like the cut of a razor.

24. Muræna Hauy, Hauy's eel: ſtrong teeth, ſomewhat bent; dorſal fin beginning as far from the gills as theſe from the head; anal fin extremely ſhort. The prevailing colour is gold yellow, mixed with ſilvery tints. In the place of the lateral line appears a longitudinal red ſtripe. The ſpots over the whole ſurface are of a yellowiſh brown, ſome lighter, ſome darker. The branchial aperture, lying low, ſeems to connect this genus with the Sphagebranchus, or worm-fiſh. Communicated by citizen Noel, of Rouen.

25. Muræna doliata, the white-banded muræna: colour brown, with about ſixty narrow white bands encircling the body and tail; no pectoral fins, anal and dorſal not viſible; vent near the end of the tail; branchial aperture ſingle, under the throat. This and the following are new ſpecies communicated by Commerſon; and by Cepede called Gymnomuræna, as being nearly deſtitute of fins. No fin but the caudal is perceptible to the eye. This ſpecies grows a yard long or more. Beſides the regular zones mentioned in the ſpecific character, there are ſome irregular tranſverſe bars on the ſides; and ſeveral irregular white ſtripes on the head. The body and tail are compreſſed; the upper jaws ſomewhat protruded, and each contains grinders as well as cutting teeth. The noſtrils have a double orifice; the front orifice at the tip

of a little black tube like a barble. The circular arcs which ſuſtain the gills are entirely ſmooth. There is no true lateral line; the dorſal and anal fins cannot be diſcovered without raiſing up the ſkin. The mode of catching this ſpecies is by ſeeking for them at low water under large ſtones or rocks on the ſea-ſhore, and killing them with ſticks; precaution is neceſſary for taking them alive, as they bite very ſeverely.

26. Muræna marmorata, the marbled muræna: vent nearer the head than to the end of the tail, the fin of which is very ſhort; body and tail marbled black and white. Dimenſions and habits nearly as the preceding. They are often found half concealed under rocks partly overflowed, raiſing their heads above water in ſearch of prey, which they ſeize with great celerity and greedineſs. They have very ſharp teeth in both jaws and in the palate; upper jaw longer; ſnout long; cheeks puffed out; irides golden; ſcales hardly viſible.

27. Muræna olivacea, the blenny muræna: no appearance of fins; a glutinous milky liquor over the whole body; colour olive, ſpotleſs; belly whitiſh. Obſerved by Commerſon in the Strait of Magellan; and by Cepede made a diſtinct genus, Muræno-blenna, *blenna* ſignifying mucoſity, it ſeeming to ſecrete a greater quantity of ſlime than almoſt any fiſh. Length half a yard; diameter one-eighteenth part. Kept in ſpirits for two months, ſcarcely any thing remained of it but an oily gluey maſs. This is probably the fiſh mentioned by Pallas in the following terms: "The lake Baikal yields a fiſh which is entirely peculiar to it. The Ruſſian inhabitants of the borders of the lake call it *ſolomjianka*. It has only been known within theſe few years; though probably the knowledge of it had previouſly exiſted, and been loſt by negligence. This fiſh perfectly reſembles a lump of fat. When put on the gridiron, the oily fat with which it is filled melts ſo as to leave nothing but the bones. It is never taken in nets, and has never been ſeen alive. It is with probability ſuppoſed to reſide only in the gulfs of the Baikal. It exiſts in the centre of the lake, and in ſeveral places of the ſteep banks to the north; where lines of 3 or 400 fathoms have failed to reach the bottom. It would be difficult to aſſign the cauſes which throw theſe fiſh to the ſurface. It happens commonly in ſummer, during the high winds which come from the mountains, or the hurricanes from the north. At thoſe ſeaſons, theſe fiſh are thrown on the banks, eſpecially on the coaſts of Poſolſkoi, or towards the mouth of the river of that name. When the lake has been agitated by tempeſts, they are found floating on the water in ſuch quantities as in ſome years to form a parapet on the ſhore. This proves a rich harveſt for the inhabitants, who extract an oil from them, which they ſell to the Chineſe. When theſe fiſh are thrown on ſhore, they are not devoured by the gulls and crows, which are probably diſguſted with their oily fat. They ſcarcely remain two hours on the bank before a ſlight preſſure with the hand makes them melt to oil.

28. Muræna ſiren, the ſiren, or mud-inguana: the pectoral fins divided into four finger-like appendages; three notched bones in the gills.

This ſingular animal was firſt obſerved by Dr. Garden of Charleſtown, and afterwards deſcribed by Mr. Ellis in the Philoſophical Tranſactions for 1766. It is in length from thirty-one to forty inches. It is an inhabitant of South Carolina, where it is found in ſwampy and muddy places, by the ſides of pools, and under the trunks of old trees that hang over the water; and feeds on ſerpents. The pectoral fins appear like little arms and hands, each furniſhed with four fingers, and each finger with a claw. "The head is ſomething like an eel, but more compreſſed; the eyes are ſmall, blue, and placed as thoſe of the eel are. This ſmallneſs of the eye beſt ſuits an animal that lives ſo much in mud. The noſtrils are very plainly to be diſtinguiſhed; theſe, with the gills, and remarkable length of the lungs, ſhow it to be a true amphibious animal. The mouth is ſmall in proportion to the length of the body; but the palate and inſide of the lower jaw are well provided with many rows of pointed teeth: with this proviſion of nature, added to the ſharp exterior bony edges of both the upper and under jaw, the animal ſeems capable of biting and grinding the hardeſt kind of food. The ſkin, which is black and full of ſmall ſcales, reſembles ſhagreen. The ſcales are of different ſizes and ſhapes, according to their ſituation; but all appear ſunk into its gelatinous ſurface; thoſe along the back and belly are of an oblong oval form, and cloſe ſet together; in the other parts they are round, and more diſtinct. Both the parts are mottled with ſmall white ſpots, and have two diſtinct lines compoſed of ſmall white ſtreaks continued along from the feet to the tail. The fin of the tail has no rays, and is no more than an adipous membrane like that of the eel."

Linnæus, from the deſcriptions ſent him, made it a new genus named *Siren*, of a new order Meantes, of the claſs Amphibia. But from this claſs both the order Meantes and that of Nantes have been lately expunged; and Gmelin has reduced the ſiren to a ſpecies of the preſent genus. Its place here, however, ſeems ſtill of doubtful propriety; as Gmelin himſelf acknowledges. For Camper, having lately had an opportunity to diſſect the ſiren, diſcovered, that on each ſide of the head it is furniſhed with three true gills, ſeparated from each other by membranes having tooth-like appendages; that the mouth is armed with ſtrong and firmly-planted teeth; that the heart has only one ventricle; and that the abdomen is filled with very long and capacious inteſtines: from all theſe circumſtances, he concludes, that this animal ought to be conſidered as a fiſh of the order Branchioſtegi; while in other reſpects it is more nearly allied to the genus Muræna, of the order Apodes; although it differs materially from the other ſpecies of that genus, by having only three notched bones in the gills, and from the pectoral fins being each divided into four finger-like appendages. Another genus with which this curious animal has evidently a great affinity, is the Lacerta, or lizard. It very much reſembles the larva, or firſt ſtate, of a lizard; and it is ſtill doubtful whether it may not really be ſuch; yet it has never been obſerved in any other ſtate, having two feet only, without any appearance of a hind pair; the feet are alſo furniſhed with claws, whereas the larvæ of all the Lacertæ are obſerved to be without claws; or, in the Linnæan phraſe, *digitis muticis*. The body is eel-ſhaped, but ſlightly flattened beneath; marked on the ſides by ſeveral wrinkles, and ſlightly compreſſed towards the extremity of the tail. On each ſide the neck are three ramified branchial proceſſes, reſembling, on a larger ſcale, thoſe belonging to the larvæ of water-newts; and at the baſe are the openings into the gills. It has a kind of ſqueaking or ſinging voice, for which reaſon Linnæus diſtinguiſhed it by the title of Siren. It remains to be added, that the ſiren, if thrown on the ground with any degree of violence, has been obſerved to break in two or three places; in this particular reſembling the Anguis fragilis, or ſlow-worm. It is alſo proper to obſerve, that no lizard of which it may be ſuppoſed the larva, has ever yet been diſcovered in thoſe parts of Carolina where it is moſt frequent. The ſpecies to which it ſeems moſt allied is the Lacerta teguixin of Linnæus, which is a native of South America. The ſiren is ſhown on the Plate, at fig. 4.

29. Muræna anguina, the four-footed ſiren: feet four, with eel-ſhaped body, and ramified branchiæ. This ſingular animal is found in as ſingular a ſituation; being an inhabitant of the celebrated and romantic lake called Lake Zirchnitz, about ſix German miles from Labac, in the duchy of Carniola, in Auſtria. (See Lake, vol. xii. p. 91.) The ſpecies is extremely rare; and is found, in the ſpring, and towards the decline of ſummer, in ſome particular parts of the above-mentioned lake; and commonly meaſures, when full-grown, from about ten to twelve or thirteen inches in length; the largeſt ſpecimens being near three quarters of an inch in diameter. It is entirely of a pale

roſe or fleſh colour, or even nearly white, except the three pair of ramified branchial fins on each ſide the neck, which are of a bright red or carmine-colour. Its general ſhape is that of an eel; the body being cylindric, till towards the end of the tail, where it become flat, and is attenuated both above and below into a kind of fatty fin, ſcarcely diſtinguiſhable from the reſt of the tail. The ſkin is everywhere ſmooth and even; the head of a ſomewhat depreſſed form, with a lengthened, obtuſe, and widiſh, ſnout, and has no external eyes: the mouth is moderately wide, and furniſhed with a row of very minute teeth: the legs are about three quarters of an inch in length; the fore-legs being ſituated almoſt immediately behind the branchial fins, and the feet furniſhed with three toes, without any appearance of claws; the hind-legs are ſituated at a great diſtance backwards, towards the commencement of the tail, and are of the ſame appearance with the fore-legs; but the feet have only two toes, which, like thoſe of the fore-feet, are deſtitute of claws. The motions of the animal, when taken out of the water, are, in general, extremely ſlow and languid; as is alſo the caſe when kept in a veſſel of water; but, when in its native lake, it is ſometimes obſerved to ſwim pretty briſkly, waving its body in a ſerpentine direction, in the manner of a leech. It is well figured by Laurenti, who ſeems to have been its firſt deſcriber, in his work entitled "Specimen Medicum, exhibens Synopſin Reptilium," under the title of Proteus anguinus. With reſpect to its real nature, zoologiſts are not yet agreed: ſome imagining it to be the larva of ſome ſpecies of lizard whoſe gradations have not been fully aſcertained; while others, with perhaps equal probability, ſuppoſe it a complete or perfect animal. It appears evidently to be of a predacious nature; feeding on the ſmaller kind of aquatic animals; ſince one which was kept alive for ſome days in a veſſel of water, was obſerved to diſcharge from its ſtomach ſeveral ſmall ſhells of the genus Helix, and in the ſtomach of one which Dr. Schreibers diſſected were found the head and bones of a ſmall fiſh. Its voice is a ſtrong hiſs, louder than might be expected from the ſize of the animal. Upon the whole, as Dr. Schreibers obſerves, there can be no doubt that this animal bears a great affinity to the M. ſiren, before deſcribed, having both gills and lungs; and, therefore, leaves us in equal uncertainty as to its being a larva or a perfect animal. It is, however, remarkable that, notwithſtanding the moſt careful reſearches during many years, and the frequent fiſhing which takes place in the lakes and caverns of the neighbouring country, at all ſeaſons of the year, no animal has hitherto been detected of which it can poſſibly be ſuppoſed the larva.

29. Muræna piſciformis, the fiſh-formed ſiren: ferruginous-brown, ſpotted with black, with finely ramified branchiæ, tetradactylous fore and pentadactylous hind feet. This animal was firſt deſcribed in Shaw's Naturaliſt's Miſcellany, from a well-preſerved ſpecimen in the Britiſh Muſeum. It departs ſtill more from the appearance and ſhape of an eel, approaching that of a fiſh, as its name imports; and, though perhaps no other than the larva or tadpole of ſome large American lizard, ſeems a ſcarcely leſs ſingular and curious animal than the ſiren, ſo much and ſo long the ſubject of dubious ſpeculation to Linnæus, and for which he at length inſtituted his additional order termed Meantes. In its general appearance it bears ſome reſemblance to the larva of the Rana paradoxa; but is furniſhed with gills, opening externally in the manner of a fiſh: the openings are very large, and the operculum, or external flap, is continued from the ſides of the head acroſs the throat beneath, ſo as completely to inſulate the head from the breaſt: the gills themſelves conſiſt of four ſemicircular bony or cartilaginous arches, which are denticulated or ſerrated on their internal or concave part, like thoſe of fiſhes: on the opercula, or external flaps, are ſituated three very large and elegant branchial fins or ramified parts, divided and ſubdivided into a vaſt number of ſlender or capillary proceſſes. In theſe particulars it reſembles the M. ſiren, except that, in that animal, the external opening to the gills is very ſmall. The mouth is furniſhed in front with a row of extremely minute teeth: the tongue is large, ſmooth, and rounded at the tip: the rictus or gape, when the mouth is cloſed, appears conſiderably wider than it really is; owing to a lateral ſulcus proceeding from each corner to ſome diſtance. The feet are entirely deſtitute of webs, and the toes are furniſhed with weakiſh claws: the fore-feet have four, and the hind-feet five, toes. Excluſive of the general colour of the animal, the whole ſkin, when minutely examined, appears to be ſcattered over with very minute white ſpecks, reſembling thoſe on the ſurface of the M. ſiren. The ſides of the body are marked by ſeveral ſtrong rugæ, or furrows; and an impreſſed lateral line or ſulcus is continued from the gills to the tail. It is ſuppoſed to inhabit Mexico: in length it is about ſix inches, in height one and a half.

A ſpecies nearly allied to this is mentioned by Mr. Schneider, who examined it in the muſeum of profeſſor Hellwig at Brunſwick. It was taken in the Lake Champlain, in North America, where it is ſaid to be dreaded by the fiſhermen, who conſider it as a poiſonous animal. Its length is more than eight inches, and its diameter nearly an inch: it is ſoft, ſpongy, and porous, and is marked on each ſide by three rows of round black ſpots: tail ancipital, compreſſed, and ſpotted; lower edge ſtrait; upper curved; tip roundiſh or cylindric. Head broad, flat; eyes ſmall; teeth in both jaws conical obtuſe, and rather long: tongue broad; mouth wide; lips like thoſe of a fiſh: on each ſide the neck three branchial fins: feet four, diſtant, tetradactylous, and without claws. *Schneid. Hiſt. Amph.* p. 50.

It may be added that the animal figured in the 4th volume of the American Philoſophical Tranſactions, and deſcribed by Mr. de Beauvois as a new ſpecies of ſiren, ſeems much allied to the preſent, (M. piſciformis,) and may even be the ſame ſpecies, ſince it appears to agree in the leading particulars: the ſpecimen, however, ſeems not to have been in the higheſt ſtate of preſervation, ſince no mention is made of any ſpots: its ſize is conſiderably ſmaller than that of the preſent animal; and the toes are repreſented as terminating bluntly. Mr. de Beauvois thinks, that, upon the whole, the Linnæan order *Meantes* ſhould be preſerved, until more detailed and enlarged obſervations on theſe animals ſhall have completely elucidated their real nature. *Shaw's Naturaliſt's Miſcellany*, and *General Zoology*, vol. iii.

MURÆ'NA, a celebrated Roman, left at the head of the armies of the republic in Aſia by Sylla. He invaded the dominions of Mithridates with ſucceſs, but ſoon after met with a defeat. He was honoured with a triumph at his return to Rome. He commanded one of the wings of Sylla's army at the battle againſt Archelaus near Chæronea. He was ably defended in an oration by Cicero, when his character was attacked and cenſured. *Cic. pro Mur. Appian de Mithrid.*

MU'RAGE, *ſ.* [from *murus*, Lat. a wall.] Money paid to keep walls in repair.—*Murage* is a reaſonable toll, to be taken of every cart and horſe coming laden through a city or town, for the building or repairing the public walls thereof, due either by grant or preſcription: it ſeems to be a liberty granted to a town by a king for collecting of money towards walling the ſame. See ſtat. 3 Edw. I. c. 30. *Jacob.*

MURAJA'MA, a town of Japan, on the weſt coaſt of Niphon: ſixty miles ſouth of Achita.

MURAKWA', a town of Poland, in the palatinate of Braclaw: twenty-eight miles weſt of Braclaw.

MU'RAL, *adj.* [*muralis*, Lat.] Pertaining to a wall.—*Mural* arch is a wall, or walled arch, placed exactly in the plane of the meridian, i. e. upon the meridian line, for the fixing of a large quadrant, ſextant, or other inſtrument, to obſerve the meridian altitudes, &c. of the heavenly bodies. Tycho Brahe was the firſt who uſed a *mural* arch in his obſervations; after him Hevelius, Mr. Flamſtead, De la Hire, &c. uſed the ſame means. *Chambers.*—In the nectarine and the like delicate *mural* fruit, the later your pruning, the better. *Evelyn's Kalendar.*—A ſoldier would venture his life for a *mural* crown. *Addiſon.*

And repair'd
Her *mural* breach, returning whence it roll'd. *Milton.*

MURAL'T (John), an intelligent and induſtrious phyſician, was a native of Zurich, and deſcended from an ancient family in that city. He commenced his ſtudies at Montpellier; and afterwards went to Leyden, and to Paris, in which capital he attended chiefly to midwifery and anatomy, under the tuition of Mauriceau and Gayant. On his return to Zurich, he practiſed all the branches of the healing art; and alſo gave lectures in natural philoſophy, anatomy, and ſurgery. He was inſtrumental in eſtabliſhing an anatomical theatre in this city, and frequently gave demonſtrations, by diſſection, both in human and comparative anatomy. He acquired a general reputation and eſteem among his fellow citizens; and died much regretted in 1733. He was author of a conſiderable number of papers printed in the Acta Academiæ Naturæ Curioſorum, of which ſociety he was admitted a member, under the name of Aretæus. Theſe memoirs relate principally to comparative anatomy. He likewiſe publiſhed the following works: 1. Vade-mecum Anatomicum, ſive Clavis Medicinæ, Zurich, 1677; which was reprinted in Amſterdam, in 1688, under the title of "Exercitationes Anatomicæ obſervationibus et experimentis anatomicis mixtæ." The experiments and obſervations relate to the chyle, milk, lymph, bile, blood, and other humours; and ſome of them are original; but he claims other diſcoveries which have not been allotted to him. 2. Collegium Anatomicum, Nuremb. 1687. 3. Zoologia, Zur. 1709. 4. Phyſices ſpecialis quatuor Partes, ſive Helvetiæ Paradiſus, ibid. 1710. This work contains a catalogue of the plants that grow on the mountains round Zurich, many of which had not been deſcribed before; but Haller obſerves that, he was not always correct in his nomenclature. *Halleri Bibl. Botan.*

MURAL'T (Beat-Louis de), a native of Berne, after travelling with a penetrating and philoſophical eye through ſeveral parts of Europe, made himſelf known by his "Lettres ſur les François et ſur les Anglois," in two vols. 12mo. He wrote alſo Fables, and other works, which, though not very excellent, ſuited the taſte of the times, and were much read. *Gen. Biog.*

MURA'NO, a ſmall iſland in the gulf of Venice, with a town of the ſame name, which is the ſee of a biſhop, and lies a little to the north of Venice.

Murano is a very ancient town, having been founded by the inhabitants of Altiano at the ſame time with Venice. It is built in the centre of the lagunes, and interſected by canals. Its circumference meaſures three Italian miles, and its population conſiſts of 10,000 ſouls. It has four parochial churches, ſeven other churches, one monaſtery, ſix nunneries, one oratory, and two ſeminaries. The churches are as follow: viz. that of Santa Maria and St. Donato, which is very old, and the principal and mother church of the iſland: it has a ground-floor of moſaic work, wrought in the year 1140, and ſome good paintings. The church Gli Angeli contains, above all the other churches of the iſle, a great number of beautiful paintings. The church of St. Bernardo poſſeſſes alſo ſome good paintings; as well as the churches of St. Chiara le Dimeſſe, of St. Jacobo, of St. Mattheo, of St. Marco and Andrea, of St. Martino, and chiefly of St. Pietro Martyre, with the convent, which contains the only known painting of Andrea of Murano, the firſt founder of the better Venetian ſchools. The church of St. Stephen is alſo adorned with good paintings. There is alſo in this iſland a rich lay-brotherhood of St. Giovanni; the abbey of St. Cipriano, incorporated with the patriarchate of Venice; a college of the Somaſchi, where youth are inſtructed in the belles lettres; and a college of the Piariſts, deſtined for the ſame purpoſe. Near Murano is ſituated the convent of the Camalduan monks of St. Maria, and the epiſcopal palace of Murano, erected by the biſhop Giuſtiniano. The palaces Donato are alſo to be claſſed among the fineſt buildings of Murano, on account of the paintings al freſco by Paul Veroneſe. But the moſt remarkable objects at Murano are the celebrated glaſs-houſes, in which 1000 perſons are employed, and conſume yearly, 8000 cords of wood. They were at firſt erected in Rialto, but afterwards removed to this iſland, on account of the numerous conflagrations. Here the fineſt plate-glaſs in the world is fabricated, together with magnificent girandoles of the fineſt cryſtal, all ſorts of glaſs ornaments for apartments, garlands, deſert-pieces for ſplendid tables, beads and corals, and a kind of ſmall enamelled tubes of a red and white glaſs for ornaments, which are not made in any other part of the world. The glaſs plates are not caſt here, as in England or France, but are blown in whole and long cylinders, ſimilar to the proceſs of blowing bottles. When the plate has acquired a ſufficient diſtenſion by blowing and other means, it is divided with a ſharp inſtrument, and both ends are ſeparated aſunder, and flattened. This great plate is again put into the oven, and taken afterwards out of it as a clear and perfect piece of glaſs. The proprietors of theſe glaſs-houſes enjoy certain high prerogatives of Venetian citizenſhip, it being ſuppoſed that the king of France, Henry III. when viſiting their manufactures, granted them theſe privileges: and the commune has hitherto enjoyed the privilege of coining money to a certain amount at Venice. *Oppenheim's Account of Maritime Auſtria*; 1798.

MURA'NUM, in ancient geography, a town on the confines of Lucania. Now *Morano*; a citadel in Calabria Citra, at the ſprings of the Sybaris, midway between the Sinus Tarentinus to the eaſt, and the Tuſcan Sea to the weſt. Suppoſed to have ariſen from the ruins of Syphæum, a town of the Bruttii mentioned by Livy.

MURA'NY, a fortreſs of Hungary: eighteen miles ſouth-weſt of Kapſdorf.

MURA'RI, one of the names of the Hindoo deity Kriſhna, or Viſhnoo.

MURARUT', a mountain of Tranſilvania, on the borders of Servia: forty-eight miles ſouth of Hunyad.

MURASS'ON, a town of France, in the department of the Aveiron: thirteen miles ſouth-ſouth-weſt of St. Afrique, and thirty eaſt-ſouth-eaſt of Albin.

MURASZER'DA, a town of Hungary, on the river Muhra: eight miles north-north-eaſt of Cſakathurn.

MURAT', a town of France, in the department of the Tarn: nine miles eaſt of La Caune.

MURAT', a town of France, and principal place of a diſtrict, in the department of the Cantal: ſeven miles weſt-north-weſt of St. Flour, and twenty-one north-eaſt of Aurillac. Lat. 45. 7. N. lon. 2. 56. E.

MURAT' (Joachim). See the article NAPLES.

MURA'TIO, *ſ.* A town or borough ſurrounded with walls. *Jacob.*

MURATO'RI (Lodovico Antonio), a learned Italian writer, was born at Vignola, in the duchy of Modena, in the year 1672. He was obſerved, even in his infancy, to have a paſſion for reading, which was imbibed from peruſing the Romances of Madame Scudery, which by accident, at that early period, fell in his way. At the age of thirteen he was ſent to the Jeſuits' ſchool at Modena, where he daily ſtole from his ſleep ſeveral hours to allot to his ſtudies; and from this time to his death he reſtricted himſelf to ſeven hours reſt out of the twenty-four. At his own deſire he was devoted to the ſervice of the church, and received the tonſure from the biſhop of Modena in his ſixteenth year. Having completed his courſe at ſchool, he entered upon the ſtudies of the univerſity, and cultivated with great eagerneſs polite literature and poetry; and in a ſhort time afterwards made great proficiency in the ſtudy of the Greek. In 1695 he was appointed one of the prefects of the Ambroſian library at Milan, having previouſly received the degree of doctor of laws at Milan. He was ſoon after ordained prieſt; and, in a manner, ſhut himſelf up amidſt the treaſures of that celebrated repoſitory. His reſearches enabled him to make thoſe collections of curious literature, which he afterwards gave to the world under the titles of *Anecdota Latina*, and *Anecdota Græca*. At this time he began to make a collection of inedited inſcriptions, and other remains of antiquity; and, for the purpoſe of promoting philoſophy and letters, he procured the inſtitution of an academy in the Borromean palace. While thus employed, he was called by the duke of Modena to return thither, and take the office of keeper of the archives of the houſe of Eſte, to which, at his own deſire, was added the office of ducal librarian. He returned in the year 1700, and in two years his labours were interrupted by the wars in Italy, and it was thought neceſſary to remove the archives to a ſafer place on the approach of the French, who ſoon made themſelves maſters of Modena. They treated Muratori with reſpect, and offered him the office of royal librarian, which he refuſed. In 1714, 15, and 16, he took ſeveral journeys into Italy for the purpoſe of collecting new materials for memoirs of the houſe of Eſte, and that of Brunſwick, which derives its origin from it. In this buſineſs he was engaged as well by king George I. of Great Britain, who furniſhed him with letters of recommendation, as by the duke of Modena. On his return he received the benefice of provoſt to the church of St. Maria Pompoſa, in Modena; and, in the diſcharge of the duties attached to this office, he conducted himſelf ſo as to afford a model for pariſh-prieſts, in acts of kindneſs and charity to all who were the objects of them. He inſtituted a ſociety for the protection of the widow, the orphan, and the deſtitute; and at his death bequeathed a large ſum for its ſupport. So benevolent was he on every occaſion which he thought demanded pecuniary aid, that it was found after his death he had given away to the poor, and expended upon his churches, much more than he had received from all his benefices conjointly. Theſe offices of duty and kindneſs naturally attached him to the place of his reſidence; and no offers, however ſplendid, of which he had many, could tempt him to quit Modena, where he lived in high eſteem.

Of his labours in the cauſe of literature, we have the teſtimony of Gibbon, who acknowledges Muratori to have been "his guide and maſter in the hiſtory of Italy." "His country, and the public," ſays the hiſtorian, "are indebted to him for the following works on that ſubject. 1. *Rerum Italicarum Scriptores* (A.D. 500—1500) *quorum potiſſima pars nunc primum in lucem prodit*, &c. 28 vols. folio, Milan, 1723—1738, 1751. A volume of chronological and alphabetical tables is ſtill wanting as a key to this great work, which is in a diſorderly and defective ſtate. 2. *Antiquitates Italiæ medii Ævi*, 6 vols. folio, Milan, 1738—1743, in 75 curious diſſertations on the manners, government, religion, &c. of the Italians of the darker ages, with a ſupplement of charters, chronicles, &c. 3. *Diſſertationi ſopra le Antiquita Italiane*, 3 vols. 4to. Milan, 1751, a free verſion by the author, which may be quoted with the ſame confidence as the Latin text of the Antiquities. 4. *Annali d'Italia*, 18 vols. 8vo. Milan, 1753—1756; a dry though accurate and uſeful abridgment of the hiſtory of Italy, from the birth of Chriſt to the middle of the eighteenth century. 5. *Dell' Antichita Eſtenſe et Italiane*, 2 vols. folio, Modena, 1717—1740. In the hiſtory of this illuſtrious race, the parent of our Brunſwick kings, the critic is not ſeduced by the loyalty or gratitude of the ſubject. In all his works, Muratori approves himſelf a diligent and laborious writer, who aſpires above the prejudices of a catholic prieſt."

It was an early idea of our author to inſtitute a literary republic in Italy, which ſhould aſſociate all the men of letters into one body; for this purpoſe, he wrote various addreſſes to the public, under the fictitious name of Lamindo Pritanio, in which he propoſed his plan, and pointed out the advantages that would probably reſult from ſuch an inſtitution. The ſubject was amply diſcuſſed, but the idea was never realized. In 1706, he publiſhed a work, entitled "Della perfetta Poeſia Italiana," in two volumes, which gave riſe to a conſiderable controverſy, as might be expected, in a country in which different poets of high celebrity had formed different ſchools of admirers, pupils, and imitators. In 1735 Muratori wrote a treatiſe on "Moral Philoſophy," which was ſeveral times reprinted. It was followed by a treatiſe on the powers of the human mind, intended as an anſwer to Huet's tract on the weakneſs of the human mind. He carried his enquiries into medical ſubjects, and on the appearance of a peſtilential diſorder in Germany in 1713, he publiſhed a work, entitled "Governo delle Peſte," in which he treated on the office of the magiſtrate, the phyſician, and the divine, during the awful viſitation of the plague. To a new edition of this work in 1721 was added a relation of the plague of Marſeilles. In 1742 he publiſhed a curious work, "Dei Diſetti della Giuriſprudentia," which was connected with his purſuits in hiſtory and antiquities; and theſe were the objects of his favourite ſtudies. As a theologian he raiſed a formidable ſtorm againſt himſelf in controverſial divinity, the ground of which was the immaculate conception of the Virgin Mary. He endeavoured to moderate the zeal of the combatants; and in ſo doing he acquired the reputation of a heretic, and found it neceſſary to write an epiſtle in his own vindication to Benedict XIV. Muratori was author of another celebrated but obnoxious work, entitled "Della Regolata Divozione dei Chriſtiani," printed in 1747, under the feigned name of Lamindo Pritanio. In this he went as far as he durſt in avowing himſelf hoſtile to vulgar ſuperſtition, and on that account made himſelf many enemies. Muratori was author of many other works beſides thoſe that have been mentioned above, particularly of lives of eminent perſons, as of Petrarch, Paolo Segneri, &c. and of various diſſertations on antiquarian ſubjects. His reputation as a writer extended throughout Europe; and he was, by means of a good conſtitution and excellent health, enabled to continue his various labours till a very advanced period of life. He died in January 1750, in the ſeventy-eighth year of his age; and various tributes of high reſpect were paid to his memory, by perſons of all parties of different countries. *Gibbon. Gen. Biog.*

MURAU'. See MUEHRAU.

MURAWA', a town of Hindooſtan, in Bahar: thirty-ſix miles ſouth-weſt of Arrah.

MURAZ'ZO, a town of France, in the department of the Stura: four miles ſouth of Foſſano.

MUR'CA DE PANO'YA, a town of Portugal, in the province of Tra los Montes: twelve miles ſouth-ſouth-weſt of Mirandela, and eighteen north-eaſt of Lamego.

MURCH, a town of Hindooſtan, in Bundelcund: forty-five miles north of Callinger.

MUR'CHA, a town of Bengal: eleven miles north-eaſt of Moorſhedabad.

MURCHAPOU'R, a town of Hindooſtan, in the circar of Ellichpour: twenty miles north-eaſt of Akowla.

MUR'CIA, the pagan goddeſs of idleneſs. The name is taken from *murcus* or *murcidus*, an obſolete word, ſignifying a dull, ſlothful, or lazy, perſon. The ſtatues of this goddeſs were always covered with duſt and moſs, to expreſs her idleneſs and negligence. She had a temple in Rome, at the foot of the Aventine mount.

MUR'CIA, one of the ſmalleſt provinces of Spain, though called a kingdom, is about thirty leagues from the north-weſt to the ſouth-eaſt, and twenty from the ſouth-weſt to the north-eaſt; and is bounded by the kingdom of Valencia on the eaſt, La Mancha and New Caſtile on the north and weſt, the kingdom of Juan on the weſt, that of Granada on the weſt and ſouth, and the Mediterranean Sea on the eaſt and ſouth-eaſt. It is a dry hilly country, almoſt covered with mountains of various elevations,

tions, which are ſeparated in ſome parts by dried parched-up valleys, and elſewhere by others of more than common beauty and fertility. It contains a biſhopric, a cathedral chapter, a collegiate chapter, ſix commanderies of military orders, ninety-one convents, twelve hoſpitals, two aſylums, three colleges for the education of youth, two military governments, one of the three grand departments of the royal navy, an intendant of the province, an intendant, of the navy, ſix cities, ſixty-four towns, ſeven villages, and ſome hamlets. It has two ports in the Mediterranean; the ſmalleſt being that of Las Agailas, and the other the largeſt and moſt important in the whole of Spain, which is Carthagena. Its principal towns, beſides Murcia, the capital and epiſcopal ſee, are Carthagena, a fortified town and formerly an epiſcopal ſee, Lorca, Chinchilla, Albacete, Villena, and Almanza. This province is watered by two ſtreams, the Benamor and the Guardavar, and by two rivers, the Segura and the Guadalentin. The moſt remarkable of its mountains, which are branches of Montes Oroſpedani, are, the Sierra of Penas, Pinoſa, Loſillas to the weſt, that of Chinchilla to the north-weſt, thoſe of Montes Agudo, Covatellos, and Orihuela, to the north-eaſt, the Sierra of Almanza to the north, that of El Cano to the ſouth, of Eſpana to the ſouth-weſt, and of Caraſcoy to the ſouth-eaſt.

The kingdom of Murcia was the firſt part of Spain that was occupied by the Carthaginians, who formed in it their firſt colony, and built a town, the foundation of which is aſcribed to Aſdrubal, A.U.C. 562; and it is now called CARTHAGENA, which ſee. This country was afterwards wreſted from the Carthaginians by the Romans, of whoſe poſſeſſion there remains the evidence of a military road, called by the people of the country the Road of Hercules. Being afterwards taken from the Romans by the Goths, this country formed part of the monarchy which the latter eſtabliſhed in Spain; but it was laid waſte by the Vandals, who completely deſtroyed Carthagena, which was afterwards rebuilt on account of its harbour. By the revolution which happened in 552, the maritime part of the kingdom of Murcia fell under the empire of the Greeks, who retained poſſeſſion of it until the year 624, when it reverted to the Goths. The Arabs in their turn ſeized this province, and became maſters of it by a treaty of peace ſigned in 715. In 1144, Murcia was annexed to the kingdom eſtabliſhed by the Moors, the capital of which was Grenada; but in 1221, it became ſubject to the kings of Cordova, and formed a ſeparate ſtate. In proceſs of time, Alphonſo X. reſtored it to the king of Caſtile, having diſpoſſeſſed Aben Hudiel, to whoſe ſovereignty it was ſubjected by the diſſolution of the kingdom of Cordova in 1236. Alphonſo transferred the title and honour of king to Mahomet, the Moor, who was the laſt that held that appellation in Murcia. Since that time this country has belonged to the crown of Caſtile, and has been under the ſame government and laws with the other provinces of this crown. This province has never been thoroughly re-peopled ſince the expulſion of the Moors. According to the enumeration in 1787 and 1788, its population conſiſted of 337,686 inhabitants; a number very inadequate to the extent of the province, which is about 1100 ſquare leagues.

The kingdom of Murcia produces a great quantity of ſilk. The Moors, when they conquered Spain, are ſaid to have brought thither the mulberry-tree, and to have taught the Spaniards the manner of cultivating it; as alſo how to prepare and weave the ſilk. The ſoil of Murcia is ſo favourable to this tree, that it more eaſily grows there than in any other part of Spain. Murcia is ſaid to contain 355,500 mulberry-trees, and to produce annually 40,000 ounces of the grain of the ſilk-worm; the reſult of which is 250,000 pounds of ſilk. Every kind of fruit produced in Spain is found in Murcia; it furniſhes Caſtile, England, and France, with oranges, lemons, figs, &c. The mountains are covered with ſhrubs, reeds, and odoriferous medicinal plants.

Murcia preſents an extenſive field for natural hiſtory. Of lead, copper, and ſilver, mines, there are various traces. The province affords ſulphur, nitre, alum, bole, rock-cryſtal, marble, and various mineral waters. The climate of this province is much commended; the atmoſphere is ſeldom cloudy, fogs are unknown, and rain is very rare. The arts and ſciences are little encouraged in this province. The diſtinguiſhing character of the inhabitants is indolence.

MUR'CIA, a city of Spain, and capital of the above province of the ſame name. Murcia was only a village till the time of the Romans; who, delighted with its ſituation, dedicated it to Venus Myrtia. It was in the fields of Murcia that Scipio, returned from his conqueſts, celebrated the obſequies of his father and uncle. Murcia remained 616 years under the dominion of the Romans. It was taken, diſmantled, and ſacked, by the Goths, who poſſeſſed it 310 years. The Moors, in their turn, came to beſiege it, after having conquered Cordova, Malaga, Grenada, and Jaen; and the inhabitants went to meet and fight them. The two armies met in a plain, ſtill called *Sangonera*, on account of the bloody battle that followed, in which the Murcians behaved ſo gallantly, that moſt of them remained upon the field. In this extremity the governor of the city ordered all the women to be clad in armour, and drawn up on the rampart, whilſt in the character of an ambaſſador he went to the Mooriſh general to capitulate. The Moors, believing the city to be ſtill ſtrong and full of ſoldiers, granted him very advantageous terms; but what was their aſtoniſhment, when, upon entering the gates, they found only an army of women! The ſame circumſtance is related of the taking of Orihuela. At length, after 527 years' poſſeſſion, the Moors loſt it, in 1241, to Don Ferdinand, ſon of Alphonſo the Wiſe; and it has ever ſince remained under the dominion of Spain.

Murcia is ſituated in a large and beautiful valley, watered by the river Segura; its population is computed at 60,000 perſons, including thoſe who inhabit the Huerta, or neighbouring country dependent upon it, who are ſuppoſed to amount to a third part of the whole. It is the ſee of a biſhop, ſuffragan to the archbiſhop of Toledo, which ſee was removed hither from Carthagena in 1291. Its dioceſe includes almoſt the preſent kingdom of Murcia; and the revenue of the biſhop is equal to 22,916l. 13s. 1d. ſterling. The town has eleven pariſhes, ten convents of monks, nine convents of nuns, three colleges for the ſecular clergy, two hoſpitals, and an aſylum or penitentiary-houſe. It has generally a garriſon of two ſquadrons of cavalry, and is the chief place of an intendant of the whole kingdom or province of Murcia. Its public eſtabliſhments are a cuſtom-houſe, a board of public economy, two public libraries, a curing-houſe for ſalt-petre, gunpowder-mills, ſome ſilk-manufactories, and a conſiderable eſtabliſhment for ſpinning and twiſting ſilk. It was formerly fortified, but is no longer walled. Its ſuburbs are pleaſant, communicating with the town by two bridges. The houſes, being badly built, exhibit an indifferent appearance; many of them are ancient, loaded with ornaments of architecture and ſculpture in bad taſte. Its ſquares are numerous; it has many churches, and its cathedral is magnificent. The promenades of Murcia are four; viz. the Arſenal, the Botanic Garden, the Alameda, and the Malecon; but they are of little uſe, as the Murcians ſeldom walk, but ſtay at home, ſmoking cigars, and ſleeping. In Murcia there are three colleges for education, and two public libraries. Its manufactures are ſuch as have been mentioned in the preceding article; and it merely ſhares in the commerce of the province. Ignorance and ſloth, ſays M. de Laborde, render the manners of this town diſagreeable; prejudices run nigh, and the inhabitants are extremely litigious. The Murcian woman, however, are mild and affable, and would be fond of ſociety, if their liberty were not reſtrained by the authority and diſpoſitions of their huſbands. For want of lamps, it is dangerous to walk the ſtreets at night. In ſummer the heat is extreme, Fahrenheit's thermometer being often at 99°, and in winter a fire is hardly ever neceſſary. At Murcia there are no inns, the want of which is a ſerious inconvenience on the road from Madrid to Carthagena, and on that from Catalonia and the kingdom of Valencia into Andaluſia. It is ninety-ſix miles ſouth-ſouth-weſt of Valencia. Lat. 37. 57. N. lon. 1. 20. W.

MUR'CIA, *ſ.* in botany. See MYRTUS.

MURCIELA'GOS, two ſmall Philippine-iſlands, near the north coaſt of Mindanao. Lat. 9. 13. N. lon. 122. 28. E.

MUR'DER, *ſ.* [moꞃðoꞃ, moꞃðeꞃ, Sax. *murdrum*, law Lat. the etymology requires that it ſhould be written, as it anciently often was, *murther;* but of late the word itſelf has commonly, and its derivatives univerſally, been written with *d.* *Dr. Johnſon.*—The etymology of the Sax. moꞃð, whence moꞃðoꞃ, and of the M. Goth. *maurthr*, require *murther;* but *murder* has alſo the authority of the Su. Goth. *mord*, the Teut. *moord*, and the old Fr. *murdre. Todd.*] The act of killing a man unlawfully; the act of killing criminally.—The crime of *murder* is puniſhed with death in almoſt all nations. *Chambers.*

Blood hath been ſhed ere now, i' the olden time,
Ere human ſtatute purg'd the general weal;
Ay, and ſince too, *murders* have been perform'd
Too terrible for the ear. *Shakeſpeare's Macbeth.*

Slaughter grows *murder* when it goes too far,
And makes a maſſacre what was a war. *Dryden.*

MURDER, or *Murther*, in law, is thus defined, or rather deſcribed, by ſir Edward Coke: "When a perſon, of ſound memory and diſcretion, unlawfully killeth any reaſonable creature in being, and under the king's peace, with malice aforethought, either expreſſed or implied."

1. It muſt be committed by a perſon *of ſound memory and diſcretion:* for lunatics or infants are incapable of committing any crime; unleſs in ſuch caſes where they ſhow a conſciouſneſs of doing wrong, and of courſe a diſcretion or diſcernment between good and evil. Thus, lord Hales ordered a boy of ten years of age to be hanged, who had burnt a child to death in a cradle. In the Gentleman's Magazine for May 1748, there is a curious caſe of murder committed by a boy of that age; but we have not been able to diſcover what became of the criminal afterwards. We ſhall copy the paragraph; as it ſufficiently ſhows the "malice aforethought," and the "ſound memory and diſcretion," in the precautions he took to eſcape detection.

On Monday, May 16, William York, a boy ten years old, was committed to Ipſwich goal for the murder of Suſan Mayhew, a child about five, who was his bed-fellow in the poor-houſe belonging to the pariſh of Eyke. He confeſſed that, a trifling quarrel happening between them on the 13th, about ten in the morning, he ſtruck her with his open hand, and made her cry: that, ſhe going out of the houſe to the muck-hill oppoſite to the door, he followed her with a hook in his hand, *with an intent to kill her;* but, before he came up to her, he ſet down the hook, and went into the houſe for a knife: he then came out again, took hold of the girl's left hand, and cut her wriſt all round, and to the bone, with his knife; and then threw her down, and cut her to the bone juſt above the elbow of the ſame arm: that after this he ſet his foot upon her ſtomach, and cut her right arm round about and to the bone, both on the wriſt and to the elbow: that he then *thought ſhe would not die*, and therefore took the hook, and cut her left ham to the bone; and, obſerving ſhe was not dead yet, ſtruck her about three times on the head with the hook broadways, and then found ſhe was dead. His next care was to conceal the murder; for this purpoſe he filled a pail with water at a ditch, and waſhed the blood off the child's body; buried it in the muck-hill, together with the blood that was ſpilt upon the ground, and made the muck-hill as ſmooth as he could; afterwards he waſhed the knife and hook and carried them into the houſe, waſhed the blood off his own clothes, hid the child's clothes in an old chamber, and then came down and got his breakfaſt. When he was examined, he ſhowed very little concern; all he alleged was, that the child fouled the bed in which they lay together, that *ſhe was ſulky*, and that *he did not like her.*

2. Next, it happens when a perſon of ſuch ſound diſcretion *unlawfully killeth.* The unlawfulneſs ariſes from the killing without warrant or excuſe: and there muſt alſo be an actual killing to conſtitute murder; for a bare aſſault, with intent to kill, is only a great miſdemeanor, though formerly it was held to be murder.

3. The perſon killed muſt be *a reaſonable creature in being, and under the king's peace*, at the time of the killing. Therefore to kill an alien, or an outlaw, who are all under the king's peace or protection, is as much murder as to kill the moſt regular-born Engliſhman; except he be an alien-enemy, in the time of war.

4. Laſtly, The killing muſt be committed with *malice aforethought*, to make it the crime of murder. This is the grand criterion which now diſtinguiſhes murder from other killing; and this important point we have already fully diſcuſſed and explained under the article HOMICIDE, vol. ix. p. 261.

MUR'DER, *interj.* An outcry when life is in danger:

Kill men i'the dark! where be theſe bloody thieves?
Ho, *murder! murder!* *Shakeſpeare's Othello.*

To MUR'DER, *v. a.* To kill a man unlawfully.—If he dies, I *murder* him, not they. *Dryden.*—To deſtroy; to put an end to:

Can'ſt thou quake and change thy colour,
Murder thy breath in middle of a word,
And then again begin, and ſtop again? *Shakeſpeare.*

MUR'DERER, *ſ.* One who has ſhed human blood unlawfully; one who has killed a man criminally.—Thou doſt kill me with thy falſehood; and it grieves me not to die, but it grieves me that thou art the *murderer. Sidney.*—The very horror of the fact had ſtupefied all curioſity, and ſo diſperſed the multitude, that even the *murderer* himſelf might have eſcaped. *Wotton.*

With equal terrors, not with equal guilt,
The *murderer* dreams of all the blood he ſpilt. *Swift.*

A ſmall piece of ordnance, in ſhips of war; called alſo a murdering-piece.—A caſe-ſhot is any kind of ſmall bullets, nailes, old iron, or the like, to put into the caſe, to ſhoot out of the ordnances or *murderers. Smith's Sea Grammar*, 1627.

MURDERER's BA'Y, a bay on the weſt coaſt of Staten Land, or New Zealand; ſo called by Taſman, in commemoration of ſome of his crew being murdered there by the natives, in December 1642; between Cape Farewell and Rocky Point. Lat. 40. 49. S.

MUR'DERESS, *ſ.* A woman that commits murder.—Art thou the *murdereſs* then of wretched Laius? *Dryden.*

Diana's vengeance on the victor ſhown,
The *murdereſs* mother, and conſuming ſon. *Dryden.*

MUR'DERING-PIECE, *ſ.* A ſmall piece of ordnance.—The ſmall cannon, which are, or were, uſed in the forecaſtle, half-deck, or ſteerage, of a ſhip of war, were within a century called *murdering-pieces. Malone.*

And, like a *murdering-piece*, aims not at one,
But all that ſtand within the dangerous level. *Beau. and Fl.*

MUR'DERKILL, a town of North America, in the ſtate of Delaware: ſixteen miles ſouth-ſouth-eaſt of Dover.

MUR'DERMENT, *ſ.* The act of killing unlawfully. *Not in uſe.*—To her came meſſage of the *murderment. Fairfax*

MUR'DEROUS, *adj.* Bloody; guilty of murder; addicted to blood:

Upon thine eye-balls *murderous* tyranny
Sits in grim majeſty to fright the world. *Shakeſpeare.*

MUR'DEROUSLY, *adv.* In a bloody or a cruel manner. *Sherwood.*

MUR'DEROUSNESS, *ſ.* A propenſity to bloodſhed. *Scott.*

MURDGUR', a town of Hindooſtan, in the circar of Cicacole: eighteen miles north-north-weſt of Ganjam.

MURDGUR'RY, a town of Hindooſtan, in Myſore: twenty miles eaſt-ſouth-eaſt of Sirpy.

MURE, a cape on the weſt coaſt of the iſland of Corſica: thirteen miles ſouth-ſouth-weſt of Ajazzo.

MURE (La), a town of France, in the department of the Iſere: eighteen miles ſouth of Grenoble, and nineteen north-eaſt of Die.

MURE, *ſ.* [*mur*, Fr. *murus*, Lat.] A wall. *Not now in uſe.*—The ſtreightes ſeemed to be ſhutt up with a long *mure* of yce. *Settle's Laſt Voyage of Capt. Frobiſher,* 1577.—Girt with a triple *mure* of ſhining braſs. *Heywood's Golden Age,* 1611.

The inceſſant care and labour of his mind
Hath wrought the *mure* that ſhould confine it in
So thin, that life looks through, and will break out. *Shakeſp.*

To MURE, *v. a.* To incloſe in walls.—All the gates of the city were *mured* up, except ſuch as were reſerved to ſally out at. *Knolles.*—To confine by any ſtrong faſtening:

He took a muzzell ſtrong
Of ſureſt iron made, with many a lincke;
Therewith he *mured* up his mouth. *Spenſer.*

MURE'KA, a town of Ruſſia, in the government of Tobolſk, on the Tunguſka: 192 miles eaſt of Eniſeiſk. Lat. 58. 30. N. lon. 98. 14. E.

MU'RENGER, *ſ.* An overſeer of a wall.—The *murengers* are two officers of great antiquity in the city of Cheſter; being two of the principal aldermen choſen yearly to ſee the walls kept in good repair, and to receive a certain toll and cuſtom for the maintenance thereof. *Chambers.*

MUREN'ZKOI STAN'ITZ, an oſtrog of Ruſſia, in the government of Irkutſk, on the Lena. Lat. 60. 31. N. lon. 114. 50. E.

MU'RES, a town of Spain, in Aſturia: ſeventeen miles north-north-weſt of Oviedo.

MURET', a town of Prance, and principal place of a diſtrict, in the department of the Upper Garonne, on the Garonne: nine miles ſouth of Toulouſe, and thirteen north of Rieux. Lat. 43. 27. N. lon. 1. 25. E.

MURET', or MURE'TUS (Mark-Anthony), an eminent claſſical ſcholar, was born in 1526, at a town of the ſame name as that by which he is known, near Limoges. With but little aſſiſtance in the way of a preceptor, he acquired the Greek and Latin languages at an early age; and in his eighteenth year he went to Auch to read lectures on Cicero and Terence in the archbiſhop's ſeminary. He viſited the famous Julius-Cæſar Scaliger at Agen, by whom he was recommended to the magiſtrates at Bourdeaux, where he taught the belles lettres in 1547. He left that city for the capital, where he was made one of the profeſſors in the college of St. Barbe; and acquired ſo much reputation by his lectures, that the king and queen came to hear him. From Paris he went to Toulouſe, where he ſtudied the civil law, and explained its elements. He had been driven from the metropolis by the imputation of a crime, which in very few countries meets with any quarter; the charge followed him to Toulouſe, and obliged him haſtily to remove to Venice. That the accuſations were unfounded, has been inferred from the favourable reception which he met with in Italy, even from popes and cardinals; and alſo from the regularity of his life in that country, which was his principal reſidence from the year 1554. At Venice he taught publicly, at a very conſiderable ſalary; and from thence he was ſent to Padua, to inſtruct the Venetian youth in claſſical literature; and there he contracted an intimacy with Bembo, Manuzio, and other eminent Italian ſcholars. In 1560, he was invited to Rome by cardinal Hippolito d'Eſte, whom he accompanied in his legation to Paris. Here he printed his edition of Cicero's Philippics, and on his return to the capital he continued to reſide with the cardinal, who engaged him, in 1563, to write commentaries upon Ariſtotle's morals, which he performed during four years, with great applauſe, before a numerous audience. He afterwards gave lectures on the civil law; and at the deſire of pope Gregory XIII. explained ſeveral of the principal claſſical authors. In 1576, though at the age of fifty, he took holy orders; after which, Stephen Battori, king of Poland, invited him to his kingdom upon very advantageous terms; but Gregory, at the earneſt requeſt of the conſervators of the Roman people, having doubled his appointments, the literature and ſociety of Rome turned the ſcale, and he declined accepting the offer. He died at Rome in 1585, and was buried with extraordinary funeral honours. Muret was one of the moſt elegant Latin writers of his time; he was likewiſe a man of general erudition, and well verſed in that ſort of knowledge which is requiſite for a critic on the writings of antiquity. It is to his diſgrace, that he wrote in praiſe of the horrible maſſacre of St. Bartholomew, publiſhed in his panegyric of the hateful Charles IX. His works were publiſhed collectively at Verona in 1727-30, in 5 vols. 8vo. They conſiſt of notes on various authors, orations, letters, poems, diſputations, &c. His place is rather among men of letters, than men of genius.

MU'REX, *ſ.* in botany. See PEDALIUM.

MU'REX, *ſ.* in helminthology, a genus of the claſs vermes, and order teſtacea. Generic characters—Animal a limax; ſhell univalve, ſpiral, rough, with membranaceous ſutures; aperture oval, ending in an entirely ſtraight or ſlightly aſcending canal. This genus is ſeparated into ſix diſtinct diviſions, containing in the whole more than 180 ſpecies, ſcattered through the different ſeas of the globe: of theſe, ſeven or eight only are common to our own coaſts. See the article CONCHOLOGY, vol. v. p. 28, 9. and, for a reference to the different ſpecies of Murex delineated on the Plates adapted to that article, ſee HELMINTHOLOGY, vol. ix. p. 353.

I. *Spinous, with a produced beak.*

1. Murex hauſtellum: ſhell ovate tuberculate, with a long ſubulate muricate beak. There is alſo a variety of this ſpecies. It is found in Aſia, America, and in the Red Sea. It varies much in the colour and length of its tubercles on the beak; the aperture is rounded, generally roſy; the mouth is ſometimes white, ſometimes bluiſh.

2. Murex tribulus, the thorny woodcock: ſhell ovate, with a triple row of ſetaceous ſpines, the beak elongated ſubulate, with ſimilar ſpines. Of this ſpecies there are two varieties: α. With ſpines ſhorter than the beak. β. With ſpines as long or longer than the beak. It inhabits the ſame ſeas as the laſt, but is rare. The ſhell is whitiſh or reddiſh, tranſverſely ſtriate.

3. Murex cornutus: ſhell roundiſh, and ſurrounded with ſubulate oblique ſpines; beak long, ſubulate, ſtraight, with a few ſhort ſpines. It is found on the ſouthern coaſts of Africa, but is not frequently met with. The ſhell is eight inches long, tranſverſely ſtriate, white, yellow, or pale cheſnut; within it is roſy; ſpines two inches long, the whorls rounded and inflated.

4. Murex brandaris: ſhell ſubovate, ſurrounded with ſtraight ſpines; beak moderately long, ſubulate ſtraight, and obliquely ſurrounded with ſpines. It inhabits the Mediterranean and Adriatic ſeas. The ſhell is white, cinereous, or browniſh, with a triple row of ſmall ſpines, the third row ſhorter, rarely a ſingle row with the beak unarmed.

5. Murex trunculus: ſhell ovate, knotty, and ſurrounded with ſpines on the fore-part; beak ſhort, perforate, and truncate. Found in the Mediterranean and in Jamaica. The ſhell is variable in colours, ſometimes barred and tranſverſely ſtriate; beak ſometimes ſtraight, ſometimes bent to the left.

6. Murex pomum: ſhell ovate, knotty, with protuberances from three to ſeven; beak broad. It inhabits the eaſtern ſhores of Africa; is coarſe and ponderous.

7. Murex decuſſatus: ſhell ovate, tranſverſely grooved, with convex ribs, croſſed by perpendicular knots; beak imperforate. Found on the eaſtern coaſts of Africa. The margin of the lip of this ſpecies is membranaceous; the ſpire has ſeven diſtinct whorls.

8. Murex triacanthus: ſhell turgid, knotty, tranſverſely ſtriate, with a triple row of ſpines. Found in a foſſile ſtate; ſhell ſhaped like a fig, with five or ſix horizontal belts croſſing the ſtriæ; beak above an inch long; the three outmoſt whorls knotty, and a little prominent.

9. Murex melanamathus: ſhell tranſverſely ſtriate, with eight rows of hollow black ſpines; ſpire a little knotty and prickly; beak ſubulate. The place of its habitation is not known.

10. Murex radix: ſhell white, with numerous rows of frondoſe black undulate ſpines. This is extremely rare, and its habitation not aſcertained.

11. Murex candidus: ſhell white, with rows of ſpines, and very ſhort beak. The ſhell is about two inches long, and ſome of the ſpines are black.

12. Murex faſciatus: the ſhell of this ſpecies is inflated, with rows of ſpines, white barred with brown; the ſpire has four diſtinct turgid whorls.

II. *Sutures expanding into criſped foliations; the beak is abbreviated.*—Purpura; *that is, the ſpecies of this diviſion conſtitute the tribe of purple-fiſh properly ſo called.*

Purple was much eſteemed among the ancients; eſpecially the Tyrian purple, which underwent more dyes than the reſt, and which was almoſt peculiar to the emperors and kings. Yet this purple did not exceed that now in uſe. The chief reaſons why the ancient purple dye has been diſuſed are, that the modern is both cheaper and finer.

The method of obtaining the colour, Mr. Cole deſcribes thus: The ſhell, which is very hard, being broken, (with the mouth of the fiſh downwards, ſo as not to cruſh the body,) and the broken pieces being picked off, there appears a white vein lying tranſverſely in a little furrow or cleft next the head of the fiſh. In this vein is the purple matter lodged; ſome of which, being laid on linen, appears at firſt of a light green colour; and, if expoſed to the ſun, ſoon changes into a deep green, and, in a few minutes, into a ſea-green, and, in a few more, into a blue; thence it ſoon becomes of a purpliſh-red, and, in an hour more, of a deep purple-red. And here the ſun's action terminates; but by waſhing in ſcalding water and ſoap, and drying it, the colour ripens to a moſt bright and beautiful crimſon, which will bear waſhing admirably without the addition of any ſtyptic. While the cloth marked with this colour lies in the ſun, it will yield a very ſtrong and fœtid ſmell, as if garlic and aſſa-fœtida were mixed together.

The juice which gives this beautiful purple colour is, ſays M. Duhamel, while it remains in the body of the animal, and while that is in health, wholly white; but no ſooner is it expoſed to the ſun, than it begins to change colour, and in leſs than five minutes goes through the ſeveral changes of pale green, yellowiſh, and a beautiful emerald green; after this it becomes of a deeper and duſkier green, then bluiſh, reddiſh, and finally a deep and very beautiful purple. Sometimes the juice is found naturally green in the animal: this is probably from the creature's being in a diſeaſed ſtate; but, when it is naturally thus, it immediately becomes red, and afterwards purple, on being expoſed to the ſun; its ſeveral preceding changes ſeeming to have been made already in the body of the animal. If a piece of linen be rubbed over with this juice, and part of it expoſed to the ſun, part not, that only will turn red which is ſo expoſed, the other remaining green without any alteration; and it is obſerved, that, the ſtronger the ſun ſhines, the quicker the change appears, and probably the colour is in proportion alſo the more beautiful and lively. And it is very remarkable, that, if a needle, or any other opaque body, be laid upon the linen which is yet green, and is to become red on being expoſed to the ſun; after ſuch an expoſure, the whole ſhall be changed red or purple, excepting only that ſmall ſpot which is covered by the needle, which will ſtill remain green. A plate of glaſs, though it be three inches thick, will not prevent the colour from changing purple by being laid over it; but the thinneſt piece of metal will keep it wholly green. The one being opaque, and the other pellucid, are evidently the only reaſons for this difference. If the coloured linen be ſucceſſively covered by three pieces of paper, the one blacked with ink, the other in its natural ſtate, and the third rubbed over with oil, it will change colour on being expoſed to the ſun in different degrees; and that exactly in proportion to the degree of tranſparence in each of the papers: moſt of all in that which was covered with the oiled paper; ſomething leſs in that covered by the paper in its natural ſtate; and leaſt of all in that which was covered with the blacked paper, as that is leaſt tranſparent. The common heat of a fire, or that of a red-hot iron, produces no change at all in the colour when green. The vapour of burning ſulphur produces a little; but the green, which had not changed to purple by theſe experiments, immediately changed to it on being expoſed to the rays of the ſun.

Theſe experiments were all made in the months of January and February, by M. Duhamel, in Provence; and, the ſun having power to change the colour ſo ſpeedily there in theſe cold months, probably in a warmer climate or ſeaſon the air would have been ſufficient for the purpoſe, without the open ſun; ſince it ſeems, from experiment, that both the ſolar rays, and the light alone in a cloudy day, can act upon this colour. The light and heat of the ſun both act on this colour: light is always ſufficient to produce the effect, but the heat may eaſily be too great or too little; and, to do the whole in perfection, it muſt be at a certain middle degree.

This beautiful purple, if it ſhould ever be brought into uſe in dyeing, will have one very great advantage from its viſcoſity. The pieces of cloth that had been ſtained by it retained their colour, in ſpite of ſeveral boilings in different liquors, which M. Duhamel made them paſs through; and the colour, on examination, was found not to be ſuperficial, but penetrated the whole body of the ſtuff, which was tinged by it. There are many inconveniences which muſt naturally attend the uſe of this ſubſtance as a dye; but they may, perhaps, all be got over by care and application. It is very certain, that it is of too viſcid a nature eaſily to penetrate many ſubſtances; but it is alſo certain, that this might be obviated by diſſolving it in ſome proper liquor. It appears very plainly, that the ancients had a method of thus diſſolving their purple; but we neither know what was their purple, nor what was its diſſolvent; nor, which would be of much more conſequence to us at preſent, what is the proper diſſolvent for our own. *Mem. Acad. Scien. Par.* 1736.

Other ſpecies of fiſh, as well as the Murex, ſerved among the ancients to dye the fine purple colour they were ſo fond of, and ſome of the Buccina (e. g. the B. lapillus of Linnæus) have been of late found to have the ſame juice. But the ſmall quantity of the coloured juice which each fiſh contains, and the neceſſity of uſing it before the animal dies, makes it impoſſible to bring it to any regular article of traffic. The ancients uſed this colour only on cotton and woollen ſtuffs; whereas our cochineal, which was unknown to the ancients, ſtrikes equally well on ſilks and ſtuffs. See the article Dying, vol. vi. p. 140, 1.

13. Murex ramoſus: ſhell with a triple row of foliations and contiguous ſpire; beak truncate. The ſhell is tranſverſely ſtriate, varying much in ſhape, colour, and appearance, of the foliations.

14. Murex foliatus: ſhell with a triple row of foliations; aperture one-toothed. It is found on the eaſtern ſhores of North America.

15. Murex ſcorpio: ſhell with four rows of foliations; ſpire capitate; beak truncate. Inhabits the ſouthern diſtricts of Aſia; is extremely rare and valuable. The ſhell is white, brown, or black; aperture orbicular; one of the whorls turgid, and larger than the reſt.

16. Murex ſaxatilis: ſhell with five rows of foliations and contiguous ſpire; beak abbreviated. Found in the Mediterranean, and ſome of the coaſts of Aſia.

17. Murex diaphanus: ſhell white, diaphanous, with ſix rows of foliations tipt with black.

18. Murex cichoreum: ſhells ochraceous, tranſverſely ſtriate, with numerous rows of foliations neither very prominent nor cripſed.

19. Murex verſicolor: ſhell varied with white and red, with flat acute foliations pointed with black.

20. Murex erinaceus: ſhell ſub-angular; the whorls crowned with tubular and ſub-ſpinous raiſed ſcales or points; beak ſhort and covered. It inhabits the European ſeas, and is about two inches long. The ſhell is extremely rugged, ſurrounded with tubular ribs, each rib ending with its mouth on the angle; aperture oval, ſpire pointed with ſix whorls; lip broad and crenate.

21. Murex ſtriatus: ſhell with ſeven rows of foliations; white, with elevated tranſverſe brown ſtriæ. Inhabits India.

22. Murex tripterus: ſhell elongated, triangular, with membranaceous foliations at the angles. Found in Campania. The ſhell is ſnowy, tranſverſely wrinkled; the wrinkles croſſed with longitudinal ſtriæ; aperture oblong ovate, granulate; the ſpire has ſeven whorls, granulate between the ſutures.

23. Murex ſacellum: ſhell umbilicate, with muricate ribs; the whorls flattiſh above, with acute margins; lip crenate; beak ſtraight, aſcending. It inhabits Nicobar.

24. Murex motacilla: ſhell triangular, knotty, tranſverſely grooved, with a triple row of tubercles; beak long, ſubulate, ſtraight; mouth white. Found in India.

25. Murex triqueter: ſhell long, ſubulate, triangular, with reticulated ribs, and a ſtraight cloſed beak. The ſhell is white, ſpotted with red; the aperture is elliptic; the lip crenate; ſpire pyramidal, with ſix whorls.

III. *With three protuberant rounded ſutures; chiefly of the Eaſtern or Pacific ſeas; ſome of the ſpecies are mere foſſils.*

26. Murex lyratus: ſhell with protuberances croſſed by ſmooth belts; aperture ovate. It is found in George's Bay.

27. Murex rana: ſhell rough, with oppoſite impreſſed protuberances, and a muricate belt or two; aperture commonly toothleſs and ovate. Found on the Aſiatic ſhores.

28. Murex gyrinus: ſhell with oppoſite continued protuberances, and barred with tuberculate dots; aperture orbicular. Found in the Mediterranean and Atlantic; alſo on the ſhores of America and India.

29. Murex affinis: ſhell turgid, with oppoſite continued protuberances; ſpire pointed; the whorls ſurrounded with a crown of tubercles, the outmoſt glabrous.

30. Murex lampas: ſhell with nearly-oppoſite protuberances, gibbous; the protuberances longitudinally tuberculate. It inhabits India, and is from four to fourteen inches long. The ſhell is of a red or cheſnut colour, and rough with minute tubercles; aperture oval, toothed on each ſide, whitiſh fleſh-colour, with an oval orange-coloured border within.

31. Murex olearium: ſhell with alternate protuberances and numerous tubercles; back unarmed behind, and ſtriate; the aperture is toothleſs. It inhabits the Mediterranean and African ſeas.

32. Murex femorale: ſhell with decuſſate protuberances, triangular, wrinkled, and knotty on the fore-part; aperture ovate, toothleſs. Inhabits Aſia, Guinea, and America; it is from five to even inches long. The ſhell is brown, with tranſverſe ribs which are white towards the aperture, with intermediate grooves tranſverſely ſtriate; beak turned inwards.

33. Murex cutaceus: ſhell with a ſingle protuberance, angular, and a little wrinkled with knots; aperture toothed; pillar perforated. It inhabits Barbary, Guinea, and South America; is three inches long; ſhell browniſh, with a tinge of bloom or white, with perpendicular undulate lines.

34. Murex lotorium: ſhell with decuſſate protuberances, angular, with longitudinal tuberculous knots; beak flexuous; aperture toothed. It inhabits the Mediterranean.

35. Murex pileare: ſhell with decuſſate protuberances, and a little wrinkled with knots; aperture toothed; beak ſub-aſcending. Found in the Mediterranean.

36. Murex bufonius: ſhell with ſix oppoſite continued vaulted protuberances and knotty belts; beak oblique.

37. Murex pyrum: ſhell varicoſe, ovate, tranſverſely grooved, and knotty, with a long flexuous ſubulate beak. It inhabits the Indian Ocean, in numerous varieties. The ſhell is white, ſometimes varied with brown, or cheſnut, or yellowiſh-brown; angular, longitudinally ſtriate, and tranſverſely grooved; aperture oval, toothed; pillar ſometimes toothed, ſometimes not.

38. Murex caudatus: ſhell thin, tranſverſely ſtriate, brown varied with white; beak ſubulate; ſpire a little prominent, and tipt with brown; the whorls grooved, the firſt gibbous.

39. Murex rubecula: ſhell with decuſſate protuberances, obtuſe with knotty wrinkles; belly equal; aperture toothed. Inhabits Africa, India, and South America; it is very rare.

40. Murex ſcrobiculator: ſhell with nearly-oppoſite hollowed protuberances; ſmooth; aperture toothed. It inhabits the Mediterranean.

41. Murex reticularis: ſhell with nearly-oppoſite protuberances, reticulate, with tuberculate ſpots; pillar almoſt toothleſs, beak aſcending. Inhabits the Mediterranean and America; ſix inches long. Shell tranſverſely ribbed, and longitudinally ſtriate, with party-coloured knots in the angles of the ſection; aperture with a red border; lip toothed.

42. Murex lamelloſus: ſhell with membranaceous protuberances continued through the ſpire, and terminated with a ſpine. It inhabits the Falkland Iſlands.

43. Murex nodatus: whorls knotty; beak ſtraight; aperture violet; lip toothed. It inhabits New Holland.

44. Murex anus: ſhell with a dilated membranaceous protuberance and lips, gibbous and reticulate, with tubercles; aperture ſinuous; the beak is erect. Inhabits the Mediterranean and Aſia; is three inches long; and the ſhell is generally brown, with white bands and ſub-triangular aperture.

45. Murex miliaris: ſhell varicoſe, with tuberculate belts; aperture a little toothed; beak elongated; whorls ventricoſe; the ſhell is of a cinereous greeniſh colour; the tubercles ſometimes black, rarely rufous.

46. Murex Senegalenſis: ſhell tranſverſely ſtriate, with ſpinous protuberances, the ſpines decreaſing towards the head. This ſpecies inhabits Senegal; is about two inches and a half long; the ſhell with nine tubercles, alternately leſs; each of them armed with eight ſpines; the ſpire with eight whorls.

47. Murex carinatus: ſhell ventricoſe, with five or ſix whorls forming angular ridges; aperture ſemi-circular; beak a little reflected. It inhabits Europe.

IV. *More or leſs ſpinous, and without manifeſt beak.*

48. Murex ricinus: ſhell obovate, with rows of ſubulate ſpines; aperture and lip toothed. Inhabits the Aſiatic Ocean; about one inch and a half long. Mouth violet-colour.

49. Murex nodus: ſhell obovate, with conic ſpines; lip

toothed; pillar ſmooth and coloured. The ſhell is leſs than that of M. ricinus; the aperture is of a fleſh-colour.

50. Murex neritoideus: ſhell with numerous rows of knots; lip with pointed angles; pillar flattiſh. It inhabits India, and reſembles a Nerita. The ſhell is ſometimes white with black tubercles and violet mouth, or yellowiſh-brown with brown tubercles and yellow aperture.

51. Murex fucus: ſhell coarſe ventricoſe, ſtriate tranſverſely, with four rows of knots; pillar impreſſed, and with the outmoſt whorls flattiſh. This is a rare ſhell; the pillar is marked with two or three black dots.

52. Murex loco: ſhell obovate and knotty on the forepart; aperture toothleſs and ſub-orbicular. It inhabits the Chineſe ſhores; ſhell four or five inches long. The inhabitant is eaten by the natives, and contains a purple juice in the veſicle on the neck.

53. Murex hyſtrix: ſhell ſubovate, with four rows of acute ſpines; aperture toothleſs, repand. The ſhell is ſometimes of a bay colour, varied with white or yellowiſh-brown, with or without ſpots.

54. Murex mancinella: ſhell ovate, with obſolete ſpines; aperture toothleſs; pillar tranſverſely ſtriate.

55. Murex hippocaſtum: ſhell ovate ſtriate, with from three to five rows of obtuſe ſpines or tubercles, aperture tranſverſely ſtriate. It inhabits Guinea, India, and the iſlands of the Indian Ocean.

56. Murex ſenticoſus: ſhell a little tapering, longitudinally ribbed and tranſverſely cancellate; aperture ſtriate. Found in the Indian Ocean; about two inches long. The ſhell is yellowiſh, with a brown band on each of the whorls; the ribs prickly; aperture oblong; pillar with a ſingle plait; ſpire pointed, with diſtant whorls.

57. Murex melongera: ſhell obovate glaucous, with a ſub-ſpinous whorl or rather prominent ſpire, and ſmooth aperture. Found in India and America in great varieties; the ſpecimens are generally about five inches and a half long. The ſhell is generally brown, barred with white; aperture oval, large; ſpire with knotty whorls, rarely ſmooth; the firſt very large and turgid, and moſtly ſurrounded with ſpines.

58. Murex conſul: ſhell thick, ventricoſe, white, tranſverſely grooved and knotty; aperture repand, ovate; lip ſinuous, plaited inwardly, and denticulate. It inhabits India.

59. Murex lima: ſhell brown, ſubovate, and ſlightly beaked, with crowded nodulous paler belts. Found in George's Bay.

V. *With a long ſtraight ſubulate cloſed beak, and unarmed.*

60. Murex carioſus: ſhell without beak, ſlightly plaited, ovate, pointed; tip carious. Found in the aqueduct at Seville; ſize of a bean. The ſhell is oblong, pointed, cinereous, ſub-diaphanous, longitudinally grooved, and emarginate at the baſe.

61. Murex babylonius: ſhell tapering, with acute ſpotted belts, and ſtraight tail; upper lip cleft. It inhabits India and the American iſlands; is about four inches long; and the ſhell is ſurrounded with white belts, and marked with ſquare brown or black ſpots.

62. Murex javanus: ſhell tapering, with immaculate knotty belts; the lip has a ſeparate ſcoop. It inhabits India; reſembles the M. babylonius; but is white, immaculate, and ſometimes varied with yellowiſh-brown rays; whorls carinate or tuberculate, and ſub-ſtriate.

63. Murex ſinenſis: ſhell ventricoſe, pointed, with a cancellate reflected beak; aperture oval; whorls with tranſverſe granulate ſtriæ; baſe crowned with ſpines. It inhabits Senegal.

64. Murex ſtramineus: ſpire with elevated wings, the interſtices filled with ſhort ſtraw-like projections; all the whorls crowned with tubercles at the baſe; aperture violet; lip undulate, and with the pillar ſnowy. Inhabits the Southern Ocean. Shell ſtraw-colour; three inches long.

65. Murex auſtralis: ſhell ovate, longitudinally ſtriate; lip undulate; whorls caniculate, the firſt turgid and four-plaited, the next three-plaited. It is found in the South Sea, and is two inches and a half long. The ſhell is of a ſtraw-colour, with a yellow pillar and ſnowy lip.

66. Murex uncinatus: ſpire pointed, and tranſverſely ſtriate; the four firſt whorls with a callus, armed with hooks in the middle, the fifth and ſixth ribbed, the reſt glabrous. The ſhell is not above an inch long; the aperture is oval; lip toothed; ſpire with nine whorls.

67. Murex turris: ſhell tapering, the whorls crowned with tubercles, and ſurrounded with a granulate belt, the firſt very finely ſtriate tranſverſely. The ſhell is white, with a reddiſh band. This alſo bears a ſtrong reſemblance to N° 61. but the lip is entire.

68. Murex coſtatus: beak a little reflected, and obliquely ſtriate; the three firſt whorls of the ſpire ribbed, the other four cancellate, the firſt obconic; the pillar has a ſingle plait. It is found in a foſſil ſtate in Campania.

69. Murex aſper: the ſhell of this is longitudinally plaited, and tranſverſely ribbed; the ſpire is a little prominent; the aperture ovate; lip crenulated.

70. Murex colus: ſhell tapering, ſtriate, knotty, carinate, with a long ſtraight beak; lip crenulate. Found in the Indian Ocean. The ſhell is white, tranſverſely ſtriate, round, or angular; whorls ſeparated by a groove, and crowned with knots, the upper ones brown; the beak is nearly three inches long, and beneath it is browniſh.

71. Murex morio: beak dilated; ſhell black, with a white band; whorls a little knotty; pillar wrinkled. Found in divers parts of Africa; about ſix inches long.

72. Murex cochlidium: beak dilated; whorls of the ſpire flat above. It inhabits the Indian Ocean.

73. Murex ſpirillus: ſhell with a long beak; ſpire mucronate; the whorls convex above. Inhabits Tranquebar; reſembles the next, but the whorls are not ſeparated by a groove. Shell ventricoſe beneath; convex above; ſpire with a prominent obtuſe knob in the centre, the whorls ſurrounded with an acute margin above; the beak is ſub-cylindrical, and not dilated towards the aperture of the belly; pillar with a tranſverſe wrinkle.

74. Murex caniculatus: beak dilated; whorls of the ſpire ſeparated by a ſmall canal. It inhabits Canada and the Frozen Sea. The ſhell is brown, ſometimes larger and uniform, ſometimes leſs and radiate, ſmooth or tranſverſely ſtriate; margin of the back knotty.

75. Murex ficus: beak dilated; ſhell ſtriate, the whorls ſeparated by a ſmall canal; the outer ones brown, the firſt crowned with knobs at the baſe.

76. Murex carica: beak dilated; ſhell tranſverſely ſtriate; ſpire a little prominent; the whorls crowned with ſpines at the baſe. It is about eight inches long; the pillar is plaited.

77. Murex rapa: ſhell ſolid, umbilicate, with a triple row of knots, and tranſverſely ſtriate; the aperture large and ſtriate. It inhabits India, and reſembles the Bulla rapa.

78. Murex niveus: beak dilated; ſhell ſnowy, diaphanous; whorls of the ſpire ſeparated by a ſmall groove; the firſt with tranſverſe carinate ribs. It inhabits the ſeas about Braſil.

79. Murex granum: ſhell hemiſpherical, glabrous, diaphanous, with a ſpreading ſtraight beak, crown capillary. Found in North America.

80. Murex aruanus: beak dilated, ſpire crowned with ſpines. It inhabits New Guinea. Shell coarſe, ponderous, black or bluiſh, ſurrounded with rings; aperture angular.

81. Murex perverſus: beak dilated and repand; ſpire turned the contrary way, and ſlightly crowned. It inhabits the American Ocean. This ſpecies is exceedingly rare.

82. Murex antiquus: beak dilated; ſhell oblong, with eight round whorls; the firſt ventricoſe. It inhabits the European and Frozen ſeas, and is from four to ſix inches long. The ſhell is dark, and of a dirty yellow, very finely ſtriate, tranſverſely or longitudinally plaited. *Zool. Dan.* iii. 64.

83. Murex deſpectus: beak dilated; ſhell oblong ſtriate, and ſomewhat rugged; it has eight whorls, with two ele-

vated lines. It inhabits the European ſeas, and is about five inches long. The ſhell is coarſe white, with a gloſſy orange-yellow aperture; the animal is ſometimes eaten, but is more frequently uſed as a bait for cod and ray-fiſh.

84. Murex fornicatus: beak dilated; ſhell ovate oblong; the whorls ventricoſe, longitudinally ſtriate, and a little angular. It inhabits the Greenland ſeas. The ſhell is more than three inches long, ſub-diaphanous, ſmoothiſh, and yellow; within white, glabrous.

85. Murex incraſſatus: ſhell oblong, tranſverſely wrinkled and longitudinally ſtriate; lip denticulate within, and thickened without.

86. Murex truncatus: ſhell oblong, longitudinally ribbed; beak a little reflected, emarginate, truncate. This is the M. coſtatus of Pennant. It inhabits the European coaſts: is very minute, with ſix whorls.

87. Murex acuminatus: ſhell narrow, oblong, ribbed, with a pointed ſpire. Inhabits England.

88. Murex argus: ſhell gibbous, with tranſverſe tuberculate ribs; brown, with darker bands, within white; aperture ovate. It is found in India, and in the Friendly and Society iſlands.

89. Murex maculoſus: ſhell cancellate, yellow, with alternate white bands and cheſnut patches; ſpire with eleven round whorls.

90. Murex magellanicus: ſhell ventricoſe, umbilicate, tranſverſely ſtriate, cinereous, within violet; whorls of the ſpire with parallel ribs, the firſt very large.

91. Murex cancellatus: ſhell ovate, ſolid, opaque, cinereous; whorls of the ſpire cancellate, and ſeparated by a groove.

92. Murex ſcolopaceus: ſhell brown; whorls ſurrounded with grooves, and with tubercles above; tip of the tubercles and aperture white. There is a variety which is more elongated, and of a dirty yellow, with an obſolete band on the whorls; the tubercles more globular.

93. Murex litteratus: ſhell ventricoſe, tapering, ſpotted with black; pillar with a ſingle plait; beak ſhort; ſhell ſnowy, with a wide aperture; ſpire with eight prickly whorls.

94. Murex trigonus: ſhell ſub-triangular, cancellate; ſpire with ſeven inflated contiguous whorls, the firſt with a large diſtinct tubercle. It is found in Senegal. The ſhell is two inches long.

95. Murex ſemilunaris: ſhell longitudinally ribbed, and very finely ſtriate tranſverſely; ſpire with flattiſh diſtant whorls, with rows of tubercles; aperture ſemilunar. This is found in Senegal; about an inch long.

96. Murex coſtatus: ſhell with annular ſtriæ, and inflated round whorls, each of them with nine rounded parallel ſpinous ribs. Inhabits Senegal; two inches and a half long.

97. Murex ſulcatus: ſhell rounded, with annular grooves; aperture oval; firſt whorl of the ſpire turgid. Found in Senegal; one inch and three-quarters long, with nine contiguous whorls, which are ſometimes inflated, ſometimes flattiſh.

98. Murex fuſiformis: ſhell elongated, with numerous rows of very minute crowded tubercles. This alſo inhabits Senegal; the ſhell is ſix lines long, with about eight whorls; the firſt with from twelve to fifteen rows of tubercles, the ſecond with five.

99. Murex tritonis: ſhell ventricoſe, oblong, ſmooth, with rounded whorls to the aperture, and ſhort beak. Inhabits India and the South Seas. There is a variety found in the Mediterranean; the ſhell is full ſixteen inches long, white, and appearing as if covered with brown, yellow, and black, ſcales; the pillar is white, with tranſverſe black ſtriæ; whorls of the ſpire ſeparated by a nodulous ſuture, the firſt marked with ſtriate grooves. This ſpecies is uſed by the natives of New Zealand as a muſical ſhell; and by the Africans, and many nations of the Eaſt, as a military horn.

100. Murex tulipa: ſhell ventricoſe, oblong, ſmooth; whorls rounded, with a double ſuture; pillar with two plaits; beak dilated, ſtriate. It inhabits South America; the ſhell generally ſpotted and clouded, within tranſverſely ſtriate; whorls ſometimes with only a ſingle ſuture.

101. Murex clathratus: ſhell oblong, beaked and grooved, with longitudinal ſub-membranaceous plaits. This ſpecies is found in Iceland; it reſembles very much the Turbo clathratus; but it has a ſhort beak, and numerous erect compreſſed plaits.

102. Murex naſſo: ſhell ſolid, black, or pale brown, with a white ſub-diaphanous band; whorls knotty; pillar a little plaited. This is thought to be a ſpecies between the Voluta and Murex.

103. Murex plicatus: whorls of the ſpire plaited and knotty. It is found, though rarely, in India.

104. Murex ſcala: ſhell umbilicate, with diſtant wedged, ribbed, and tranſverſely-ſtriate, whorls; aperture heart-ſhaped. The ſhell is reddiſh-white, ſometimes yellow, with pale brown bands.

105. Murex fiſcellum: ſhell angular, longitudinally plaited and tranſverſely ſtriate; lip toothed; mouth violet; beak ſtraight, ſhort. Inhabits China.

106. Murex corona: ſhell faſtigate, with brown and yellowiſh bands; whorls above flattiſh, with waved imbricate ſcales; beak ſtraight, entire. Inhabits Mexico.

107. Murex dolarium: beak dilated, ſhell ovate, with a few elevated obtuſe belts on the whorls. Inhabits the ocean; ſize of a walnut.

108. Murex corneus: ſhell oblong, ſlender, white, the margins of the whorls complicated, the tip tubercular; aperture toothleſs; beak a little aſcending. It inhabits the Britiſh and North ſeas; three inches long. The ſhell is white, covered with a brown ſkin, tranſverſely ſtriate; ſpire with eight round whorls.

109. Murex lignarius: ſhell oblong, coarſe, with obtuſely knotty whorls; aperture toothleſs; beak ſhort, ſtraightiſh. Found in divers parts of the ocean; about three or four inches long.

110. Murex trapezium: ſhell oblong, obtuſely angular, with ſlightly knotty whorls; aperture toothed; beak ſhort and ſtraight. It inhabits the Indian ocean; it is frequently ſeen above ſix inches long.

111. Murex veſpertilio: ſhell ſolid, ventricoſe, ſmooth, with an oblong oval aperture; beak and ſpire ſtriate; the outer whorls caniculate. It is found in the Indian ocean, and is full four inches long. The ſhell on the outſide is of a cheſnut-colour, but within it is of a fleſh-colour.

112. Murex ſcolymus: ſhell thin, diaphanous, ventricoſe, and tranſverſely ſtriate; the middle of the back ſmooth; ſpire with obtuſe undulate knots; pillar three-plaited; the ſhell is white, with nine or ten whorls on the ſpire; the tubercles are hollow within, and the beak is annulate.

113. Murex harpa: ſhell ventricoſe, longitudinally ribbed, the ribs tranſverſely ſtriate; ſpire a little prominent, the whorls diſtant.

114. Murex tuba: ſhell fuſiform, tranſverſely ſtriate, white, with a brown tip to the ſpire; whorls diſtant, and crowned at the baſe with knots. It is found in China, and is nearly ſix inches long.

115. Murex ſyracuſanus: ſhell oblong, with ſtriate plaited whorls, covered with tuberculate ridges; aperture toothleſs; beak ſhort. It inhabits the Mediterranean; but is extremely rare.

116. Murex craticulatus: ſhell whitiſh, oblong, with rounded, plaited, and tranſverſely-reticulated, whorls; aperture toothed; beak ſhort. It inhabits the Mediterranean.

117. Murex ſcriptus: ſhell ſtriated, nearly without beak, fuſiform, ſmooth, pale, with longitudinal brown ſtriæ; lip toothed. It inhabits the Mediterranean, and is not much larger than a grain of barley.

118. Murex ternatus: ſhell tranſverſely ſtriate, with diſtant, undulate, tuberculate, whorls; aperture oblong; beak ſtraight, longiſh. It inhabits Ternate iſland; is yellow, and about four inches long.

119. Murex infundibulum: ſhell umbilicate, undulately knotty, with elevated brown ſtriæ; perforation funnel-ſhaped; pillar two-plaited. This is a very rare ſhell, about four inches long, with nine whorls.

120. Murex polygonus: ſhell a little ventricoſe, undulate, with tubercles; ſtriate, grooved, and obtuſely angled; black, with an oval aperture and ſhort beak. It inhabits the Indian ocean.

121. Murex iſlandicus: ſhell tranſverſely ſtriate, ſnowy, covered with a brown ſkin; ſpire papillous at the tip, with round whorls, the firſt very large and ventricoſe. It is found in Iceland. The ſhell is about five inches long, with from ſix to nine whorls; the aperture is oblong; the beak ſhort, lip acute; pillar ſmooth.

122. Murex lævigatus: ſhell fuſiform; ſpire tranſverſely ſtriate, with diſtant flattiſh whorls, the firſt round and ſmooth; the beak rather long. It has been found in the foſſil ſtate in Campania, and is three inches and a quarter long.

123. Murex foſſilis: ſo called on account of its being found (in Campania) only in the foſſil ſtate; ſhell fuſiform, thin, cancellate, with a long beak. It is an inch and a quarter long.

124. Murex candidus: ſhell ſnowy, tranſverſely ſtriate; ſpire with diſtant whorls, carinate in the middle, and crowned with tubercles; aperture oval; lip grooved within, and denticulate at the margin. The ſhell is between nine and ten inches long.

125. Murex anſatus: ſhell brown, tranſverſely ſtriate; ſpire mucronate, the whorls diſtant, convex, and knotty at the baſe; beak long.

126. Murex undatus: ſhell white, ſolid, ventricoſe, with waved angles, and very finely ſtriate tranſverſely; ſpire mucronate, the whorls knotty at the baſe; lip denticulate. It inhabits India; is eight inches and a half long, and ponderous.

127. Murex longiſſimus: ſhell thin, ſtriate, with an obtuſe knotty ſpire and long ſtraight beak. It inhabits India; is nine inches long; ſhell white, with ten whorls.

128. Murex lancea: ſhell narrowed; whorls of the ſpire tranſverſely ribbed and longitudinally crenate; aperture ovate, ribbed with white within, and toothed at the margin; the pillar is two-plaited. It inhabits Amboyna.

129. Murex anguſtus: ſhell narrowed; firſt whorl of the ſpire longitudinally plaited and tranſverſely ribbed, the others ſmooth and round; beak tranſverſely ribbed.

130. Murex verſicolor: ſhell ſubcylindrical with an obtuſe ſpire, the whorls round and ſtriate, the lower ones moſtly glabrous. It inhabits India; ſhell brown variegated, with nine whorls.

131. Murex verrucoſus: ſhell umbilicate, and ſurrounded with belts, the middle ones more raiſed; whorls crowned with tubercles, which are ſpotted with brown; beak inflected. Inhabits the Red Sea.

132. Murex ſtriatulus: ſhell thin, tranſverſely ſtriate; ſpire mucronate; the whorls round; beak long; aperture ovate; lip crenulate. Shell about four inches long, covered with a brown ſkin.

133. Murex pardalus: ſhell rounded, white, with violet ſpots, longitudinally ribbed and tranſverſely ſtriate; ſpire obtuſe; beak long.

134. Murex gigas: whorls of the ſpire turgid, gibbous, nodulous, and annulate; beak reflected; lip denticulate beneath. This ſhell is twenty-one inches long.

135. Murex lignoſus: ſhell whitiſh; ſpire obtuſe, the whorls ſlightly crowned with unequal tubercles; beak tranſverſely ſtriate. About one inch and a half in length.

136. Murex gibbulus: ſhell tapering, orange; ſpire obtuſe, the whorls diſtant, with longitudinal ribs and flexuous tranſverſe ſtriæ; beak ſhort.

137. Murex granularis: ſhell tapering; ſpire with contiguous whorls ſeparated by a flexuous line, the firſt ventricoſe. Found in the Adriatic.

138. Murex vexillum: ſhell orange, tapering, tranſverſely ribbed with brown; whorls convex; aperture oval; lip denticulate; beak ſhort.

139. Murex vulpinus: ſhell tawny, oblong, ventricoſe; whorls eight, with a ſtriate margin; aperture glabrous; beak ſhort, and bent outwards.

140. Murex afer: ſhell ovate, tranſverſely ſtriate; ſpire with nine flattiſh whorls, crowned with a row of tubercles. The ſhell is one inch and a half long, fulvous or white varied with brown.

141. Murex Campanicus: ſhell ventricoſe; ſpire obtuſe, cancellate, with carinate whorls, the firſt ventricoſe and ſmooth; beak long and ſmooth. It is found foſſil in Campania; and is three inches long.

142. Murex arenoſus: whorls of the ſpire with decuſſate ribs; the firſt very large, the three outmoſt ſmooth: beak acute; aperture oval; lip toothed outwardly. It inhabits the ſandy ſhores of India; very ſmall.

143. Murex marcenſis: ſhell narrow, browniſh, tranſverſely ſtriate; ſpire mucronate, with diſtant, contrary, round, longitudinally-ribbed, whorls; beak prominent; aperture oval.

144. Murex lineatus: ſhell oblong, whitiſh, with tranſverſe ſtriæ; beak ſhort, ſtraight. Found on the ſhores of New Zealand.

145. Murex perron: ſhell a little tapering; the whorls carinate above, margined and flattened; beak long, ſtraight. It inhabits the Southern Ocean.

146. Murex larva: ſhell cylindrical; ſpire with a crenate callous belt, the upper whorls with plaited knots; lower ones flattiſh; beak ſtraight, ſhort, emarginate.

147. Murex neritoideus; ſhell ſolid, thick, coarſe; ſpire exſerted; the whorls tranſverſely ſtriate; aperture ſemiorbicular, and ſtriate; beak ſtraight and ſhort.

148. Murex priſmaticus: ſhell ovate angular, irideſcent, longitudinally grooved and plaited; beak ſhort; lip denticulate. It inhabits India and the South Seas.

149. Murex columbarium: ſhell with longitudinal plaited ribs, and tranſverſely-grooved, angular, ſpinous, carinate, alternately varied with white and brown; whorls leſſening ſuddenly; beak ſhort, ſtraight; mouth violet. It inhabits Pulo Condore.

150. Murex aſperrimus: ſhell ribbed, varied with brown, yellow, and white; whorls oblique, with a tuberculate margin, a brown band in the middle, and another white one; beak dilated, aſcending. Shell nearly two inches long.

151. Murex undulatus: ſhell white, undulate with bay, with grooves marked with raiſed ſtriæ; the whorls, at the margin, nodulous; beak ſtraight. Found in the Red Sea, and is about four inches long.

VI. *Tapering, ſubulate, with a very ſhort beak.*

152. Murex vertagus: whorls of the ſpire plaited above; beak aſcending; pillar plaited within. It inhabits India, is about three inches long, with fifteen or more round whorls ſeparated by a groove; the lower ones ſmooth on one part; beak very ſhort.

153. Murex aluco: whorls of the ſpire tuberculate, with a ſpinous ſtreak in the middle; pillar with a ſingle plait; beak aſcending. It is found in the Southern and Atlantic Oceans, alſo in the Red Sea; and is about four inches long; whorls generally whitiſh, ſprinkled with bluiſh or browniſh dots, and tranſverſely ſtriate; lip round; aperture oval.

154. Murex annularis: whorls ſurrounded with longitudinally-ſtriate belts, the firſt whorl tranſverſely ſtriate; beak aſcending.

155. Murex plicatulus: ſhell ventricoſe, with a tranſverſely-ſtriate ſpire, the whorls with longitudinally-knotty plaits; aperture oval. The ſhell is yellowiſh, with white plaits; ſpire with eight whorls; pillar with a ſingle wrinkle.

156. Murex ſordidus: ſhell ventricoſe, tranſverſely ſtriate, and crowned with black knots; lip dilated. The ſhell is generally bluiſh, with a very trifling prominent beak. This

is thought by ſome to be a variety of the Strombus tuberculatus.

157. Murex cingulatus: ſpire tranſverſely ſtriate and grooved; the whorls ſurrounded with three rows of granulations, the firſt a little knotty. It is found in Tranquebar.

158. Murex fuſcus: the ſhell of this ſpecies is rounded; firſt whorl of the ſpire is gibbous; the following ones varicoſe; the laſt with numerous ſpines.

159. Murex faſciatus: ſhell tranſverſely ſtriate; the ſpire crowned. This is found in the rivers of America.

160. Murex fluviatilis: ſhell brown; firſt whorls of the ſpire crowned with ſpines, the other with knots; aperture repand.

161. Murex alatus; ſhell reticulate; ſpire mucronate, the firſt whorl grooved and tranſverſely ſtriate; lip winged; ſpire annulate, with nine whorls ſurrounded with a ſtriate band.

162. Murex noduloſus: ſhell tranſverſely ſtriate, and alternately barred with brown and white; ſpire mucronate; the whorls diſtant, with undulate knots.

163. Murex terebella: ſhell with a triple moniliform belt on each ſide the whorls; aperture oval, with curved ſtriæ within. The ſhell is from an inch to two inches and a half long; in colour it is a ſort of cheſnut-brown; ſometimes uniform, or cheſnut with white belts, or white with cheſnut coloured belts; the aperture often varied with blue and white.

164. Murex fuſcatus: ſpire with crenulate whorls, the upper ſtriæ denticulate. It inhabits the Mediterranean; the ſhell is covered with a brown ſkin, the baſe obtuſe; whorls with a knotty belt in the middle, and a band on each ſide; one of them granulate, the other crenulate.

165. Murex toroluſus: whorls of the ſpire with a ſlightly-knotty zone above; beak ſhort. In colour it is white, ſmooth, or marked with obſolete longitudinal ſtriæ; the tip plaited; zone of the whorls elevated, gibbous, obtuſe.

166. Murex redula: whorls of the ſpire tuberculate, with a double row of punctured ſtriæ. It inhabits Africa; ſhell reddiſh or brown; tubercles often tipt with white; the aperture is oval.

167. Murex aſper: whorls of the ſpire grooved, tranſverſely ſtriate and muricate; beak aſcending. It inhabits Guinea; the ſhell is of a milk-white, with rows of brown dots; ſolid, with from twelve to fourteen longitudinal grooves; aperture ſub-oval; pillar with a ſingle plait.

168. Murex granulatus: ſhell rough with decuſſate tubercles; beak acute, aſcending. It is found in India; the ſhell is about two inches long, white; the whorls are longitudinally ribbed and tranſverſely ſtriate; aperture oval; pillar with a ſingle plait.

169. Murex decollatus: whorls of the ſpire with longitudinal plaited grooves, the tip appearing as if the point of it were broken off. It inhabits the European Seas; reſembles the Helix decollatus, but is emarginate at the baſe.

170. Murex Moluccanus: ſhell ſtriate; whorls of the ſpire tranſverſely grooved with undulate longitudinal plaits; lip dilate crenulate, beak tubular. It is found among the marſhes of the Molucca-iſlands.

171. Murex minimus: ſhell with tranſverſe undulate ſtriæ, croſſed by longitudinal lines; aperture orbicular. Found in Jamaica.

172. Murex ſtrigilatus: ſhell longitudinally ſtriate; whorls undivided, with a ſnowy belt at the ſuture ſpotted with rufous.

173. Murex tuberculatus: ſhell tranſverſely ſtriate, and ſurrounded with glabrous knots; lip thickened. The ſhell of this ſpecies is ſolid, a little gibbous, obtuſe; the knots black tipped with white.

174. Murex gibboſus: whorls of the ſpire margined; belly gibbous; lip cleft, denticulate; beak ſhort; ſpire with nine ſtriate whorls, and longitudinally plaited; beak ſtraight and ſhort; ſhell with reddiſh ſpots.

175. Murex atratus: ſhell black, the whorls tranſverſely ſtriate and tuberculate; pillar with a ſingle plait; beak ſtraight and ſhort; ſhell with reddiſh ſpots.

176. Murex contrarius: ſhell with four contrary whorls marked with double ſtriæ; beak dilated. It inhabits the European and North Seas.

177. Murex eburneus: ſhell contrary, hyaline, with ſix very fine crenulate whorls.

178. Murex conditus: ſhell tapering, very rough, with granulations; lip doubled, emarginate each ſide, and toothed within; aperture oval, ſtriate.

179. Murex clava: ſhell tranſverſely ſtriate and ſpotted; whorls with plaited knots; beak aſcending; lip doubled, dilated; pillar-lip replicated and glabrous. Inhabits Pulo Condore.

180. Murex hexagonus: ſhell yellowiſh, hexagonal, with tranſverſe granulate ſtriæ; firſt whorl tuberculate; aperture roundiſh; lip dilated. It is found in the South Sea, and ſpecimens of it are frequently ſeen foſſil.

181. Murex minutiſſimus: ſhell with five ſpirally-ſtriate whorls and remote ribs; beak cloſed. This inhabits the Welſh coaſts; the ſhell, agreeing with its name, is exceedingly minute, elegant, and pellucid.

MU'REX, *ſ.* A caltrap, or iron inſtrument, with ſharp points projecting in every direction, uſed by the Romans as a defence againſt the enemy's horſe. It was ſo called, probably, becauſe the points bore ſome reſemblance to the ſpines and tubercles with which the ſhell of the fiſh murex is ſurrounded.

MUR'FAH, a town of Hindooſtan, in Bundelcund: fifteen miles eaſt-north-eaſt of Callinger.

MUR'FREESBOROUGH, a town of North Carolina, on the Meherrin: fifty miles north-weſt of Edenton.

MURG, a river of Germany, which riſes about two miles ſouth-eaſt of Oppenau, runs ſouth-ſouth-eaſt about ſix miles to Lake Elp, near which it is joined by the Lorbach, when it changes its courſe, and runs northward to Gerſpach: after paſſing this town, it runs north-weſt by Kuppenheim, Raſtadt, &c. into the Rhine.

MUR'GA, or Morga, a river on the coaſt of Chili, in South America, ſouth of Quintero-bay, and not far from the entrance into Chili-river.

MUR'GAH, a town of Hindooſtan, in Gurry Mundella: twenty-five miles eaſt of Mundella.

MURGAW', a town of Hindooſtan, in the circar of Gohud: ten miles ſouth of Calpy.

MUR'GENTHAL, a town of Swiſſerland, in the canton of Berne: fifteen miles eaſt of Soleure.

MUR'GI, or Murgis, in ancient geography, the laſt town of Bætica, next the Tarraconenſis: the Urce of Ptolemy. Now *Muxara,* a port-town of Granada, on the Mediterranean. Lat. 37. 6. N. lon. 1. 50. W.

MURGIAN', a town of Perſia, in the province of Comis: thirty miles eaſt of Damegan.

MURGIAN', a town of Perſia, in the province of Kerman: fifty miles north of Sirgian.

MURGLOO'R, a town of Hindooſtan, in Golconda: twenty-five miles ſouth-ſouth-eaſt of Combamet.

MUR'HARD, or Murhart, a town of Wurtemberg, on the Muhr: twenty-two miles north-eaſt of Stuttgart, and ſixty-two ſouth-eaſt of Worms. Lat. 48. 56. N. lon. 9. 39. E.

MURHOO', a river of Queda, which runs into the ſea in lat. 5. 15. N. lon. 100. 15. E.

MU'RIA, *ſ.* Muriat; in mineralogy, a genus of ſalts, of which the generic characters are—Taſte ſaline; eaſily ſoluble in water, and the ſolution not made turbid by ſoda; not effervеſcing with diluted acids, but effervеſcing and emitting grey ill-favoured ſuffocating vapours in ſtrong hot ſulphuric acid; changing nitrous acid into the nitro-muriatic acid. The Muriats, and the methods of combining them, have been fully deſcribed under the article Chemistry, vol. iv. p. 243 & ſeq. ſo that we have little more to do, in this place, than to detail their ſpecific mineralogic characters.

1. Muria aquatica, or ſea-ſalt: fixed, decrepitating when

heated, of a cubic form, diſſolved in water. Of this there are three varieties, as it occurs, 1. in the ocean; 2. in ſalt lakes; 3. in ſalt ſprings. When evaporated, it generally contains from 20 to 30 per cent. of muriat of ſoda.

2. Muria montana, common or rock ſalt, or muriat of ſoda: fixed, decrepitating in the fire, dry, pure, producing ſulphat of ſoda when ſaturated with ſulphuric acid. Found in Britain, Poland, Hungary, Spain, and various other countries, ſometimes forming vaſt maſſes and mountains. It is found colourleſs, and of various ſhades of grey, yellow, red, blue, or brown. It is frequently contaminated by a mixture of muriat of lime, muriat of magneſia, or other earths; and may be purified by dropping into it firſt a ſolution of carbonat of barytes, then of carbonat of ſoda, as long as any precipitate continues to fall; then ſeparate the precipitate by filtration, and evaporate ſlowly till the ſalt cryſtallizes: it is ſoluble in ſomething leſs than three times its weight of water. Specific gravity 2·12. Contains acid 52, ſoda 42, water of cryſtallization 6.

Rock-ſalt is generally accompanied by gypſum and indurated ochry clay; and is always ſituated among ſecondary ſtrata. In ſome parts of the world it has been employed inſtead of ſtone, in building: this uſe of it is mentioned by Strabo and Pliny. The rock-ſalt of Cheſhire is of a browniſh red colour, in conſequence of the preſence of an ochry clay: this clay is immediately ſeparated by ſolution and cryſtallization; ſubſiding to the bottom of the water in which the ſalt has been diſſolved, and leaving the ſupernatant liquor clear; from which the ſalt may be recovered by evaporation of the water that held it in ſolution, in a perfectly colourleſs ſtate. Tranſparent colourleſs patches of ſalt occur here and there in the natural ſtratum; but, upon the whole, this is of the colour above deſcribed, and the appearance of the mine is much the ſame as of a quarry of common ſtone of the ſame colour. Mr. Playfair deſcribes a peculiarity in the rock-ſalt of Cheſhire: he ſays that the maſs is compact, but arranged in nodules of five or ſix feet in diameter; theſe nodules are not perfectly ſpherical, but each is compreſſed by thoſe that ſurround it, ſo as to have the ſhape of an irregular polyhedron.

The ſalt-mines of Cheſhire are found near the centre of a large plain formed by the ſouthern parts of Lancaſhire, the northern extremity of Shropſhire, and the intervening county of Cheſhire. This plain is ſubdivided into three; the baſon of the Dee on the weſt, of the Merſey on the north, and the Weaver in the middle. In this middle diſtrict, which may be compared to a ſector of a circle, having its centre at the point where the Weaver falls into the Merſey (the circumference ſtretching along the borders of Flintſhire, Shropſhire, and Staffordſhire), are found the ſalt-mines, generally not far from the banks of the Weaver and its branches. The ſalt-rock was firſt diſcovered at Marbury, near Northwich, about a hundred and forty years ago, in ſearching for coal. After this bed of rock had been worked for more than a century, a ſecond and inferior ſtratum was met with, ſeparated by a bed of indurated clay from the one previouſly known. This lower ſtratum was aſcertained to poſſeſs, at a certain depth, a great degree of purity and freedom from earthy admixture; on which account, and from the local advantages of Northwich for exportation, the foſſil ſalt is now worked only in the vicinity of this place. The thickneſs of the upper bed of ſalt varies from twenty to thirty yards; that of the lower bed has never yet been aſcertained. It is a certain fact, that no marine exuviæ or organic remains are found in the ſtrata ſituated over the rock-ſalt of Cheſhire. The occurrence of gypſum in connexion with beds of foſſil ſalt, is a fact generally obſerved; and it occurs in Cheſhire, as well as in the ſalt-rocks on the continent. One of the moſt ſtriking facts connected with the internal ſtructure of the Northwich rock-ſalt, is the appearance obſervable in the horizontal ſections of the rock, of various figures, more or leſs diſtinctly marked, and differing conſiderably in the forms which they aſſume; ſome appearing nearly circular, others perfectly pentagonal, and others again having an irregular polyhedral form. The lines which form the boundaries of theſe figures are compoſed of extremely-pure fine ſalt, forming a diviſion between the coarſe red rock exterior to the figure, and the equally-coarſe rock included within its area. *Tranſ. of the Geologic Society*, vol. i. 1811.

The brine-ſprings met with near Droitwich in Worceſterſhire, from which a great quantity of ſalt is ſeparated by the proceſs of evaporation, probably communicate with ſtrata of rock-ſalt; and perhaps theſe ſtrata may hereafter be diſcovered; for within the laſt two or three years a vein of gypſum has been met with in that part of Worceſterſhire, which alone might lead to the expectation of finding rock-ſalt.

The following account of the ſalt-mines in Upper Poland, is extracted from Malte-Brun's Picture of Poland.—There are two diſtricts in Upper Poland worthy of claiming the attention of the naturaliſt and geographer; the one is that of the mines between the Pilica and the Viſtula, the other that of the ſalt-mines between the Viſtula and the Carpathian mountains. The whole extent of the chain of the Carpathian from the north, riſes into a gradual aſcent, intermixed with ſmall hills compoſed of white clay, and ſometimes of chalky plaſter. Underneath this ſtratum is found another, which conſiſts of a fine ſoft pliable ſand; next to this ſand is a layer of ſandy marl; and under this, and often in the middle of it, is found the foſſil ſalt. From Cracow to Lemberg, this bed of ſand is viſible in the plain. On aſcending to the height of 150 to 200 feet above the Viſtula, the argillaceous hillocks commence; amongſt which, wherever they make holes of any depth, foſſil ſalt and ſalt-water is met with: ſprings of ſulphur and bitumen are common: in this tract of land are ſituated the two famous ſalt-mines of Bochnia and Wieliczka.

According to the Poliſh hiſtorians and geographers, the ſalt-mines of *Bochnia* were diſcovered in 1251. This diſcovery is attributed to St. Cunigonda, an Hungarian princeſs, the wife of the duke Boleſlas V. but attended with many fabulous circumſtances; notwithſtanding which, it is eaſy to conclude, that ſhe brought along with her ſome Hungarian miners. They were not regularly worked, or well known, till 1442; but at preſent the ſalt-mines of Bochnia are far inferior to thoſe of Wieliczka. The produce of both, under the Poliſh government, amounted to about ten millions of florins (Poliſh), and the expenſes of working, &c. to about nine-tenths of that ſum. After the reſtrictions were taken off, and the encouragement given by the Auſtrian government, it is ſtated that the produce of the mines amounted to two millions of florins of Vienna, clear of all deductions. The mine of Bochnia, according to Schober, conſiſted of a long ſubterraneous ſort of gallery or paſſage, about 750 feet wide from north to ſouth; about 10,000 feet long, in a line from eaſt to weſt; and its depth from 100 to 1200 feet. The mine firſt appears in cryſtal ſpars, and the ſalt is found everywhere in veins. It is rather finer than that of Wieliczka, eſpecially where they quarry deeper. It is cut into moderate-ſized pieces, in order to be put into barrels. Pieces of broken black wood are often found amongſt the ſalt. Within the whole extent of the mine there is ſo little moiſture, that duſt abounds in great quantities. Alabaſter too is found in the mine.

The ſalt-mines of *Wieliczka* are divided into three parts: that of St. John, the Old, and New Field. The town of Wieliczka is not only undermined, but the mines extend on each ſide to a diſtance equal to its ſize; that is, from eaſt to weſt ſix thouſand feet; from ſouth to north, about two thouſand; and in the deepeſt part of the valley about eight hundred, according to Buſching. There are ten pits or ſhafts; but that known by the name of *Wodna-Gora* ſerves as a canal to carry off the waters which filter through the different ſtrata above; for throughout the whole extent of theſe famous mines, there is not a ſingle ſpring of water. In the ſhaft or entrance called *Leſzno*, Auguſtus III. cauſed a winding ſtair-caſe to be made of four hundred and ſeventy ſteps, which coſt forty thouſand Poliſh florins in completing. It is by the ſhafts or entrances of the *Danielowitz*, that travellers deſcend by means of ropes. On their arrival at the firſt mine, they are ſtruck with the grandeur, elegance, and regularity, of the columns and vaulted roofs: in many of thoſe excavations are ſeveral little chapels and altars, cut out of the rock, that is to ſay, the ſalt; and adorned with a crucifix, or the image of ſome ſaint, before which a lamp is continually burning. The chapel of St. Anthony is thirty feet high; there are ſeveral very ſpacious apartments in it; ſome of them ſerve as ſtore-houſes for barrels of ſalt ready packed; ſome for the forage of the horſes, and others as ſtables for thoſe animals, about twenty or thirty, according to the demand for the article. In ſome ſpots where water has been, the ſides and bottoms are covered with cryſtallized pieces of ſalt, hanging over each other in cluſters of thouſands; many of thoſe pieces weigh half a pound and more, and form a brilliant ſpectacle where many torches are held near them; but much leſs ſo than many ancient enthuſiaſtic travellers have deſcribed it. In the chapel of St. Cunegonda, there is a ſtatue of Auguſtus III. entirely of ſalt.

The air is particularly wholeſome, although it is chiefly compoſed of a nitrous gas, which riſes towards the roofs of the paſſages, where it ſometimes is ſet on fire by the approach of torches; it burns ſlowly, with a clear reddiſh flame: the miners call it *ſaletra*. The number of perſons employed in the mines, is generally about ſeven hundred. No one paſſes his life in them, although travellers have aſſerted the contrary. Accidents but rarely happen: at certain diſtances, large pillars of ſalt are left ſtanding to ſupport the weight of the ſolid roof. In the year 1745, however, a conſiderable part fell in. Owing to neglect, the mines took fire in 1644, and in 1696, and continued to burn for a long time.

In the two firſt ſtrata, the ſalt is found in huge unformed maſſes, from which pieces may be cut of three, four, and five, hundred cubic feet. The earths, or rocks, are of three ſorts: one is a marl, of a deep greyiſh colour, moiſt and ſoft to the touch, ſometimes intermixed with gypſum. In this marl is found the kind of ſalt called *zielona*, or green ſalt; it takes this colour from a ſmall portion of marl which it contains. Amongſt the different varieties of this ſalt, the *ſpiſa* is diſtinguiſhed; it is of a greyiſh colour: it is the common ſalt, the *lodowaty* or frozen ſalt, and the *jarka* or ſandy ſalt. The ſecond ſort of earth is a rich unctuous ſoapy marl, which contains an infinity of ſhells. The third kind of rock offers a mixture of impure ſalt with gypſum and pyrites; in this mixture, called *zuber*, is found the ſalt-gem, or cryſtals of ſalt, which are either regular cubes, or rectangular priſms. After theſe neſts of ſalt, frequently very irregular, there is generally found a bed of marl and lime before they arrive at the *ſzybakowa*, or regular bed of foſſil ſalt, the moſt compact and pure: theſe beds are alternately mixed with white clay, ſlate, and gypſum; they run with a very little declination in a line from weſt to eaſt: they incline upwards towards the ſouth principally, and conſequently towards the Carpathian mountains. The layers or beds of ſalt are ſtrongly undulated above; while their baſe preſents a flat regular ſurface. The layers, whether of ſalt or earth, are often found interrupted by what the miners call *coins*. In the earth, and even in the body of the ſalt, are found pieces of a black ſort of wood, which frequently reſemble ſtrong branches of trees. Monſ. de Born cites an inſtance of a piece of an elephant's tuſk having been taken out of the mine; and he adds, that the jaw, teeth, and ſeveral bones, of the ſame animal, have alſo been found there.

Pallas ſpeaks of rock-ſalt in the neighbourhood of the River Jaik, which is ſometimes ſo hard as to ſnap the pick-axes made uſe of in quarrying it: he adds, that this ſalt is generally white; often as tranſparent and colourleſs as cryſtal; and that it readily breaks into cubic fragments. He obſerves that the ſouthern parts of Ruſſia, Siberia, and Grand Tartary, are as rich in common ſalt as any tract of land in the known world. Bruce mentions that in ſome parts of Abyſſinia cubic maſſes of rock-ſalt paſs as current coin.

3. Muria impura, or muriat of alumine: fixed, decrepitating in the fire, dry, producing ſulphat of ſoda when ſaturated with ſulphuric acid; mixed with various earths. Found in the Nevil Holt waters, and in the ſalt-pits of Saltſburg; and is a coarſer variety of the laſt from its being much mixed with gypſum, common mould, clay, and other earths: its taſte is aſtringent.

4. Muria febrifuga, or muriat of potaſh: fixed, decrepitating in the fire, forming muriat of potaſh with ſulphuric acid. Found in the environs of Madrid, and in ſome mineral waters in Normandy: it has a diſagreeable bitteriſh taſte, and when diſſolved and cryſtallized forms cubes which are often irregular: it was formerly known in the ſhops by the name of *febrifuge* or *digeſtive ſalt*. Specific gravity 1·836; contains acid 31, potaſh 61, water 8.

5. Muria ammoniaca, muriat of ammoniac, or ſal ammoniac: of an acrid pungent urinous taſte; when heated, ſubliming into a white ſmoke; rubbed with quicklime, exhaling an alkaline odour; its cryſtals deliqueſcing in the air. Found in coal-pits in various parts of Britain, but principally in the interior parts of Aſia and Africa, and in the neighbourhood of volcanos; rarely pure, white, and tranſparent, generally of a yellowiſh-grey, apple-green, or browniſh-black, colour: it diſſolves in about three times its weight of water, and when ſlowly evaporated forms flexible ſpicules connected together like the web of a feather. Specific gravity 1·42; contains acid 42·75, ammonia 25·00, water 32·25.

6. Muria barytes, or muriat of barytes: fixed, decrepitating in the fire, of an acrid aſtringent taſte, precipitating ſulphat of barytes when dropped into a weak watery ſolution of ſulphuric acid. Found in ſome mineral waters of Sweden; and when evaporated forms four-ſided priſms whoſe baſes are ſquares, or tables. It is ſometimes uſed in ſcrofulous affections in doſes of from five to twenty drops; but much precaution is neceſſary in its exhibition, as, like all other barytic ſalts, it is poiſonous.

7. Muria ſtrontiana, or muriat of ſtrontian: of a ſharp penetrating taſte; when heated undergoing a watery fuſion, and afterwards becoming a white powder; precipitated from its watery ſolution by muriatic acid. Perhaps never found naturally combined, but is prepared by diſſolving carbonat of ſtrontian in muriatic acid: its cryſtals are long ſlender ſix-ſided priſms, which are ſoluble in two parts of water, and alſo in alcohol, to whoſe flame they give a purple tinge.

8. Muria calcarea, or muriat of lime: of a bitter taſte, ſwelling and melting and loſing its water of cryſtallization by heat, and after having been expoſed to a violent heat ſhining in the dark. Found in mineral waters, but generally combined with common ſea-ſalt, to which it gives a bitteriſh taſte, and which it cauſes to attract moiſture and melt ſpeedily in the air: its cryſtals are ſix-ſided ſtriate priſms terminated by very ſharp pyramids: its earth is precipitated by ſulphuric acid.

9. Muria magneſiata, or muriat of magneſia: of a very bitter taſte, ſoluble in its own weight of water, its ſaturated ſolution quickly forming a jelly on which if hot water be poured ſpongy maſſes are formed. Found in ſalt and other mineral ſprings, and abounds in the waters of the ſea: its ſolution is precipitated by cauſtic alkalies, and not viſibly by the ſulphuric: it very ſpeedily deliqueſces in the air, and when dried in a high temperature is very cauſtic; ſo much ſo as to act upon iron, and in time to ſoften it.

For farther particulars of the above, and an account of ſome other muriats, ſee CHEMISTRY, vol. iv. p. 164, 243–50, 283, 303, 312.

MURIAL'TO, a town of France, in the department of the Stura, on the Bormida: five miles eaſt of Ceva.

MU'RIAT. See MURIA.

MU'RIATED, *adj.* [from *muria*, Lat.] Put in brine. —Early fruits of ſome plants, when *muriated* or pickled, are juſtly eſteemed. *Evelyn's Acet.* § 12.

MURIAT'IC, *adj.* Partaking of the taſte or nature of brine; from *muria*, brine or pickle. *Quincy.*—If the ſcurvy be entirely *muriatick*, proceeding from a diet of ſalt fleſh or fiſh, antiſcorbutick vegetables may be given with ſucceſs, but tempered with acids. *Arbuthnot.*

MURIATIC ACID. See the article CHEMISTRY, vol. iv. 217, 246.

MURJAT'TAH, a river of Bengal, which runs into the bay of Bengal in lat. 21. 43. E. lon. 89. 38. E.

MU'RIC, a town of Japan, in the iſland of Niphon: ſeventy-five miles ſouth-weſt of Meaco.

MU'RICATE, or MURICATED, *adj.* [*muricatus*, Lat.] Prickly; full of ſharp rigid points.

MU'RICHOM, a town of Bootan: forty-eight miles north of Beyhar.

MURIC'IA, *ſ.* [ſo denominated by Loureiro, from *murex*, the celebrated purple-dying ſhell-fiſh of the ancients, in alluſion to the purple colour and muricated figure of the fruit.] In botany, a genus of the claſs monoecia, order ſyngeneſia, or rather polyadelphia, natural order cucurbitaceæ. Generic characters—Male, calyx: the outermoſt a large, inflated, obtuſe, ſingle-flowered, ſheath. Perianthium in five deep, awl-ſhaped, ſtriated, coloured, ſpreading, equal, ſegments. Corolla: bell-ſhaped, of five ovate-lanceolate, ribbed, ſpreading, petals. Stamina: filaments three, ſhort, thick, triangular, dilated and connected at the baſe; antheræ three, or rather five, thoſe on two of the filaments being double, with two divaricated lobes, auricled at the baſe, the third ſimple, all diſtinct, with a pollen-bearing line at the outſide. Female, on the ſame plant, ſcattered. Calyx and corolla: as in the male. Piſtillum: germen between the ſheath and perianthium, oblong-ovate, villous; ſtyle round, thick, as long as the ſtamens, ſlightly three-cleft at the top; ſtigmas three, horizontal, arrow-ſhaped. Pericarpium: berry large, ovate, muricated, of one cell. Seeds: numerous, large, orbicular, reticulated, tuberculated at the edge.—*Eſſential Character.* Male: Calyx in five deep ſegments; petals five; filaments three. Female: Calyx in five deep ſegments; petals five; ſtyle nearly ſimple; berry muricated, of one cell; ſeeds orbicular, tuberculated.

Muricia Cochinchinenſis, a ſingle ſpecies: native of China and Cochinchina. It is a large climbing ſhrub, with a thick, woody, branched, ſtem; leaves ſtalked, alternate, five-lobed, ſmooth, veiny, finely toothed; the three upper lobes pointed, two lower (or lateral) ones bluntiſh and ſhort. Flowers lateral, ſolitary, pale yellow, on long ſtalks. Berries of a reddiſh purple both within and without, rather fleſhy, with brown ſeeds, imbedded in the pulp. The fruit has an inſipid taſte, and no ſmell. It is uſed to colour wafers, cakes, or other eatables, of a fine purple. The ſeeds and leaves are reported by Loureiro to have an opening and cleanſing quality, removing obſtructions in the liver and ſpleen, &c. *Loureiro's Cochinch.* 590.

MU'RICIDE, *ſ.* [from the Lat. *mus*, a mouſe, and *cædo*, to kill.] A deſtroyer of mice.

MURIGU'TI, *ſ.* in botany. See HEDYOTIS.

MURIL'LO, a town of Spain, in the province of Arragon: ſixteen miles ſouth of Jaca.

MURIL'LO (Bartholomew-Stephen), a celebrated Spaniſh painter, was born in 1613, at Pilas, near Seville. He received his firſt inſtructions in painting from his maternal uncle Caſtillo, an artiſt of repute at Seville. From him Murillo caught his firſt manner; and ſo many of his early works, repreſenting fairs and markets, were purchaſed for the Weſt Indies, that it has been falſely reported that he viſited that part of the world. The great fame of Velaſquez impreſſed the young artiſt with an eager deſire of obtaining improvement under him; and, going to Madrid for that purpoſe, he was admitted into his academy. There he diligently copied ſeveral of the works of Titian, Rubens, and Vandyke, by which he greatly improved his ſtyle of colouring, while at the ſame time he perfected himſelf in drawing from antique models. This was all the further inſtruction he received in his art; for he never viſited Italy, as ſome have aſſerted. On his return to Seville he began to exerciſe himſelf in great works, of which the firſt was the hiſtory of St. Francis in freſco, at the convent of that order. In this and his other pieces the figures are ſuppoſed to be portraits; for he was always a moſt faithful imitator of nature, and it is obſerved that all his heads have a caſt of the national Andaluſian character. He indeed delighted in repreſenting common and low life, ſuch as beggars and ruſtics; and moſt of his pictures that have been exported from Spain are of that kind. He was, however, capable of great beauty and ſublimity; but his ideas are all natural, and his works are marked with a certain ſimplicity of conception, joined with perfect truth. After a very fine piece of his had been publicly exhibited at Madrid in a proceſſion, the king, Charles II. invited him to come and reſide in the capital, with the appointment of one of the royal artiſts; but Murillo, who had neither avarice nor ambition in his temper, and had formed long attachments at Seville, ſent his excuſes. He continued to furniſh that city and other Spaniſh towns with altar-pieces and church-hiſtories, while for his amuſement he drew groupes of beggar-boys as he ſaw them in the ſtreets. It is agreed that he painted with wonderful force, that his colouring is clear and mellow, and his tints contraſted ſo as to produce the moſt ſtriking effects; and, if he is defective in taſte and knowledge of the antique, they were probably incompatible with his characteriſtic excellences. The latter have ſtamped a high value on his works throughout Europe. He was fond of his art, which he continued to practiſe to his ſeventy-third year; when a fall from a ſcaffold in a convent at Cadiz occaſioned an injury, which brought on a mortification that proved fatal to him in 1685.

The principal works of Murillo are at Seville; they are alſo found at Madrid, Cordova, Cadiz, and Granada. His ſmaller pieces are diſperſed in cabinets throughout Europe. The following deſcription of one of this painter's fineſt pieces is given by Mr. Jacob: "Moſes Striking the Rock is a moſt wonderful production; the anxious countenances of the Iſraelites, all eagerly crowding to the water, are exact repreſentations of what might be ſuppoſed the expreſſions of people in ſuch a ſtate. The figure of the mother with an infant, eagerly ſtretching out her hand to catch a few drops for her child, another lamenting the delay in obtaining a ſupply, and a boy mounted on a horſe, ſtretching forward to the ſtream, are eſteemed the beſt figures; while the countenances of all diſcover gratitude to God for this unexpected ſupply. I never felt ſo much pleaſure from the contemplation of any work of art as from this picture; but, notwithſtanding the admirable expreſſions of the countenances, I could not help admiring the ſhadow of the rock from which the water guſhes out. A paſſage in the ſacred writings mentions as a luxury *the ſhadow of a great rock in a deſert wilderneſs;* it is here diſplayed moſt admirably; the rock is high and large; within its ſhade the people appear protected from the rays of the ſun, which ſeem to diffuſe a burning heat over every other part of the ſcene." *Travels in Spain,* 1810.

MURI'NA, or MU'RINES, *ſ.* [Greek.] In antiquity, a delicious ſweet wine, medicated with ſpices. It was a kind of hippocras, and the uſual drink of the ladies.

MU'RING, *ſ.* [*murus*, Lat.] The act of raiſing walls, of walling-up, or of incloſing with walls.

MU'RIS (John de), a celebrated writer on muſic, to whom the invention of muſical characters is generally given. Fabricius, biſhop Tanner, and others, allow him to have flouriſhed about the year 1330. He is ſtyled by ſome a doctor and canon of the Sorbonne, by ſome a mathematician and philoſopher, and by others a chanter of the church of Nôtre-Dame at Paris. His country is likewiſe diſputed: for, though the general opinion be that he was born at Meurs in Normandy, whence he had his name, yet, by a typographical error, he is called Parmigiano in Bontempi, inſtead of Parigino, which makes him a native of Parma, inſtead of Paris. But, though he has no title to the invention of the time-table, as we ſhall ſoon demonſtrate, he muſt certainly have been a great benefactor to practical muſic by his numerous writings on the ſubject, which doubtleſs threw new lights upon the art, as may be better imagined now from the gratitude of his ſucceſſors, by whom he is ſo frequently quoted and commended, than from the writings themſelves, which Time, to whom he was ſuppoſed to have been ſo great a friend, has rendered totally uſeleſs, and almoſt unintelligible.

But, though he is entitled to an honourable place among muſical worthies, yet, as both his country and profeſſion have been diſputed, all that can be done to gratify the reader's curioſity concerning him, is to give a complete liſt of his works that are ſtill preſerved in the ſeveral libraries of Europe; and, from their titles and contents, to deduce at leaſt a probable opinion of other circumſtances concerning him.

Dr. Burney informs us, that, beſides a MS. in the Vatican, on the ſubject of counterpoint, he found there three others by de Muris, on the ſubject of muſic. The firſt is a treatiſe on Time, or Meaſured Muſic: *Joannis de Muris Practica Cantus Menſurabilis, pr. quilibet in Arte.* This tract is likewiſe in Bene't college Camb. No. 410. The ſecond is A Compendium of Counterpoint: *Joannis de Muris Ars Summaria Countrapuncti, pr. volentibus introduci.* The third, which is among the queen of Sweden's MSS. No. 1718, conſiſts of Muſical Theorems explained in Verſe: *Joan. de Muris Theoremata Muſica Verſibus explicata.*

In the king of France's library at Paris, there are two copies of his "*Speculum Muſicæ*, or Mirror of Muſic," in ſeven books, which is the principal and moſt ample of all his muſical writings. This is the work mentioned by Merſennus, Du-Cange, and Rouſſeau, and in which they all tried in vain, as well as myſelf, (ſays Dr. Burney,) to find proofs of his having been the inventor of the time-table. Rouſſeau has given two conſiderable quotations from this work in his Muſical Dictionary, article DISCANT, which de Muris defines "The ſinging extempore with one or more perſons in different concords, in ſuch a manner as to produce one harmony." After which he explains what he means by concords, and the choice that ſhould be made of them upon theſe occaſions. He then ſeverely cenſures the ſingers of his time for their ignorance and indiſcriminate uſe of them: "If our rules are good, with what front," ſays he, "do thoſe dare to *diſcant* or *compoſe*, who are ſo ignorant of concords as not to know which are more or leſs pleaſing, which ought to be avoided, or moſt frequently uſed; where to introduce them, or any thing that concerns the true practice of the art? If they accord, it is by mere chance; their voices wander about the tenor or plain-ſong without rule, truſting wholly to Providence for their coincidence. They throw ſounds about at random, as awkward people throw ſtones at a mark, without hitting it once in a hundred times." Maſter Muris then proceeds to flagellate with great fury theſe corruptors of the pure and ſimple harmony of his time. But the Latin of this paſſage is ſo obſolete and monkiſh, that it ſeems as if it would fall more naturally into Engliſh of the 16th century, than into that of the preſent times. "But, alas! in theſe our dayes, ſome do ſtryve to gloſſe over theyr lacke of ſkyll with ſilly ſayenges. This, cry they, is the *newe* method of diſcantynge, theſe be the new concordes. Howbeit they grievouſly offend thereby both the hearing and the underſtanding of ſuche as be ſkylled to judge of theyr defects; for, where we look for delight, they do induce ſadneſſe. O incongruous ſayenge! O wretched gloſſe! irrational excuſe! O monſtrous abuſe! moſt rude and beſtial ignoraunce! to take an aſſe for a man, a goat for a lyon, a ſheepe for a fiſhe, a ſnake for a ſalmone! For in ſuche ſorte do they confound concordes with diſcordes, as ye ſhall in no wiſe diſcerne the one from the other. O! if the good old mayſters of former time did hear ſuche *diſcanters*, what would they ſay or do? Out of doubte they wolde thus chyde them, and ſay, This diſcant, whereof ye now make uſe, ye do not take it from *me*; ye do in no wyſe frame your ſonge to be concordaunt with *me*; wherefore do ye thruſt yourſelves in? ye do not agree with me; ye are an adverſary, and a ſcandal unto me. O that ye wolde be dumb! This is not *concordynge*, but moſt doatynge and delyrious *diſcordynge*."

This work, which is written on vellum, in folio, contains ſix hundred pages. The firſt ſentence of the original is, "Libro tertio de Philoſophica Conſolatione Boetius volens reddere Cauſam," &c. It is divided into ſeven books: the firſt of which treats of the invention of muſic, and of its diviſions, and contains 76 chapters; the ſecond, of muſical intervals, 123; the third, of harmonics, or muſical proportion, 56; the fourth, of concords and diſcords, 51; fifth, of the ancient tetrachords, diviſion of the monochord, and doctrines of Boethius, 52 chapters; ſixth, of the modes and notation of the ancients, of the changes made in their ſyſtem by Guido, and of the eccleſiaſtical tones, 113. Book the 7th, of meaſured muſic; of diſcant, in treating of which he has the chapter "de ineptis diſcantoribus," part of which has been given in the preceding chapter; of the time-table, moods or diviſions of time; of the folly of placing a tail to the ſemibreve, by which he ſeems to mean the minim, without naming it; of perfect and imperfect meaſures; and laſtly, a parallel between ancient and modern muſic, which occupies the laſt five of the 45 chapters into which this book is divided, the concluding ſentence of which is, "Exempli cauſa deſcribere tibi volo quorum figuræ ſunt in hoc ordine conſequentes. Explicit Tractatus Muſicæ, Magiſtri Johannis de Muris."

Notwithſtanding all the nice and ſubtle diviſions and ſubdiviſions of his ſeven books into 917 chapters, the practical muſician would at preſent profit but little from the ſtudy of them, as almoſt all the doctrines contained in the firſt five books are ſpeculative, and ſuch as may be found in Ptolemy, Boethius, and other ancient authors, whom almoſt all the muſical writers of later times have copied in pure pedantry, without underſtanding themſelves what they read, and conſequently without conveying any uſeful ſcience to their readers by what they have written. It is only in the two laſt books that de Muris condeſcends to ſpeak of the practical muſic of his own times: in the ſixth book he treats of the eccleſiaſtical tones, notation, and chants, which John Cotton and Walter Odington had done before; and in the ſeventh he defines cantus menſurabilis, diſcant, moods, characters of the different duration of ſounds, as the long, breve, ſemi-breve, and their perfection and imperfection. Here he employs ſeveral chapters in refuting ſuch as have diſputed his doctrines; and laſtly, he draws a parallel between the muſic of the ancients and that of the moderns, in order to aſcertain their ſeveral degrees of perfection. It is in mere charity to the curious in muſical antiquities, (ſays Dr. Burney,) that we have beſtowed ſo much pains in examining and deſcribing this book; which, though of difficult acceſs, and more difficult peruſal, might tempt them, from the celebrity of the author, to explore its dark regions, and impair their eyes and patience in ſearch of ſcientific treaſures which it does not contain.

Of other writings upon various ſubjects by John de Muris, that are ſtill preſerved among the manuſcripts of the Bodleian and Muſeum libraries, an account given in Tanner's Bibliotheca Britannica, p. 537. All the tracts in the liſt of his writings which concern muſic were carefully examined by Dr. Burney, who has given an analyſis of their contents.

The tract which begins “ Quoniam Muſica eſt de Sono relato ad Numeros,” is now marked Bodl. 300. It is a treatiſe of Harmonics, in which the circular and conical diagrams and diviſions of the ſcale are innumerable. The author is as fond of the circle in this work, as Tartini was four hundred years after. The tranſcriber has, however, omitted many of theſe illuſtrations of his doctrines, by which, perhaps, the injury to muſical ſtudents of the preſent age is not very conſiderable.

In the tract beginning “ Quilibet in arte,” which was unexpectedly found in Bene't college, Cambridge, the notes are divided into five claſſes: “ Quinque ſunt partes prolationis; videlicet, maxima, longa, brevis, ſembrevis, et minima;” and here, likewiſe, his doctrine agrees with that in his other treatiſe, where he ſeems to call the triple proportions imperfect, and the dual perfect. This is the moſt ancient manuſcript in which we have found the ſigns of the modes, C Ͼ O ⊙, and the “ punctum perfectionis.” Here it plainly appears that the punctum, or point, in John de Muris, operates in the ſame manner as that already deſcribed in Franco, p. 187, where it makes the note to which it is prefixed *perfect*, that is, of three times; and the calling it “ point of perfection,” proves its power of making a double quantity triple, as at preſent. At the bottom of fol. 6. is written, “ Explicit tractatus Joannis de Muris:” however, it goes on for fifteen pages more. Here, too, we firſt ſaw an open or white minim, and a half-lozenge note. The ink is pale, and the writing very bad, and difficult to decipher; but the manuſcript, which is written on paper of a coarſe texture, ſeems entire, and correſponds in every particular with that in the Vatican library, No. 5321. It was this treatiſe which Proſdocimo de Beldemandis of Padua, a voluminous writer on muſic in the beginning of the fifteenth century, thought of ſufficient importance to merit a commentary, which is now in the poſſeſſion of Padre Martini of Bologna. “ Practica Menſurabilis Cantus, Mag. Joan. de Muris, de Normandia, alias Pariſienſis, cum expoſit. Proſdocimo de Beldemandis Patav. MS. an. 1404.

The tract in the Bodleian library, upon the Meaſures and Proportions of Organ-pipes, according to Guido, beginning “ Omne inſtrumentum muſice,” is very ſhort, and contains nothing very important to muſic at preſent. It is not known that Guido ever wrote on the ſame ſubject, and de Muris only means, by “ ſecundum Guidonem,” to ſay that he has followed the ſame proportions which Guido eſtabliſhed in his diviſion of the monochord.

Among the MSS. which were bequeathed to the Vatican library by the queen of Sweden, there is a “ Compendium of Practical Muſic,” by John de Muris, in which he treats of muſical characters for time; but introduces the ſubject with a ſhort chronological liſt of anterior muſicians who had merited the title of *Inventors:* beginning, as uſual, with Tubal; and, after naming Pythagoras and Boethius, he proceeds to Guido, the monk, “ who conſtructed the gammut, or ſcale for the monochord, and placed notes upon lines and ſpaces; *after whom came Magiſter Franco, who invented the figures, or notes, of the Cantus Menſurabilis.*” Thus the queſtion is ſet at reſt by his own confeſſion.

With reſpect to the diſpute concerning the place of his nativity, though Tanner, copying Pits and Bale, calls him an Engliſhman, yet we find that, in the title of one of the manuſcripts of the Bodleian library, in Tanner's liſt, he is called a Norman, and in another a Pariſian. Padre Martini likewiſe quotes a manuſcript of the year 1404, in which he is called the “ Great John de Muris, de Normandia, alias Pariſienſis.” Having taken ſome pains to trace the opinion of his being an Engliſhman to its ſource, we have been able to find no ſuch title given to him in any of his numerous writings that have been preſerved in manuſcript throughout Europe. The aſſertion reſts entirely on Robert Record, a phyſician at Cambridge, and one of the firſt writers upon ſcience in the Engliſh language. Pits calls him an Engliſh mathematician, and ſays, “ he was a man of ſome genius, but poſſeſſed of too daring a curioſity; for, while he was ſtudying philoſophy, he addicted himſelf to mathematics, and to that more ſublime part of aſtronomy which contemplates the heavens; and, in the exerciſe of his genius for calculation, he had the inſolence to predict future events; thus perſuading the ignorant and vulgar, that by the aſpect of the ſtars he could penetrate the decrees of Providence. He dared to publiſh celeſtial ſecrets, under the title of Prophetiarum, prophecies.” Theſe particulars, and many more, he ſays, were collected from Robert Record. But neither from him nor any one elſe was he able to diſcover at what time he lived. Bale, who calls him a mathematician and a conjurer, (*mathematicus et vates,*) gives the ſame authority for his being an Engliſhman. This bare aſſertion, made at a time when it was not ſo cuſtomary to give or expect proofs and critical exactneſs in ſupport of facts as at preſent, has not only been copied, without farther inquiry, by Pits, Bale, and Tanner, at home, but by Fabricius and other reſpectable writers on the continent. A Latin diſtich, by an anonymous writer, which has been quoted in favour of this opinion, can add but little to its weight, when it is known to come from the moſt ignorant and monkiſh of writers, the author of a treatiſe “ De Origine et Effectu Muſice,” written 1451; who tells us that “ Cyrus lived ſoon after the deluge; that one king Enchiridias was a writer on muſic,” miſtaking, I ſuppoſe, ſome Enchiridion which he had ſeen, for the name of a royal author; and that “ Thubal kept a blackſmith's ſhop, at which Pythagoras adjuſted the conſonances by the ſound of his hammers.” But ſuch authority will be found no more to prove J. de Muris an Engliſhman, than Guido or Franco, as both thoſe writers equally contributed to the progreſs of muſic in this kingdom.

That monks and perſons of learning, for many centuries before the reformation, were more frequently diſtinguiſhed by the name of the place which gave them birth, joined to their baptiſmal appellation, than by their family-name, is moſt certain: as Guido Aretinus, Geoffroy of Monmouth, Henry of Huntingdon, William of Malmſbury, John of Saliſbury, Matthew of Weſtminſter, &c. who have been always ſuppoſed natives, or, at leaſt, inhabitants, of the ſeveral places by which they were called. Now, though no town in Normandy of the name of Meurs can be found, either in maps or geographical books, yet, as there are ſeveral places ſo called in France, particularly one in Touraine, and another in Anjou, near Angers, which, by giving birth to our John, ſerved to diſtinguiſh him from his innumerable nameſakes of other kingdoms, cities, and profeſſions; and, as no ſatisfactory or probable reaſon has been aſſigned for ſuppoſing him an Engliſhman, nor can any one be now ſuggeſted, except a patriotic deſire of appropriating to our own country a man whoſe learning and talents have been long celebrated; it is but juſt to reſtore him to that country which ſeems to have the faireſt claim to him.

John de Muris, though not the inventor of the “ Cantus Menſurabilis,” ſeems, by his numerous writings, greatly to have improved it. Indeed, every ſpecies of note to be found in his tracts, except the minim, is deſcribed in Franco, as well as uſed in compoſitions anterior to his time, and mentioned by authors who wrote upon muſic before him. Nor is it poſſible to imagine that this art was invented and received by all Europe at once; like others, it had its beginning, improvements, and perfection, in different periods of time. His “ Art of Counterpoint,” of which we procured a copy at Rome, though compriſed in a few pages, is, however, the moſt clear and uſeful tract on the ſubject which thoſe times could boaſt. *Burney's Hiſt. of Muſic*, vol. ii. p. 175, 197–208.

MURIPADOO', a town of Hindooſtan, in the circar of Cicacole: five miles north of Tickely.

MU'RITZ, a lake of Mecklenburg, a little to the ſouth of Wahren.

MURK, *ſ.* [*morck*, Dan. dark.] Darkneſs; want of light:

Ere twice in *murk*, and occidental damp,
Moiſt Heſperus hath quench'd his ſleepy lamp. *Shakeſp.*

MUR'KAH, a town of Hindooſtan, in Allahabad, on the Jumna: fifty miles weſt-north-weſt of Allahabad.

MUR'KY, *adj.* Dark; cloudy; wanting light:

So ſcented the grim feature, and up-turn'd
His noſtrils wide into the *murky* air,
Sagacious of his quarry. *Milton's Paradiſe Loſt.*

A *murky* ſtorm deep lowering o'er our heads
Hung imminent, that with impervious gloom
Oppos'd itſelf to Cynthia's ſilver ray. *Addiſon.*

MURLAVAD'DY, a town of Hindooſtan, in Myſore: twenty-one miles ſouth of Bangalore.

MUR'LI, *ſ.* A name given in the Eaſt Indies to bands of females retained in eminent temples as choriſters. The word ſeems deſcriptive of their muſical avocation, as it means, in a dialect of the country, "a flute or pipe." Hence Kriſhna, the Apollo of India, when ſeen with the pipe in his hand, as he is in Sonnerat, Maurice's Indian Antiq. and in ſeveral plates of the Hindoo Pantheon, is called Murlidur, or Mudlidher; more correctly, perhaps, Murlidhara, meaning "pipe-bearer;" as Siva is in like manner ſurnamed Gangadhara, from bearing the river Ganga, or Ganges, mythologically, on his head.

To the temple at Jejury, in Hindooſtan, as we are informed by major Moor, not fewer than two hundred beautiful young women are attached as ſingers and dancers. As the word Jejury was omitted in its proper place, we will here ſubjoin a ſhort account from the Hindoo Pantheon. "A handſome temple, dedicated to the worſhip of an avatara of Siva under the name of Kandeh Rao, is at Jejury, a town of ſome extent, about thirty miles to the ſouth-eaſt of Poona. I have viſited this temple. It is ſituated in a beautiful country, on a high unconnected hill, and has a very commanding and majeſtic appearance: the temple, ſurrounding walls, and ſteps up to it, are well built of fine ſtone. I have had occaſion to remark, and it has alſo doubtleſs been remarked by others, that the ſcites of churches built by the Jeſuits are always on the moſt healthy, beautiful, and pictureſque, points, evincing the judgment and taſte of that wonderful order of men: the ſame may, I think, be obſerved of Hindoo temples; generally, after allowing for the neceſſary proximity of water, the moſt beautiful the neighbourhood affords. This temple is very rich: it is ſaid to expend 50,000 rupees, about 6000l. ſterling, yearly in the expenſes and eſtabliſhment for Kandeh Rao; horſes and elephants are kept for him: he and his ſpouſe are bathed in Ganges water, and roſe-water, perfumed with *atr*, and decorated with gems. The revenues, like thoſe of moſt other temples, are derived from houſes and lands given by pious people, and from preſents and offerings conſtantly making by all deſcriptions of votaries and viſitors, according to their means, or to their faith, hope, or charity. At the annual *jatra*, or fair, which commences on the laſt day of the dark half of the lunar month Chaitra (in January), 100,000 or more perſons viſit Jejury. It is cuſtomary for each family to ſacrifice a ſheep; and the brahmins aſſured me, that twenty or thirty thouſand are ſlain on this occaſion, and to the honour and glory of Kandeh Rao." Here the offerings of beaſts, and the ſingers and dancers, will naturally remind the reader of the Jewiſh ritual, and of the annual feſtivals at the temple of Jeruſalem.

In another work the ſame author more particularly deſcribes Jejury as a pretty large town, but, with the exception of a few ſhopkeepers and retailers of fruit, vegetables, and ſuch ſmall wares, apparently wholly inhabited by brahmins and beggars, the latter of whom were exceedingly importunate and troubleſome. Were it not for its temple, the town is not deſerving particular notice. The aſcent to the temple is on the north-eaſtern ſide, by a handſome flight of broad ſtone ſteps; and, being of conſiderable height, and rather ſteep, the walk up is ſomewhat fatiguing: arches are in many places thrown acroſs over the ſtairs, which have, on each ſide, frequent buildings of ſtone of a pyramidal form for lights; others have the appearance of receſſes. The inner temple, where the deity is placed, is ancient, and not very handſome; but the encloſure is elegant and extenſive, beautifully finiſhed with fine ſtone, and the pavement is alſo of large flags. The encloſure is open, and commands a fine view of the ſurrounding country.

MURMAN'SKOI BE'REG, the north-eaſt coaſt of Ruſſian Lapland, in the government of Archangel, between lat. 68 and 69. N.

MUR'MUR, *ſ.* [Latin.] A low ſhrill noiſe.—Flame as it moveth within itſelf, or is blown by a bellows, giveth a *murmur*, or interiour ſound. *Bacon's Nat. Hiſt.*

When the wing'd colonies firſt tempt the ſky,
Or, ſetting, ſeize the ſweets the bloſſoms yield,
Then a low *murmur* runs along the field. *Pope.*

A complaint half ſuppreſſed; a complaint not openly uttered:

Some diſcontents there are; ſome idle *murmurs*;
How idle *murmurs*!—
The doors are all ſhut up; the wealthier ſort,
With arms acroſs, and hats upon their eyes,
Walk to and fro before their ſilent ſhops. *Dryden.*

To MUR'MUR, *v. n.* To give a low ſhrill ſound:

The *murmuring* ſurge,
That on the unnumber'd idle pebbles chafes,
Can ſcarce be heard ſo high. *Shakeſpeare's K. Lear.*

Amid an iſle around whoſe rocky ſhore
The foreſts *murmur*, and the ſurges roar,
A goddeſs guards in her enchanted dome. *Pope.*

To grumble; to utter ſecret and ſullen diſcontent: with *at* before things, and *againſt* before perſons.—*Murmur* not *at* your ſickneſs, for thereby you will ſin againſt God's providence. *Wake's Prep. for Death.*—The good conſequences of this ſcheme, which will execute itſelf without *murmuring againſt* the government, are very viſible. *Swift.*

The good we have enjoy'd from heaven's free will;
And ſhall we *murmur* to endure the ill? *Dryden.*

MUR'MURER, *ſ.* One who repines; one who complains ſullenly; a grumbler; a repiner; a complainer.—The *murmurer* is turned off to the company of thoſe doleful creatures which were to inhabit the ruins of Babylon. *Gov. of the Tongue.*

Still might the diſcontented *murmurer* cry,
Ah hapleſs fate of man! ah wretch doom'd once to die.
Blackmore.

MUR'MURING, *ſ.* A low ſound; a continued murmur; a confuſed noiſe:

A cloud of cumbrous gnatts doe him moleſt,
All ſtriving to infixe their feeble ſtinges,
That from their noyance he no where can reſt;
But with his clowniſh hands their tender wings
He bruſheth oft, and oft doth mar their *murmurings*.
Spenſer.

His voice was hoarſe and hollow, yet ſo ſtrong,
As when you hear the *murmuring* of a throng
In ſome vaſt arched hall; or like as when
A lordly lion anger'd in his den
Grumbles within the earth. *Drayton's David and Goliah.*

Complaint half ſuppreſſed.—*Murmuring* is a ſecret diſcontented muttering one to another of things that we diſlike, or perſons that we diſtaſte; and the very word in all languages ſeems as harſh unto our ears as the ſin is hateful unto our ſouls. *Bp. Williams's Chariot of Truth.*

MUR'MURINGLY, *adv.* With a low ſound; mutteringly. *Sherwood.*

MUR'MUROUS, *adj.* Exciting murmur.—Round his ſwoln heart the *murmurous* fury rolls. *Pope.*

MURNAU', a town of Bavaria: ten miles ſouth Weilhaim, and fourteen ſouth-eaſt of Schongau.

MUR'NIG SEE', a lake of Carinthia: ten miles north-weſt of Welach.

MUR'NIVAL, *ſ.* [*mornefle,* Fr. from *morner,* to ſtun.] Four cards of a ſort. *Skinner and Ainſworth.*

MU'RO, a town of Naples, in the province of Otranto: ſix miles north-north-eaſt of Aleſſano.

MU'RO, a town of Naples, in Baſilicata; the ſee of a biſhop, ſuffragan of Conza: eleven miles ſouth-eaſt of Conza, and fifty-nine eaſt of Naples. Lat. 40. 47. N. lon. 15. 32. E.

MU'RO, a mountain of Portugal, which forms a weſtern boundary to the province of Tra los Montes.

MURO'L, a town of France, in the department of the Puy de Dôme: three miles north of Beſſe.

MURO'R, a town of Hindooſtan, in the circar of Mahur: thirty-eight miles north of Neermul.

MU'ROS, or MUROZ, a ſmall ſea-port town of Spain, in the province of Galicia, ſituated between Bayona and Corunna, upon the north bank of a ſmall gulf formed by the mouth of the Tambra: on the other ſide is Noya and its fertile plain, where is one of the beautiful dock-yards of Galicia for the conſtruction of ſhips.

MUR'PHY (Arthur), a conſiderable dramatic writer, was born, according to his own account, which he extracted from his mother's prayer-book, at Clooniquin, in the county of Roſcommon, in Ireland, on the 27th of December, 1727. His father, Richard Murphy, who was a merchant, failed, in 1729, in one of his own trading-veſſels for Philadelphia; but the voyage was truly diſaſtrous; the ſhip was loſt, probably in a violent ſtorm, and neither the maſter nor one of the ſhip's company was ever afterwards heard of. From this time the care of the ſubject of the preſent article devolved upon his mother. In 1735 ſhe removed, with her children, to London. Arthur did not remain long in the metropolis; he was ſent for to Boulogne by his aunt, Mrs. Plunkett, his mother's ſiſter. At ten years of age he was placed in the Engliſh college at St. Omer's, where he remained ſix years; and was in 1744 diſmiſſed to London, being then ſeventeen years old. In ſpeaking of his college-exerciſes, he ſays, from the middle of the ſecond year he obtained the firſt place, and, excepting three times, maintained his ground through five ſucceſſive years. In the middle of the year in poetry, he ſtood a public examination of the Æneid by heart. The Jeſuits were arranged in order; the rector of the college examined his pupil, and never once found him at fault: at the end of half an hour, the rector took a pen to write Murphy's eulogium. The ſcholars all went by aſſumed names, Murphy had changed his to *French;* in reference to this, the words of the rector were, *Gallus nomine, Gallus es, qui ſimul ac alas expandis, cæteros ſupervolitans.* "This," ſays Mr. Murphy towards the cloſe of his life, "at the time filled me with exultation, and even now is remembered by me with a degree of pleaſure. I often look back with delight to my ſix years' reſidence in the college of St. Omer's. During that time I knew no object of attention but Greek and Latin, and I have thought, and ſtill think, it the happieſt period of my life."

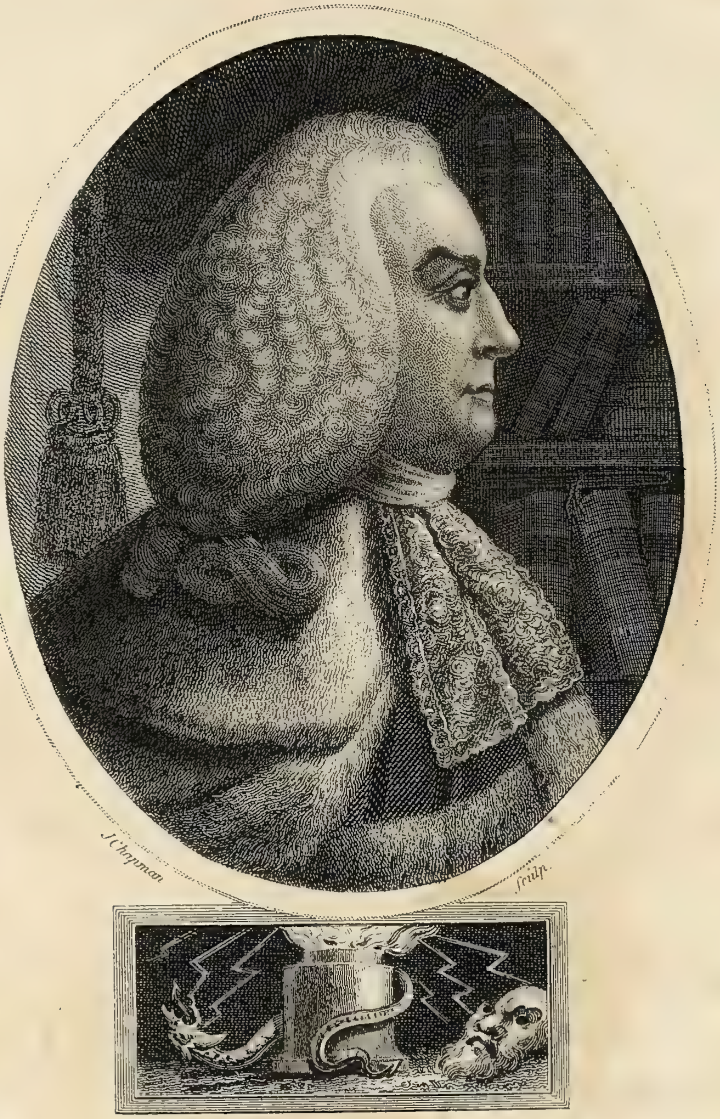
On his return to England, he reſided with his mother till Auguſt 1747, when he was ſent to Cork, to an uncle, in whoſe counting-houſe he was employed till April 1749. After this, his uncle, Jeffery French, would have ſent him to Jamaica to overlook a large eſtate which he poſſeſſed in that iſland; but, having very little taſte for that ſort of buſineſs, he returned to his mother in London. This was in the year 1751. He ſoon became acquainted with the wits of the day; and, in October 1752, he publiſhed the firſt number of "The Gray's Inn Journal," a weekly paper, which he continued for two years. On the death of his uncle, Jeffery French, he was much diſappointed at not finding his name mentioned in his will, and the more ſo as he had contracted debts, in faith of a good legacy, to the amount of 300l. He appears firſt to have eſſayed his dramatic powers in the farce of "The Apprentice," acted in 1756, and directed againſt the prevailing folly of ſpouting-clubs. It was followed by "The Upholſterer," a ſatire againſt politicians in low life, founded on a very humorous delineation of character by Addiſon in the Tatler. Both theſe were well received by the public. Mr. Murphy about this time made ſome attempts as an actor, but with a failure of ſucceſs that expoſed him to the ridicule of the cauſtic Churchill in his Roſciad. A tragedy, intitled "The Orphan of China," formed on the model of Voltaire's play with that title, came from his pen in 1759, and was acted with applauſe. Its ſucceſs enabled him honourably to diſcharge a ſecurity for 500l. which he had given for a brother who died in the Weſt Indies. His "Deſert Iſland," a dramatic poem, founded on the Iſola Diſhabitata of Metaſtaſio, and his "Way to Keep Him," a comedy, firſt of three acts, afterwards enlarged to five acts, and perhaps the moſt popular of his dramatic compoſitions, appeared in 1760. After he had reſigned the ſtage in a capacity of a performer, he engaged in the ſtudy of the law with a profeſſional view. An attempt twice repeated, to enter the ſociety of Gray's Inn, was rejected on the plea of his having been a player. The ſociety of Lincoln's Inn, however, gave him admiſſion. Mr. Murphy occaſionally went the circuits, but never obtained much employment in his legal character. He was at the bar twenty-ſix years, during which his total receipts were 10,744l. 15s.

A variety of other dramatic pieces, conſiſting of tragedy, comedy, and farce, ſucceſſively proceeded from his fertile pen. For the ground-work of theſe he was generally obliged to a foreign original, but he always employed conſiderable pains and judgment to fit them for the Engliſh theatre. Of his exertions in this walk he thus ſpeaks in his prologue to Zenobia:

Not to *tranſlate* our bard his pen doth dip;
He takes a play, as Britons take a ſhip:
They heave her down; with many a ſturdy ſtroke
Repair her well, and build with heart of oak;
To every breeze ſet Britain's ſtreamers free,
New man her, and away again to ſea.

"This," ſays one of Mr. Murphy's biographers, "is an ingenious illuſtration of the buſineſs of dramatic alteration, but cannot elevate it to the rank of original compoſition." Mr. Murphy's plays generally acted well, and had temporary ſucceſs, but they made little addition to the true theatrical ſtock of the country. His farces ſtill are acted, ſo alſo are his "Way to Keep Him," and the "Grecian Daughter." At one period of his life, as we have ſeen, he engaged in the field of political warfare: he alſo publiſhed ſeveral occaſional poems, and gave Latin verſions of ſome popular Engliſh poems; by the latter he obtained great credit as an elegant ſcholar. In 1786, he publiſhed his works collectively, in ſeven volumes, octavo. In 1792, he appeared as one of the biographers of Dr. Johnſon, in "An Eſſay on his Life and Genius;" and in the following year he publiſhed a tranſlation of Tacitus, in four volumes, quarto, dedicated to the late Edmund Burke. To this work, which is done in a reſpectable and

even



MURRAY, EARL OF MANSFIELD.

Engrav'd for the Encyclopædia Londinensis 1817 even maſterly manner, he has added "An Eſſay on the Life and Genius of Tacitus;" alſo, hiſtorical ſupplements and frequent annotations and comments. Mr. Murphy continued to write to an advanced age; and in 1798 he publiſhed his "Arminius," intended to excite the nation to meaſures of war, which he thought, to uſe the cant of politicians, "to be juſt and neceſſary." Through his intereſt with lord Loughborough, he obtained the office of one of the commiſſioners of bankrupts, to which, during the laſt three years of his life, was added a penſion of 200l. a-year.

Mr. Jeſſe Foot has given an intereſting account of the cloſe of Mr. Murphy's life, from which it appears he had perfectly reconciled his mind to the ſtroke of death. When he had made his will, and given plain and accurate directions reſpecting his funeral, he ſaid, "I have been preparing for my journey to another region, and now do not care how ſoon I take my departure." On the day of his death, which was on the 18th of June, 1805, he frequently repeated the lines of Pope:

> "Taught, half by reaſon, half by mere decay,
> To welcome death and calmly paſs away."

Beſides the works already mentioned and alluded to, Mr. Murphy was author of the Life of Fielding, Life of Garrick; and a tranſlation of Salluſt, from his pen, has appeared as a poſthumous work. He was a man of great urbanity of manners, and much regarded by his friends, whom, to the laſt, he uſed to entertain with anecdotes of the literary acquaintance of his younger years, related with humour and vivacity. *Jeſſe Foot's Life of Murphy. Monthly Mag.*

MURR, *ſ.* A catarrh. *Obſolete.*—I never ſpit nor cough more than this; and that but ſince I caught this *murre. Gaſcoigne's Tr. of Arioſto's Suppoſes,* 1566.

MURR, in geography. See MUHR, p. 169.

MURR I'SLANDS, a cluſter of ſmall iſlands, near the ſouth coaſt of Labrador. Lat. 50. 32. N. lon. 59. 8. W.

MUR'RA, a town of Arabia, in the province of Yemen: ten miles north-weſt of Zebid.

MUR'RA, *ſ.* Among the ancients, a foſſil ſubſtance, found in Parthia and Carmania, of a fine ſmell, and beautiful variety of colours. It was thought to be ſome humour condenſed in the earth by the heat of the ſun. See MURRHINE.

MURRA was likewiſe a dry perfume, made of the murra reduced to powder.

MUR'RAIN, *ſ.* [The etymology of this word is not clear; *mur* is an old word for a catarrh, which might well anſwer to the glanders; *muriana,* low Latin. Skinner derives it from *mori,* to die. *Dr. Johnſon.*—Minſheu derives it, with greater probability, from the Greek μαραίνω, to waſte, to conſume; whence the old French *marrane,* "forte de maladie epidemique." Roq. Gloſs. Our word was formerly written *morren. Todd.*] The plague in cattle.—Some trials would be made of mixtures of water in ponds for cattle, to make them more milch, to fatten, or to keep them from *murrain. Bacon.*

> A hallowed band
> Cou'd tell what *murrains* in what months begun. *Garth.*

MURRAINS are occaſioned various ways, but principally by a hot, dry ſeaſon; or rather by a general putrefaction of the air, which begets an inflammation in the blood, and a ſwelling in the throat, with other ſymptoms: the diſeaſe ſoon proves mortal, and is communicated from one to another. The ſymptoms are, generally, a hanging down, or ſwelling, of the head, rattling in the throat, ſhort breath, palpitation of the heart, ſtaggering, abundance of gum in the eyes, &c. breath hot, and tongue ſhining.

The moſt remarkable murrain we hear of, is that mentioned in the Philoſophical Tranſactions; which ſpread itſelf through Swiſſerland and Germany, into Poland, &c. and of which we have given an account of the ſymptoms and method of cure, (rather prematurely perhaps,) from the Phil. Tranſ. vol. xiii. anno 1682-3. under our article MIST, vol. xv. p. 586.

MUR'RAIN, *adj.* Infected with the murrain:

> The fold ſtands empty in the drowned field,
> And crows are fatted with the *murrain* flock.
> *Shakeſpeare's Midſ. N. Dream.*

MUR'RAY, a townſhip of Upper Canada, in the county of Cumberland, lying northward of the iſthmus which joins the county and peninſula of Prince Edward to the Main. It is waſhed by the waters of lake Ontario and the river Trent, as well as thoſe of the bay of Quinte.

MUR'RAY (William, Earl of Mansfield), a diſtinguiſhed lawyer and judge, was a younger ſon of David viſcount Stormont, a peer of Scotland. He was born at Perth, in March 1704-5; and at the age of three was removed to London, where he received his early education. He was admitted a king's ſcholar at Weſtminſter when he had completed his fourteenth year; and at that claſſical ſeminary he diſtinguiſhed himſelf particularly by the excellence of his declamations, which were conſidered as prognoſtics of that eloquence for which he was afterwards ſo conſpicuous. At the election of ſcholars for the univerſities in May 1723, he was firſt upon the liſt of thoſe who were deſtined for Chriſt-church college in Oxford, where he was accordingly entered in the following June. He received the degree of B. A. four years afterwards; and of M. A. in 1730, at which period he left the univerſity. He had ſupported his claſſical reputation there by a copy of Latin verſes on the death of George I. which was honoured with the firſt prize; and by an elegant and judicious Latin oration in praiſe of Demoſthenes. After ſpending ſome time in a tour through France and Italy, he ſat down to the ſtudy of the law at Lincoln's Inn. Although at this time he appears to have been chiefly conſpicuous as a polite ſcholar, it is certain that he was by no means inattentive to profeſſional improvement; for he and ſome other ſtudents were accuſtomed to hold regular meetings for the diſcuſſion of legal queſtions, previouſly to which they prepared their arguments with great care. He was called to the bar in Michaelmas term, 1730; and from his firſt commencement he ſeems to have ſcorned the idea of riſing by the ſlow drudgery of common practice. He cultivated with aſſiduity the talent of eloquence and the graces of elocution; and, being favoured by nature with a fine impreſſive countenance and a melodious voice, he was ſoon able to diſtinguiſh himſelf above his competitors. In conſequence of a diſplay of his abilities in an appeal-cauſe before the houſe of lords, he roſe rapidly into fame and employment; and ſo ſudden was the change, that he has been heard to ſay, he knew ſcarcely an interval between a total want of buſineſs and the receipt of 3000l. per annum.

Mr. Murray had the honour and advantage of early engaging the friendſhip of Pope, then in the zenith of his fame; and that poet has left ſeveral teſtimonies of his ſingular affection for the riſing lawyer. He addreſſed to him an imitation of the firſt ode of the fourth book of Horace, in which he paints his friend as

> Noble and young, who ſtrikes the heart
> With every ſprightly, every decent, part.

The natural and acquired advantages which characterized the eloquence of Mr. Murray were ſo conſpicuous, even on the ſpur of an occaſion, and his perception ſo quick, as to enable him to ſhine upon any emergency. A circumſtance of this kind occurred in 1737, when he was junior counſel in a conſiderable cauſe: his leader was ſuddenly ſeized in court with a fit; the duty of courſe fell to the lot of the junior, who wiſhed to decline it for want of time to make himſelf maſter of the caſe. The court adjourned for an hour; and with this ſhort preparation Mr. Murray made ſo able and eloquent a defence, as not only to reduce the damages to a mere trifle, but to gain the reputation of a moſt prompt, perſpicuous, and eloquent pleader. In 1738, there were fifteen or ſixteen appeals heard and determined in the houſe of lords, in eleven of which Mr. Murray was engaged.

Among ſeveral intereſting cauſes in which he was employed, one of the moſt conſiderable was that of the provoſt and corporation of Edinburgh, for the puniſhment of whom, on account of miſconduct in the caſe of captain Porteus, an act of parliament was framed in 1737. Mr. Murray, who was their counſel, oppoſed it with unwearied aſſiduity in both houſes; and his exertions were ſo much approved by the perſons concerned, that the freedom of the city of Edinburgh was preſented to him in a gold box. From his being choſen on this occaſion as the defender of a cauſe connected with diſaffection to the government; from the known politics of the Stormont family; and from the bequeſt of an eſtate to him by Mr. Vernon, a tradeſman in London, of jacobitical principles; it may be inferred that at this time he was at leaſt ſuppoſed to be inclined to that party; but a ſubſequent life ſpent in office under the exiſting government ſufficiently obliterates any ſtain of that kind contracted in his early years.

In 1738 he married one of the daughters of the earl of Winchelſea, a connexion which was of ſervice to his fortune, and the ſource of domeſtic comfort during forty-ſix years that they paſſed together. The chancery-bar was that to which he had hitherto confined his practice; but in 1742 his appointment to the office of ſolicitor-general gave a wider ſcope to his profeſſional talents. In the ſame year he entered the houſe of commons as repreſentative for Boroughbridge. From that time he became a ſtrenuous defender of the duke of Newcaſtle's miniſtry; and was often a ſpeaker oppoſed to Mr. Pitt, who then began to diſtinguiſh himſelf in parliament. At the trial of the rebel-lords in 1746, he acted in his office, and particularly exerted himſelf in the impeachment of lord Lovat, whoſe guilt he proved with great force of argument, but in ſo candid and gentleman-like a manner, that he received the acknowledgments of the culprit himſelf. Some years afterwards the inconſiderate talk of an old acquaintance involved him, together with Johnſon biſhop of Glouceſter, and Stone the prince's tutor, in the charge of having long before drunk the pretender's health in a private company. More attention was paid to this matter than it deſerved; and the parties exculpated themſelves as well as they could. The good king himſelf ſet in it the propereſt light: "Whatever they were (ſaid he) when they were Weſtminſter boys, they are now my very good friends." No ſerious conſequences enſued; and in 1754 Mr. Murray was promoted to the office of attorney-general. In 1756, on the death of ſir Dudley Ryder, he was raiſed to the high poſt of chief-juſtice of the King's Bench, and at the ſame time was advanced to the peerage by the ſtyle of Baron Mansfield of the county of Nottingham.

From this period lord Mansfield may be conſidered as at the head of the judicature in this kingdom; and, although his conduct and principles have undergone ſevere cenſure in the violent party-contentions which have agitated the nation during great part of the preſent reign, yet his character ſeems permanently eſtabliſhed as one of the moſt able, the moſt eloquent, the moſt enlightened, and (in his legal capacity detached from his political) the moſt upright, judges who have ever occupied that bench. His behaviour towards the gentlemen of the bar, and the ſuitors to the court, was equally courteous, obliging, and dignified; and no man was more attentive to the public accommodation in his diſpatch of buſineſs. His quickneſs of apprehenſion, denoted by an eye of fire, enabled him at once to diſcover where the force of a cauſe lay. This he ſtated with ſuch wonderful clearneſs, and placed in ſo ſtriking a point of view, that a great orator pronounced his ſtatement of a caſe to be worth the argument of any other man.

Many important points occurred for his opinion and determination in his high office. It has been, indeed, a kind of era of Engliſh juriſprudence, particularly with reſpect to the law of maritime inſurance, and the parochial poor-law, which have been in a manner created by his deciſions. That the rule of equity was his chief guide in theſe caſes can ſcarcely be conſidered as a juſt ground of cenſure, where the common law was defective or contradictory; whether in other inſtances he did not too much diſregard precedent, and incline rather to make law than to interpret it, muſt be left to the adepts of the ſcience to determine. In many inſtances his ideas of legiſlation were large and liberal. He was eſpecially a friend to religious toleration, and on various occaſions he ſet himſelf againſt vexatious proſecutions founded upon intolerant laws. In 1767 he greatly diſtinguiſhed himſelf by his ſound and forcible reaſoning in favour of the diſſenters, whom the mean and unjuſt politics of the corporation of London had habitually ſubjected to the fine for refuſing to ſerve the office of ſheriff, whilſt they lay under the ſevere penalties of the teſt and corporation acts ſhould they have ſerved it without a religious qualification, with which they could not conſcientiouſly comply. His expoſure of the tyrannical injuſtice of ſuch a dilemma carried with it a conviction that put an end to the practice; as related more particularly under LIBERTY *of* CONSCIENCE, vol. xii. p. 589.

It muſt not, however, be concealed, that lord Mansfield was, in politics, a favourer of high maxims in government, and directly hoſtile to thoſe popular principles which were the ſubject of ſo much contention in the early part of this reign. He maintained that the jury, in all caſes of libel, were only judges of the fact of publication, and had nothing to do with the law as to libel or not; and, in all the great cauſes concerning the liberty of the preſs, he ever attached himſelf to the court, ſo that, as it has been well ſaid, "his conduct as a politician will probably not be dwelt upon by an encomiaſt, as that part of his public life which does him moſt honour." In 1776, he was advanced to the dignity of an earldom, with the remainder to the Stormont family, as he had no iſſue of his own. At this period the popular diſputes were ſubſiding, and he probably expected to wear his well-earned honours in peace; but the diſgraceful riots in 1780 brought upon him a ſtorm for which he was totally unprepared. Although the part he had taken in the liberal bill for the relief of the Roman catholics was by no means conſpicuous, yet, as the head of the executive juſtice of the kingdom, he was marked out for the attacks of a mob, who had, finally, no other object than the ſubverſion of all law and order. According to Murphy, his lordſhip made his eſcape, in diſguiſe, before the flames blazed out. His houſe in Bloomſbury-ſquare was, with all its furniture, pictures, books, manuſcripts, and other valuables, entirely conſumed by fire. He bore his calamity with great equanimity, and refuſed to take any ſteps for procuring a compenſation for his loſſes. He once, in the houſe of lords, made a very pathetic alluſion to it, when, having given his opinion upon a legal matter, he ſaid "I ſpeak this not from books, for books I have none!" No man was, in all reſpects, better qualified to enjoy the *otium cum dignitate* than lord Mansfield; yet he was not in haſte to withdraw himſelf from ſcenes of buſineſs, and he continued on the bench till 1788, when he reſigned his ſeat, having filled it with diſtinguiſhed reputation for thirty-two years. A reſpectful and affectionate addreſs from the bar, ſigned by all the counſel who had practiſed in the court during the time he was on the bench, was tranſmitted to him by Mr. Erſkine: in this addreſs they ſay, "We deſire, in this manner, affectionately to aſſure your lordſhip, that we regret, with a juſt ſenſibility, the loſs of a magiſtrate, whoſe conſpicuous and exalted talents conferred dignity upon the profeſſion; whoſe enlightened and regular adminiſtration of juſtice made its duties leſs difficult and laborious, and whoſe manners rendered them pleaſant and reſpectable."

The faculties of earl Mansfield ſtill continued clear, though their vigour was abated; and he retained his recollection

collection till within a few days of his deceaſe, which took place without a groan, on the 20th of March 1793, in the 89th year of his age. His remains were depoſited in Weſtminſter Abbey. The bulk of his large fortune went to lord Stormont, who ſucceeded to his title. The private virtues of lord Manſfield were univerſally acknowledged; and the ſingular amenity of his manners, in which vivacity and gaiety were tempered with elegance and decorum, rendered him the delight of all the ſocial circles which he frequented. The records of his legal knowledge are preſerved in his arguments as counſel in Mr. Atkins's Reports, and his ſpeeches and deciſions as judge in Sir James Burrows's, Mr. Douglas's, and Mr. Cowper's, Reports. His judgments in the court of K. B. were particularly fortunate; for, during the whole time of his preſiding there, there were few or no inſtances of their being either arraigned or reverſed. Of his diſintereſtedneſs let it be obſerved, that he thrice refuſed the office of lord high chancellor, and never took any grant or emolument from the late king, for himſelf or any perſon belonging to him; and when the ſufferers by the dreadful riots in 1780 were to be reimburſed by the public, his lordſhip, in conjunction with ſir George Saville, nobly refuſed any compenſation whatever. *Halliday's Life of Earl Manſfield. Jones's Biog. Dict.*

MUR'RAY (John-Andrew, M. D.), profeſſor of medicine in the univerſity of Gottingen, and member of various learned ſocieties, was deſcended from a Scots family, who during Cromwell's uſurpation abandoned their native country, and ſettled in Poland and Pruſſia. He was born in 1740 at Stockholm, where his father was preacher to the German congregation in that city. Under the eye of this worthy parent, he was initiated in the principles of learning; and till the age of fourteen he frequented the German Lyceum, where he applied to the languages, mathematics, philoſophy, hiſtory, and geography. The two following years he had private inſtruction in mathematics and natural philoſophy; and in 1766, when ſeventeen, he removed to Upſal, where he ſtudied natural hiſtory, botany, the materia medica, and pathology, under Linnæus; anatomy, under Arvilius; and pharmacy, mineralogy, and chemiſtry, under Wallerius. Among all theſe preceptors he entertained the higheſt reſpect for Linnæus: he always embraced every opportunity of declaring how much he was indebted to that celebrated man; afterwards maintained with him an uninterrupted literary correſpondence, and on many occaſions defended him when attacked on account of his ſyſtem or opinions. In 1759 he made a tour to the ſouthern provinces of Sweden, and thence to Copenhagen, the object of which was to enlarge his knowledge of natural hiſtory, and to make himſelf acquainted with new economical diſcoveries. In 1760 he proceeded to Gottingen, where his brother John-Philip was profeſſor of philoſophy; and here he applied, with the utmoſt aſſiduity, for two years, to the different branches taught in that ſeminary, attending the lectures of Richter, Vogel, Buttner, Kaſtner, and other profeſſors. He devoted ſome time alſo to the ſtudy of the Engliſh, French, and Italian, languages. By a ſpecial licenſe from the Hanoverian government, he began, at Eaſter, 1763, to give leſſons in botany; in Auguſt, the ſame year, he took the degree of M. D. and in April following was appointed extraordinary profeſſor of medicine. In 1768 he was elected a member of the Academy of Sciences at Stockholm; next year he was appointed profeſſor of medicine, and director of the botanical garden; and in 1770 he was admitted a member of the Royal Society of Gottingen. Linnæus had already given the name of Caſſida Murrayi to an inſect diſcovered by him; and in 1771 he gave the denomination of MURRAYA exotica to an Eaſt-Indian tree. See that article.

In the courſe of the following years he was elected a member of moſt of the learned ſocieties in Europe; in 1780 the king of Sweden conferred on him the order of Vaſa, and in 1782 he was raiſed by his Britannic majeſty to the rank of privy-counſellor. In the beginning of 1791 he was attacked by a ſpurious peripneumony, which left behind it a continued cough, intermittent pains in the left ſide, and a ſhortneſs of breath. He conſulted his friend Dr. Altorf; but the diſeaſe continued to gain ſo much that, on the 21ſt of May, his phyſician thought it adviſable to make him acquainted with the real ſtate of his caſe. This information he received with the utmoſt tranquillity and compoſure; obſerving that the only thing which gave him uneaſineſs was his Apparatus Medicaminum, on which he had employed ſo much time and labour, and which he could have wiſhed to live to complete. He then aſked his friend whether he would undertake to bring it to a concluſion; and, being anſwered in the affirmative, he got up, notwithſtanding his extreme weakneſs, and, having delivered to him the manuſcript, gave directions in what manner he was deſirous that the continuation ſhould be executed. The ſame day he corrected the tenth ſheet of the ſixth volume; but the violence of his pain obliged him to ſuſpend his labour at the twelfth page; and next day, May 22, 1791, he expired, in the fifty-ſecond year of his age.

Murray was a man of ſound judgment, great activity and induſtry, and extenſive information. He conſtantly roſe early, and laboured till a late hour in his cloſet, unleſs prevented by his avocations in the botanic-garden. Hence he was enabled to compoſe a number of tracts, on various ſubjects, in botany, natural hiſtory, medicine, pharmacy, and medical literature. His principal work, however, was on the ſubject of the materia medica, and had occupied a large portion of his time and attention. It was publiſhed at different times, and entitled "Apparatus Medicaminum, tam ſimplicium quam præpatorum et compoſitorum, in Praxeos adjumentum conſideratus;" and conſiſts of ſix volumes, octavo. Among his other productions, are, 2. Opuſcula in quibus Commentationes varias, tam medicas quam ad Rem naturalem ſpectantes, retractavit, emendavit, auxit; 2 vols. Gott. 1785, 1786. 3. Commentates de Hepatitide, maxime Indiæ Orientalis, ibid. 1780. 4. Spinæ bifidæ mala oſſium conformatione inita, ibid. 1786. 5. Retzii Primæ Lineæ Pharmaciæ, tranſlated from the Swediſh, 1771 6. Roſenſtein's Family Diſpenſatory, tranſlated from the ſame, Leipſic, 1781. In the Tranſactions of the Royal Society of Gottingen, are inſerted many valuable papers of profeſſor Murray's, chiefly relating to the moſt remarkable plants cultivated in the botanic-garden; and he enjoyed ſo much of the confidence of his great preceptor Linnæus, as to be entruſted by him with the editing of the thirteenth edition of the Syſtema Vegetabilium. He likewiſe publiſhed the fourteenth edition of the ſame work, after the author's death, in 1784. It is to be regretted that, in the execution of his taſk, he did not follow the original principle of Linnæus, in introducing the new genera from the Supplement and other ſources. *Gen. Biog.*

MUR'RAY FRITH', a large bay of the German Sea, on the eaſt coaſt of Scotland, and north of the county of Murray, whence its name; anciently *Æſtuarium Vavaris.*

MURRAY HAR'BOUR, a harbour on the eaſt coaſt of the iſland of St. John, in the Gulf of St. Lawrence. Lat. 46. N. lon. 62. 20. W.

MURRAY'S I'SLANDS, ſeveral ſmall iſlands on the ſouth-weſt coaſt of the county of Kircudbright, at the mouth of Fleet Bay: eleven or twelve miles north-north-eaſt of Burrow Head.

MURRA'YA, *ſ.* [from *John Andrew Murray*, juſt noticed.] In botany, a genus of the claſs decandria, order monogynia, natural order aurantia, *Juſſ.* Generic characters—Calyx: perianthium inferior, of one leaf, very ſmall, cloven into five, linear, erect, roundiſh, remote, permanent, ſegments. Corolla: bell-ſhaped, of five lanceolate petals, ſpreading at their tips; nectary bell-ſhaped, ſhort, incloſing the germen. Stamina: filaments ten, awl-ſhaped, the length of the flower; antheræ ſomewhat oblong. Piſtillum: germen ſuperior, roundiſh; ſtyle thread-ſhaped, angular, longer than the ſtamens; ſtigma flattiſh, warty, angular. Pericarpium: berry rather pulpy, of one cell. Seed: ſolitary, large, obovate, furrowed on one ſide.—*Eſſential Character.* Calyx five-cleft; corolla of five petals, bell-ſhaped; nectary ſurrounding the germen; berry ſingle-ſeeded.

Murraya exotica, or aſh-leaved murraya, a ſingle ſpecies. A native of the Eaſt Indies; and introduced at Kew in 1771, where it flowers in Auguſt and September. This is a ſhrub or ſmall tree, about ſix feet in height, whoſe trunk is branched, and covered with a greyiſh bark. Leaves alternately pinnate, compoſed of three pairs of leaflets, with an odd one; leaflets alternate, on ſhort ſtalks, obovate, bluntiſh, rigid, ſmooth, reſembling thoſe of the common Buxus, whence its French appellation *buis de Chine.* Flowers corymboſe, white, ſomewhat like an orange-flower, but about half the ſize; their ſcent is ſaid to be ſomewhat like that of jaſmine, but by no means powerful. Berries globular, pointed, tubercled, red; ſeed large, whitiſh or pale ſtraw-coloured.

MUR'RAYSHIRE, MORAYSHIRE, or the County of ELGIN, one of the northern counties of Scotland, bounded on the north by an arm of the ſea, called the *Frith of Murray*, on the eaſt by Bamffſhire, on the ſouth by Aberdeenſhire and Inverneſsſhire and Nairnſhire; being thirty miles from eaſt to weſt, and nearly the ſame from north to ſouth. Its air is ſalutary, and the winter milder than any other part in the north of the kingdom. The ſouth ſide is mountainous, but abounds with paſture, as the low country does with corn. Here are ſeveral woods of firs and oaks. The ſoil is generally fruitful, and produces the fruits ripe ſoon. Its principal rivers are the Spey, the Loſſie, Nairn, and Findhorn; all of which produce vaſt quantities of ſalmon. In 1811, the number of inhabitants was 28,108. The chief towns are Elgin and Forres. Murray, or Moray, formerly comprehended the ſhires of Nairn, Moray Proper, or Elgin, and a great part of the ſhire of Bamff. It was anciently counted the granary of Scotland; the old hiſtorians are laviſh in their praiſes in favour of its fertility and ſalubrity; and it uſed to be a common ſaying, that it enjoyed forty days more of fair weather than moſt other parts of Scotland.

Numerous intereſting remains of antiquity are found in different parts of Morayſhire.—Elgin is diſtinguiſhed by the ruins of an ancient cathedral, originally built by biſhop Murray, whoſe epiſcopal ſeat was tranſlated hither from Spynie in the year 1224. Having been burnt to the ground, however, in 1390, by Alexander Stewart of Badenoch, it was refounded by biſhop Barr. The remains of Pluſcardine-abbey ſtand on the north ſide of the river Loſſie, ſix miles to the ſouth-weſt of Elgin. This monaſtery was founded by king Alexander II. in the year 1230, and dedicated to St. Andrew. The religious were monks of Valles Caulium, a reform of the Ciſtertians following the rule of St. Bennet, and were brought hither by William Malvoiſin biſhop of St. Andrews, from the dioceſe of Langres, in France. From the appearance of the ruins, this inſtitution appears to have been one of conſiderable extent and riches. On the ſouth bank of loch Spynie are the ruins of the ancient palace of the biſhops of Moray, which is ſaid to have been one of the moſt magnificent epiſcopal ſeats in Scotland. Lochinbarb-caſtle, in the pariſh of Edinkillie, has evidently been a place of great ſtrength. Catharine de Beaumont, widow of David de Haſtings earl of Athol, was blockaded here during the captivity of king David Bruce, by ſir Andrew Moray the regent. Edward III. however, ſaved her from falling into his hands, by compelling him to raiſe the ſiege the year following, when he marched his army ſo far north as Inverneſs, with the view of enforcing the ſubmiſſion of the whole kingdom. The preſent remains of this caſtle cover a ſpace of ground not leſs than one hundred yards ſquare. Near this fortreſs are the veſtiges of another, called Dounehill, which appears to be of more ancient date than the former; and was probably one of the ſtrong holds to which the inhabitants retired with their cattle upon the invaſions of the Danes, Norwegians, or Iſlanders. It is ſituated on a conical mount, defended on the one ſide by the deep rocky channel of the rapid river of Dwie, and on the others by an immenſe foſſe or ditch, with a ſtrong rampart on the outſide, moſtly compoſed of ſtones, ſome of which are apparently vitrified. About a mile higher up the river ſtands the caſtle of Dumphail, long the property of the family of Dunbar; and in the pariſh of Dyke is that of Darnaway, the venerable manſion of the earls of Moray, of the Randolphs, the Dunbars, the Douglaſes, and the Stuarts, all names of much note in the page of hiſtory. The grand hall in this caſtle, built by Thomas Randolph, regent of Scotland during the minority of king David Bruce, is by much the oldeſt and moſt remarkable part of the buildings; and meaſures eighty-nine feet in length by thirty-five in breadth.—In the pariſh of Duffus may be diſcovered traces of ſome ancient military works, which are attributed to the Danes. The ſpot on which they are ſituated is called the Burgh; and is ſuppoſed to be the real ſcite of the fortreſs mentioned by Buchanan, as having been ſurrendered to the Danes upon the defeat of Malcolm II. At the weſtern extremity of the pariſh is an obeliſk or ſtone croſs, conjectured to be the ſame which was erected to commemorate the rout and diſperſion of the forces of Camus by the ſame monarch in the purſuit of the Danes, after the victory of Panbride, in Angus. The village of Duffus is further remarkable for a ſquare, in the centre of which ſtands the church, ſurrounded by four ſtreets regularly paved, the workmanſhip of Oliver Cromwell's ſoldiers. Swino's ſtone, or pillar, on the road from Nairn to Forres, is a curioſity that particularly demands attention. This ſtone is univerſally allowed to exceed in ornamental workmanſhip all the other obeliſks in Scotland; and is even generally ſuppoſed to be the fineſt monument of the kind now exiſting in Europe. Its height above ground is not leſs than twenty-three feet, and it is ſaid to ſink twelve beneath it. Its breadth is about four feet. The portion above the ſurface of the ground is viſibly divided, on the eaſt ſide, into ſeven compartments, containing a variety of baſſo-relievos, repreſenting military figures. On the other ſide is diſplayed a ſumptuous croſs, and under it appear two perſonages in the attitudes of reconciliation. It is remarkable that no diſtinct tradition concerning this obeliſk has reached the preſent period; hence its origin and intention are doubtful, but it is uſually ſuppoſed to have been erected in memory of the peace concluded between Malcolm and Canute, upon the final retreat of the Danes from Scotland.

MUR'RE, *ſ.* A kind of bird; the razor-bill, Alca torda.—Among the firſt ſort we reckon coots, meawes, *murres*, creyſers, and curlews. *Carew.*

MURREEO'W, a town of Hindooſtan, in Benares: fourteen miles ſouth of Jionpour.

MUR'REY, *adj.* [*morée*, Fr. *morello*, Ital. from *moro*, a moor.] Darkly red.—Painted glaſs of a ſanguine red, will not aſcend in powder above a *murrey*. *Brown's Vulg. Errors.*

MUR'REY, *ſ.* A dark brown. *Phillips.*

MUR'REY-COLOURED, *adj.* Darkly red.—Cornelius jumps out, a ſtocking upon his head, and a waiſtcoat of *murrey-coloured* ſattin upon his body. *Arbuthnot.*

MUR'RHINE, or MURRHI'NUS, *ſ.* [μοῤῥινος, Gr.] In antiquity, an appellation given to a delicate ſort of ware brought from the eaſt, whereof cups and vaſes were made; which added not a little to the ſplendour of the Roman banquets.

Critics are divided concerning the matter of the *pocula* or *vaſa murrhina*, *murrina*, or *murrea*. Some will have them to have been the ſame with our porcelain, or china-ware. The generality held them to have been made of ſome precious kind of ſtone, which was found chiefly, as Pliny tells us, in Parthia, but more eſpecially in Carmania. Arrian tells us, that there was a great quantity of them made at Dioſpolis in Egypt. This he calls another ſort of murrhina-work; and it is evident, from all accounts, that the murrhina of Dioſpolis was a ſort of glaſs-ware, made in imitation of the porcelain or murrha of India. There is ſome difference in the accounts given by Pliny and Martial of the murrhina vaſa. The firſt author ſays, that they would not bear hot liquors, but that only cold ones were drunk out of them. The latter, on the other hand, tells us, that they bore hot liquors very well. If we credit Pliny's account, their porcelain was much inferior to ours in this particular. Some conjecture them to have been of agate, others of onyx, others of coral. Baronius, doubtleſs, was fartheſt out of the way, when he took them to be made of myrrh, congealed and hardened. Some have ſuppoſed theſe veſſels to be made of cryſtal, but this is contrary to the account of all the ancients. The Greeks had the words κρυϛαλλος for cryſtal, and σμυρνε for myrrh, very common among them; and therefore, if any of theſe veſſels had been made of either of theſe ſubſtances, they would in ſome places have called them *ſmyrna*, or *cryſtallina*. On the contrary, the moſt correct among them call them *murrhina*, or *morrina*. The cups made of cryſtal, which were alſo in uſe at thoſe times, were called *cryſtallina;* and theſe, *murrhina* or *murrhæa*, by way of keeping up the diſtinction; and Martial tells us, that the ſtone they were made of was ſpotted or variegated, calling them *pocula maculoſæ murræ*. And Statius mentions the cryſtalline or murrhine cups in the ſame ſentence, but as different things, not the ſame. Arrian mentions alſo the λιθος μορρια; which his interpreters cenſure as an error of the copies, and would alter into *myrrha*, the name of the gum myrrh.

Pompey is recorded as the firſt who brought theſe murrhine veſſels out of the eaſt, which he exhibited in his triumph, and dedicated to Jupiter Capitolinus. But private perſons were not long without them. So fond, in effect, did the Roman gentry grow of them, that a cup which held three ſextaries was ſold for ſeventy talents. T. Petronius, before his death, to ſpite Nero (or as Pliny expreſſes it, *ut menſam ejus exhæredaret*, to diſinherit his table), broke a baſon, *trulla murrhina*, valued at three hundred talents, on which that emperor had ſet his heart.

MUR'RION, *ſ.* [often written *morion*. See MORION. Junius derives it from *murus*, a wall.] A helmet; a caſque; armour for the head:

Their beef they often in their *murrions* ſtew'd,
And in their baſket-hilts their bev'rage brew'd. *King.*

MUR'RO-BATHRA'RII, *ſ.* Among the Romans, a kind of perfumers.

MUR'SANGE, a town of France, in the department of the Côte d'Or: four miles eaſt of Beaune.

MUR'SCHNITZ, a town of Germany, in the principality of Coburg: nine miles north-eaſt of Coburg.

MUR'TEN. See MORAT.

MURTEZABAD', a town of Aſiatic Turkey, in Natolia: twelve miles north of Angura.

MURTH, *ſ.* Plenty, as of corn. *An old word. Ainſworth.*

MUR'THER. See MURDER, p. 214.

MURTHLACH'. See MORTLACH.

MUR'TI, *ſ.* A word, among Hindoo metaphyſicians, meaning a form, apparition, image, or idol. It denotes any ſhape or appearance aſſumed by a celeſtial being. According to the Vedanta theory, our vital ſouls are *murti*, or *images* merely, of the Supreme Spirit. Homer deſcribes the *idol* of Hercules in Elyſium, with other deceaſed heroes, though the god himſelf was at the ſame time enjoying bliſs in the heavenly manſions. The Hindoo theory, in like manner, would deſcribe ſuch a murti as not ſuſceptible of affecting with any ſenſation, either pleaſing or painful, the being from which it emanated; though it may give pleaſure or pain to collateral emanations from the ſame ſource. Hence they offer no ſacrifices to the Supreme Eſſence, of which our ſouls are images, or murtis; but adore him with ſilent meditation. Oblations are made to fire; and acts of worſhip performed to the ſun, the ſtars, the earth, and the powers of nature, which are conſidered as murtis or images, the ſame in kind as ourſelves, but tranſcendently higher in degree. The Hindoo triad is called *tri-murti;* literally *tri-form*. This difficult ſubject is diſcuſſed by Mr. Wilford, in vol. iii. of the Aſiatic Reſearches.

MUR'TON, a village of Cumberland, in the pariſh of Lamplugh, near St. Bees.

MUR'TON, a village of Weſtmoreland, near Appleby, having near it a remarkable hill, called Murton-Pike, reſembling a pyramid. It is three miles diſtant from the pariſh-church of St. Michael.

MURU', a ſeaport town of Japan, in the iſland of Niphon. The harbour is narrow, but ſafe, and ſcreened by a mountain. It is ſeventy-five miles ſouth-weſt of Meaco.

MURU'A, a town of Hindooſtan, in Oude: thirty-three miles north of Kairabad.

MURU'MIA, *ſ.* in botany. See PASSIFLORA.

MURVIE'DRO. See MORVIEDRO.

MURVI'EL, a town of France, in the department of the Herault: ſix miles north-north-weſt of Beziers, and ten ſouth of Bedarrieux.

MURZINE'I, a town of Ruſſia, in the government of Tobolſk, on the Irtiſch: forty miles north-north-weſt of Tara.

MUS, *ſ.* in zoology, a genus of quadrupeds of the claſs mammalia, and order glires. The generic characters are—Fore-teeth upper wedged; grinders three, rarely two, on each ſide of the jaw; clavicles perfect.

This numerous tribe conſtitutes a formidable phalanx, againſt which mankind find it neceſſary to employ various artifices of extirpation, in order to leſſen the ravages occaſionally ſuffered by its depredations. In our own iſland, the black and grey rats, the field and domeſtic mice, are the principal deſtroyers; but in other parts of Europe, as well as in the hotter regions of Aſia, Africa, and America, many other ſpecies, ſtill more formidable, are found. The different kinds vary conſiderably in their manner of life, ſome confining themſelves entirely to vegetable food, while others are polyphagous, deſtroying with indiſcriminate avidity almoſt any animal or vegetable ſubſtance to which they can gain acceſs. Their pace is, in general, rather quick, and their moſt uſual reſidence is in obſcure ſubterraneous retreats, from which they principally emerge by night. They are of a prolific nature, and the females are furniſhed with numerous teats. Some ſpecies are migratory; others local, or attached to the ſame reſidence. Laſtly, ſome are of an uncouth form and diſagreeable appearance, while others are remarkable for the elegance of their aſpect and colours. In the 12th edition of the Syſtema Naturæ, Linnæus included in this genus the jerboas, the cavies, and ſeveral other animals which are now formed into diſtinct genera. This mode of diſtribution might perhaps be carried ſtill farther; the habit or appearance of ſome ſpecies differing very conſiderably from that of the major part of the tribe. And hence it has been found neceſſary to divide the ſpecies (upwards of fifty in number) into four diſtinct ſections.

I. *Tail compreſſed at the end.*

1. Mus caſtorides, the beaver-rat. This was firſt deſcribed by the Rev. J. E. Burrow, in the Linn. Tranſ. vol. xi. It appears to be a new ſpecies, and to bear a greater reſemblance to the beaver than the following, which has generally been called the beaver-rat, and has commonly ſtood at the head of this genus, as a connecting link with the genus Caſtor, which immediately precedes it in the nomenclature of the Linnæan ſyſtem. And Mr. Burrow obſerves, that it is placed ſo nearly midway between them, that it may be difficult to determine which has the better claim. Its teeth are thoſe of the beaver, for there are four molares on each ſide in either jaw, and the inciſors are ſimply wedged; but it is deficient in the broad flat tail, which ſeems to conſtitute an eſſential generic character of the beaver, being ſo cloſely connected with the wonderful habits of life peculiar to that creature. "The occiput was broken, and a part of the muſ-

cles remained on the ſkull when I examined it; but, as far as I could judge from this ſtate, the conformation more nearly approaches that of the rat, M. decumanus, than that of the beaver; particularly in the ſmallneſs of the cranium, in the conſtruction of the anterior part of the zygomatic arch, and in the remarkable proceſs of the lower jaw. For theſe reaſons I have referred it to the genus Mus; but ſome more ſkilful hand may hereafter deſignate it with greater propriety. Though nearly allied to both, it certainly differs generically from either the rat or beaver, and, in the hind feet, from, I think, all other mammalia."

Mr. Burrow aſſigns to this compound animal the following ſpecific characters: Tail middle-length, round, ſcaly, hoary underneath; feet palmate. The length of the body was 21 inches, of the tail 8½. The colour greyiſh-brown above, yellowiſh beneath; hair ſhort and thick; ears round and naked; eyes ſmall; upper front teeth an inch long, lower 1¼; feet five-toed. In addition to the above characters it may be remarked, that the noſe is ſurrounded with whitiſh hair: that there are a few ſtiff briſtles at the baſe of each claw; that the thumb is extremely ſhort, and the claw thick; that the length of the middle claw of the fore-foot is one inch, and that of the metatarſus three inches. The perſon who firſt poſſeſſed the animal in this country ſtates that he bought it onboard a ſhip from the Braſils: Mr. Burrow had afterwards frequent opportunities of obſerving it, and of making a drawing while it was alive at Exeter 'Change. It died ſuddenly, and without any apparent cauſe; and is now in the collection of Mr. Bullock.

2. Mus coypus, the coypu, or otter-rat: with ſlightly-compreſſed hairy tail of middling length, and webbed hind feet. The firſt deſcriber of this animal was Molina, who informs us that it is an inhabitant of the waters of Chili; that it has the general appearance of an otter, being of the ſame ſize and colour; but that in its teeth it agrees with the rat tribe. The feet are each furniſhed with five toes; thoſe of the hind feet being connected by a web: the ears are rounded, the noſe longiſh and covered with whiſkers, and the tail thick and flattiſh on the ſides. This animal lives occaſionally on land as well as water; ſometimes frequenting houſes, and is eaſily tamed. The female produces five or ſix young at a birth.

3. Mus zibethicus, the muſk-rat: with long compreſſed lanceolate tail, and unwebbed feet. In the Memoirs of the French Academy of Sciences for the year 1725, there is a complete and excellent deſcription of this animal by Monſ. Sarrazin, at that time king's phyſician at Quebec. It is from the above deſcription that Buffon has drawn up the major part of his own account, and indeed it does not appear poſſible to add any thing material to what Sarrazin has delivered. This animal is of the ſize of a ſmall rabbit, and is extremely common in Canada. Its head is ſhort, like that of a water-rat; the eyes large; the ears very ſhort, rounded, and covered internally as well as externally with hair. It has, like the reſt of this tribe, four very ſtrong cutting teeth, of which thoſe in the lower jaw are near an inch long; thoſe in the upper ſomewhat ſhorter: the fur on the whole body is ſoft and gloſſy, and beneath is a fine fur, or thick down, as in the beaver: the toes on all the feet are ſimple, or without membranes, and are covered with hair. The tail is nearly as long as the body; and is of the ſame form with that of the Sorex moſchatus, or muſk-ſhrew, being laterally compreſſed; it is nearly naked, and covered with ſmall ſcales intermixed with ſcattered hairs. The general colour of the animal is a reddiſh brown, of the tail aſh-colour. In its general appearance this animal greatly reſembles the beaver, except in ſize, and in the form of its tail. It has alſo ſimilar inſtincts and diſpoſitions; living in a ſocial ſtate in the winter, in curiouſly-conſtructed huts or cabins, built near the edge of ſome lake or river: theſe huts are about two feet and a half or three feet in diameter, plaſtered with great neatneſs in the inſide, and covered externally with a kind of baſket-work, of ruſhes, &c. interlaced together ſo as to form a compact and ſecure guard, impermeable by water. During the winter theſe receptacles are generally covered with ſeveral feet of ſnow, and the animals reſide in them without being incommoded by it, ſeveral families commonly inhabiting each cabin. It is added, that the inſides of the receptacles are furniſhed with a ſeries of ſteps, to prevent them from being injured by inundations. Theſe animals do not lay up a ſtock of proviſions like the beaver, but form ſubterraneous paſſages beneath and round their cabins, to give themſelves an opportunity of procuring occaſional ſupplies of roots, herbage, &c. According to Monſ. Sarrazin, the animal is particularly calculated by nature for its ſubterraneous habits; having a great muſcular force in its ſkin, which enables it to contract its body occaſionally into a ſmall volume: it has alſo a great ſuppleneſs in the falſe ribs, which eaſily admit of contraction, ſo that it is enabled to paſs through holes impervious to much ſmaller animals than itſelf. During the ſummer theſe creatures wander about in pairs, feeding voraciouſly on herbs and roots. Their odour, which reſembles that of muſk, is ſo ſtrong as to be perceived at a conſiderable diſtance; and the ſkin, when taken from the body, ſtill retains the ſcent: this muſky odour is owing to a whitiſh fluid depoſited in certain glands ſituated near the origin of the tail. They walk and run in an awkward manner, like the beaver; but they cannot ſwim ſo readily as that animal, their feet being unfurniſhed with webs. The females produce their young towards the beginning of ſummer, and have five or ſix at a time; theſe, if taken early, are eaſily tamed, and become very ſportive; and it is remarkable that the tail, which in the full-grown animal is as long as the body, is at that period very ſhort. The fur of this ſpecies is greatly eſteemed as a commercial article, reſembling that of the beaver. Linnæus, in the twelfth edition of the Syſtema Naturæ, ranked the animal under the genus Caſtor; and Mr. Pennant has followed his example. Schreber, however, conſiders it as belonging in ſtrict propriety to the preſent genus.

II. *Tail round, naked.*

4. Mus pilorides, the muſk-cavy: whitiſh, with longiſh, ſcaly, obtuſely-truncated, tail. This ſpecies is found in India, and the Indian iſlands; and in ſize nearly equals the Guinea-pig. Its colour is whitiſh, with a caſt of grey-ferruginous on the back, and of cinereous on the abdomen: the tail is longiſh, nearly naked, ſcaly, and obtuſe at the extremity. It burrows like a rabbit; and ſmells ſo ſtrong of muſk, that its retreat may be traced by the perfume.

β. The *Caſtor cauda lineari tereti* of Brown, is a variety of this. It inhabits the American iſlands, and ſeems to differ from the above in being of a darker colour on the back, and in having a much ſhorter tail. Perhaps it may be a diſtinct ſpecies; but the hiſtory of both ſeems at preſent not ſufficiently clear to enable us to determine this point.

5. Mus caraco, the caraco-rat: grey, with long ſcaly, ſomewhat-obtuſe tail, and ſlightly ſemipalmated hind feet. The caraco, firſt deſcribed by Dr. Pallas, ſo extremely reſembles the Norway rat, that at firſt ſight it might be miſtaken for that animal; but, on an accurate ſurvey, it will be found that the head is rather longer and ſharper in proportion; the upper jaw much longer than the lower, and the lip very much divided; the teeth are not ſo ſtrong, and the tail is conſiderably ſhorter. This ſpecies abounds in the eaſtern parts of Siberia, frequenting the banks of rivers, and ſwimming very readily, ſo that it may be conſidered as in a manner amphibious. Dr. Pallas ſuppoſes this ſpecies to have migrated from the ſouthern parts of China. The length of the caraco is ſix inches, and of the tail four and a half or rather more. Its colour is ſimilar to that of the common rat.

6. Mus Americanus, the American rat. This is ſuppoſed by Mr. Pennant to be the ſame with the preceding, or a

variety of it. It inhabits North America, among ſtones and clefts remote from habitations; and in ſize, colour, &c. ſeems to agree with the carapo. Mr. Pennant deſcribes it from a ſpecimen in the (late) Leverian Muſeum.

7. Mus rattus, the black rat: tail very long, ſcaly; body black, beneath cinereous. This ſpecies, though now common in moſt parts of Europe, is ſuppoſed to have been originally introduced from India and Perſia. The word *rattus*, or rat, is modern: the Romans probably comprehended all kinds under the word *mus*. The Welſh call it the *French mouſe*, which intimates that it has been imported thence into our iſland. None of them are found in Siberia or Kamtſcatka. They ſwarm at Otaheite, and others of the Society Iſlands; and are met with in New Zealand and New Holland. In Otaheite they are ſo bold as to attack the inhabitants when aſleep, who hold them in the utmoſt deteſtation, but will not kill them, leſt they ſhould be polluted by the touch: they will not even eat the bread-fruit theſe animals happen to run over. The rat is ſuppoſed to be a native of North America, as well as of Europe; but it is ſaid that South America was entirely free from it, till it was imported there in ſhips from Europe, in the year 1554.

The general length of this original ſpecies, from noſe to tail, is ſeven inches, and of the tail eight inches. The colour of the head and whole upper part of the body is a dark iron or blackiſh grey: the belly is of a dull aſh-colour: the legs are duſky, and very ſlightly covered with hair: the fore feet have only four toes, with a ſmall claw in place of a fifth: the tail is nearly naked, coated with a ſcaly ſkin, and marked into numerous diviſions or rings. This animal breeds frequently, and commonly brings about ſix or ſeven young at a time. Sometimes they increaſe ſo faſt as to overſtock the place of their abode; in which caſe they fight and devour each other. It is ſaid that this is the reaſon why theſe animals, after being extremely troubleſome, ſometimes diſappear ſuddenly. Various are the methods made uſe of for the expulſion of rats from the places they frequent; among which none is more ſingular than that mentioned by Geſner, who tells us he had been informed, that, if a rat be caught and a bell tied round its neck, and then ſet at liberty, it will drive away the reſt wherever it goes. This expedient appears to be occaſionally practiſed in modern times with ſucceſs; in confirmation of which, Dr. Shaw relates the following ſtory. A gentleman, travelling through Mecklenburgh about thirty years ago, was witneſs to the following curious circumſtance at the poſt-houſe in New Stargard. After dinner the landlord placed on the floor a large diſh of ſoup, and gave a loud whiſtle. Immediately there came into the room a maſtiff, a fine Angora cat, an old raven, and a remarkably large rat, with a bell about its neck. The four animals went to the diſh, and, without diſturbing each other, fed together; after which the dog, cat, and rat, lay before the fire, while the raven hopped about the room. The landlord, after accounting for the familiarity which exiſted among the animals, informed his gueſt that the rat was the moſt uſeful of the four, for the noiſe he made had completely freed the houſe from the rats and mice with which it was before infeſted.

β. A very ſmall variety of this ſpecies, not much larger than a mouſe, is ſaid by Dr. Pallas to be found about the deſerts in the lower parts of the Volga. Like many other quadrupeds, the rat is ſometimes ſeen perfectly white, in which caſe it has red eyes. The white rat, however, as we are aſſured by Mr. Schreber, does not always produce young ones of a ſimilar colour; ſo that ſuch varieties can hardly be conſidered as permanent. This is proved from an obſervation of profeſſor Herman, who, having kept a pregnant white rat for ſome time, found that the young ones were of the uſual colour of their ſpecies.

8. Mus decumanus, the common grey rat: colour grey, ſtiff-haired, with very long ſcaly tail, and body whitiſh beneath. This domeſtic ſpecies, which is now become the common rat of our own iſland, and is popularly known by the name of the *Norway rat*, (Pennant's *brown rat*,) is ſuppoſed, like the preceding, to be a native of India and Perſia, from which countries it has been imported into Europe. In England it ſeems to have made a national conqueſt over the black rat, which is now become rare in compariſon. The grey rat is larger than the black rat, meaſuring nine inches from the noſe to the tail, which is of the ſame length, and marked into about two hundred rings or circular ſpaces: the colour is a pale tawny grey, whitiſh beneath: the fore feet have four toes, with a claw in place of a fifth. It is a bold and voracious animal, and commits great havoc in granaries, &c. Sometimes it takes up its reſidence in the banks of waters, and ſwims occaſionally with almoſt as much facility as the water-rat, or Mus amphibius. In its general manner of life it agrees with the black rat; and not only devours grain and fruits, but preys on poultry, rabbits, and various other animals. It is a very prolific ſpecies, and produces from ten to twelve or fourteen, or even ſometimes eighteen, young at a time. When cloſely purſued, it will ſometimes turn upon its adverſary, and bite with great ſeverity. It ſeems to have made its firſt appearance in England about ſeventy years ago; and is ſtill much leſs frequent in France and ſome other parts of the continent than the black rat. In France, according to Buffon, it was firſt obſerved at Chantilly, Marly-la-Ville, and Verſailles, where it committed great ravages. This author affirms that it breeds three times a-year. The common rat is ſhown on the annexed Engraving, at fig. 1.

In Mr. Charles Fothergill's "Eſſay on the Philoſophy, Study, and Uſe, of Natural Hiſtory," (1813.) we find ſome beautiful reflections which remind us of Ray and Derham. We ſhall extract a few paragraphs which relate to the ſubject we are upon.

"Nothing can afford a finer illuſtration of the beautiful order and ſimplicity of the laws which govern the creation, than the certainty, preciſion, and regularity, with which the natural checks on the ſuperabundant increaſe of each tribe of animals are managed; and every family is ſubject to the operation of checks peculiar to that ſpecies, whatever it may be, eſtabliſhed by a wiſe law of the Moſt High, to counteract the fatal effects that might ariſe from an ever-active populative principle: and it is by the admirable diſpoſition of theſe checks, the contemplation of which is alone ſufficient to aſtoniſh the loftieſt and moſt comprehenſive ſoul of man, that the whole ſyſtem of animal life, in all its various forms, is kept in due ſtrength and equilibrium.

"This ſubject is worthy of the naturaliſt's moſt ſerious conſideration, as, by a few hints, I will now attempt to ſhow."

Mr. F. then quotes from Mr. Malthus, "The great law of neceſſity, which prevents population from increaſing in any country beyond the food which it can either produce or require, is a law ſo open to our view, ſo obvious and evident to our underſtandings, that we cannot for a moment doubt it." And afterwards proceeds:— "This great law pervades and affects the whole animal creation, and ſo active, unwearied, and rapid, is the principle of increaſe over the means of ſubſiſtence, amongſt inferior animals, that it is evident whole genera of carnivorous beings amongſt beaſts, birds, fiſh, reptiles, and inſects, have been created for the expreſs purpoſe of ſuppreſſing the redundancy of others, and reſtraining their numbers within proper limits. But even thoſe checks are inſufficient to reſtrain the effects of a too-rapid populative principle in ſome animals, which have, therefore, certain deſtructive propenſities given to them by the Creator, that operates powerfully upon themſelves and their offspring, as may be particularly obſerved in the natural hiſtory of the *rabbit*, but which is ſtill more evidently and ſtrikingly diſplayed in the life and economy of the *rat*.

"It has been calculated by Mr. Pennant, and there can be no doubt of the truth of the ſtatement, that the aſtoniſhing number of 1,274,840 may be produced from a ſingle pair of rabbits in the ſhort ſpace of four years, as theſe animals, even in their wild ſtate, breed ſeven times in a year, and generally produce eight young ones each time. They are capable of procreation at the age of five or ſix months, and the doe carries her burthen no longer than thirty days. But the principle of increaſe is much more powerful, active, and effective, in the common grey rat, than in any other animal of equal ſize. This deſtructive quadruped is continually under the *furor* of animal love. The female carries her young for one month only, and ſhe ſeldom or never produces a leſs number than twelve, but ſometimes as many as eighteen, at a litter: the medium number may be taken for an average; and the period of geſtation, though of ſuch ſhort continuance, is confined to no particular ſeaſon of the year. The embraces of the male are admitted immediately after the birth of the vindictive progeny; and it is a fact which I have aſcertained beyond any doubt, that the female ſuckles her young ones almoſt to the very moment when another litter is dropping into the world as their ſucceſſors. A celebrated Yorkſhire rat-catcher whom I have occaſionally employed, one day killed a large female rat that was in the act of ſuckling twelve young ones, which had attained a very conſiderable growth; nevertheleſs, upon opening her ſwollen body, he found thirteen quick young, that were within a few days of their birth. Suppoſing, therefore, that the rat produces ten litters in the courſe of a year, and that no check on their increaſe ſhould operate deſtructively for the ſpace of four years, a number not far ſhort of three millions might be produced from a ſingle pair in that time!

"Now the conſequence of ſuch an active and productive principle of increaſe, if ſuffered continually to operate without check, would ſoon be fatally obvious. We have heard of fertile plains being devaſtated, and large towns undermined, in Spain, by rabbits; and even that a military force from Rome was once requeſted of the great Auguſtus to ſuppreſs the aſtoniſhing numbers of the ſame animals which overran the iſlands of Majorca and Minorca; this circumſtance is recorded by Pliny. If, therefore, rats were ſuffered to multiply without the reſtraint of the moſt powerful and poſitive natural checks, not only would fertile plains and rich cities be undermined and deſtroyed, but the whole ſurface of the earth in a very few years would be rendered a barren and hideous waſte, covered with myriads of famiſhed grey rats, againſt which man himſelf would contend in vain. But the ſame Almighty Being who perceived a neceſſity for their exiſtence, has alſo reſtricted their numbers within proper bounds, by creating to them many very powerful enemies, and ſtill more effectually by eſtabliſhing a propenſity in themſelves, the gratification of which has continually the effect of leſſening their numbers, even more than any of their foreign enemies. The male rat has an inſatiable thirſt for the blood of his own offspring: the female, being aware of this paſſion, hides her young in ſuch ſecret places as ſhe ſuppoſes likely to eſcape notice or diſcovery, till her progeny are old enough to venture forth and ſtand upon their own energies; but, notwithſtanding this precaution, the male rat frequently diſcovers them, and deſtroys as many as he can, nor is the defence of the mother any very effectual protection, ſince ſhe herſelf ſometimes falls a victim to her temerity and her maternal tenderneſs. It is well known that rabbits have the ſame trait in their character, though perhaps not in an equal degree of force. Beſides this propenſity to the deſtruction of their own offspring, when other food fails them, rats hunt down and prey upon each other with the moſt ferocious and deſperate avidity, inſomuch, that it not unfrequently happens, in a colony of theſe deſtructive animals, that a ſingle male of more than ordinary powers, after having overcome and devoured all competitors with the exception of a few females, reigns the ſole bloody and much-dreaded tyrant over a conſiderable territory, dwelling by himſelf in ſome ſolitary hole, and never appearing abroad without ſpreading terror and diſmay even amongſt the females whoſe embraces he ſeeks. In this relentleſs and bloody character may be found one of the moſt powerful and poſitive of the checks which operate to the repreſſion of this ſpecies within proper bounds; a character which attaches, in greater or leſs degree, to the whole *mus* genus, and in which we may readily perceive the cauſe of the extirpation of the old black rats of England, Mus rattus; for, the large grey rats, having ſuperior bodily powers united to the ſame carnivorous propenſities, would eaſily conquer and deſtroy their black opponents wherever they could be found, and whenever they met to diſpute the title of poſſeſſion or of ſovereignty."

When the young rats begin to iſſue from their holes, the mother watches, defends, and even fights with the cats, in order to ſave them. A large rat is more miſchievous than a young cat, and nearly as ſtrong: the rat uſes her fore teeth, and the cat makes moſt uſe of her claws; ſo that the latter requires both to be vigorous, and accuſtomed to fight, in order to deſtroy her adverſary. The weaſel, though ſmaller, is a much more dangerous and formidable enemy to the rat, becauſe he can follow it into its retreat. Their ſtrength being nearly equal, the combat often continues for a long time; but the method of uſing their arms is very different. The rat wounds only by reiterated ſtrokes with his fore-teeth, which are better formed for gnawing than biting; and, being ſituated at the extremity of the lever or jaw, they have not much force. But the weaſel bites cruelly with the whole jaw; and, inſtead of letting go its hold, ſucks the blood from the wounded part, ſo that the rat is always killed.

One very formidable enemy of this tribe remains to be mentioned; and that is, the *rat-catcher*, or *rat-deſtroyer*. As theſe animals, like the dog and cat, are of a laſcivious nature, and as ſome ſubſtances have a ſtrong ſcent, reſembling, perhaps, that of their venereal orgaſm, they are liable to be attracted by ſuch ſmells, as dogs are, on the ſame account perhaps, inclined to roll themſelves in putrid carrion, and male cats to eat valerian and cat-mint. It is of this principle that rat-catchers avail themſelves, and, by indulging the propenſity, deceive them to their deſtruction, by blending with their favourite food different ſtrongly-ſcented ſubſtances, ſuch as the eſſential oil of rhodium, or muſk, with the poiſonous powders of nux vomica, or of ſtaves-acre, or perhaps of arſenic.

The firſt ſtep taken by rat-catchers, in order to clear a houſe, &c. of thoſe vermin, is to allure them all together to one proper place, before they attempt to deſtroy them; for there is ſuch an inſtinctive caution in theſe animals, accompanied with a ſurpriſing ſagacity in diſcovering any cauſe of danger, that, if any of them be hurt, or purſued, in an unuſual manner, the reſt take the alarm, and become ſo ſhy and wary, that they elude all the devices and ſtratagems of their purſuers for ſome time after. The place where the rats are to be aſſembled, ſhould be ſome cloſet, or ſmall room, into which all the openings, but one or two, may be ſecured; and this place ſhould be, as near as may be, in the middle of the houſe, or buildings. It is the practice, therefore, to attempt to bring them all together in ſome ſuch place before any attempt be made to take them; and even then to avoid any violence, hurt, or fright, to them, before the whole be in the power of the operator. In reſpect to the means uſed to allure them to one place, they are various. One of thoſe moſt eaſily and efficaciouſly practiſed is the trailing ſome piece of their moſt favourite food, which ſhould be of the kind that has the ſtrongeſt ſcent, ſuch as toaſted cheeſe, or broiled red-herring, from the holes or entrances to their acceſſes in every part of the houſe, or contiguous buildings, whence it is intended to allure them. At the extremities, and in different parts of the courſe of this trailed tract, ſmall quantities of meal, or any other kind of their food, ſhould be laid, to bring the greater number into the tracks, and to encourage them to purſue it to the centre place, where they are intended to be taken; at that place, where time admits of it, a more plentiful repaſt is laid for them, and the trailing repeated for two or three nights. But, beſides this trailing and way-baiting, ſome of the moſt expert of the rat-catchers have a ſhorter, and, perhaps, more effectual method of bringing them together, which is, the calling them, by making ſuch a kind of whiſtling noiſe as reſembles their own call, and by this means, with the aſſiſtance of the way-baits, they call them out of their holes, and lead them to the repaſt prepared for them at the place deſigned for taking them. But this is much more difficult to be practiſed than the art of trailing; for the learning the exact notes, or cries, of any kind of beaſts or birds, ſo as to deceive them, is a peculiar talent, not eaſily attained to in other caſes. And in practiſing either of theſe methods great caution muſt be uſed by the operator to ſuppreſs, and prevent, the ſcent of his feet and body from being perceived; which is done by overpowering that ſcent with others of a ſtronger nature. In order to this, the feet are to be covered with cloths rubbed over with aſſafœtida, or other ſtrong-ſmelling ſubſtances; and even oil of rhodium is ſometimes uſed for this purpoſe, but ſparingly, on account of its dearneſs, though it has a very alluring effect. If this caution however be not properly obſerved, it will very much obſtruct the ſucceſs of the attempt to take them; for they are very ſhy of coming where the ſcent of human feet lies very freſh, and intimates, to their ſagacious inſtinct, the preſence of human creatures, whom they naturally dread. To the above-mentioned means of alluring, is added another of very material efficacy, which is the uſe of oil of rhodium, which, like valerian in the caſe of cats, has a very extraordinary faſcinating power on theſe animals. The oil is extremely dear, and therefore very ſparingly uſed. It is exhaled in a ſmall quantity in the place, and at the entrance of it, where the rats are intended to be taken, particularly at the time when they are to be laſt brought together in order to their deſtruction; and it is uſed alſo, by ſmearing it on the ſurface of ſome of the implements uſed in taking them, by the method before deſcribed; and the effect it has in taking them off their caution and dread, by the delight they appear to have in it, is very extraordinary.

It is uſual, likewiſe, for the operator to diſguiſe his figure as well as ſcent, which is done by putting on a ſort of gown or cloak, of one colour, that hides the natural form, and makes him appear like a poſt, or ſuch inanimate thing; which habit muſt likewiſe be ſcented as above, to overpower the ſmell of his perſon; and beſides this he is to avoid all motion, till he has ſecured his point of having all the rats in his power. When the rats are thus enticed and collected, they are ſuffered to regale on what they moſt like, which is ready prepared for them; and then to go away quietly for two or three nights; by which means thoſe which are not allured the firſt night are brought afterwards, either by their fellows or by the effects of the trailing, &c. and will not fail to come again, if they are not diſturbed or moleſted. But many of the rat-catchers make ſhorter work, and content themſelves with what can be brought together in one night or two; but this is never effectual, unleſs where the building is ſmall and entire, and the rats but few in number.

With reſpect to the means of taking them when they are brought together, they are various. Some entice them into a very large bag, the mouth of which is ſufficiently capacious to cover nearly the whole floor of the place where they are collected; which is done by ſmearing ſome veſſel, placed in the middle of the bag, with oil of rhodium, and laying in the bag baits of proper food. This bag, which before lay flat on the ground with the mouth ſpread open, is to be ſuddenly cloſed when the rats are all in it. Others drive or frighten them, by ſlight noiſes or motions, into a bag of a long form, the mouth of which, after all the rats are come in, is drawn up to the opening of the place by which they entered, all other ways of retreat being ſecured. Others, again, intoxicate or poiſon them, by mixing with the repaſt prepared for them the cocculus indicus, or the nux vomica. A receipt for this purpoſe has appeared, which directs four ounces of cocculus indicus, with twelve ounces of oatmeal, and two ounces of treacle or honey, to be made up into a moiſt paſte with ſtrong beer; but, if the nux vomica be uſed, a much leſs proportion will ſerve than is here given of the cocculus. Any ſimilar compoſition of theſe drugs, with that kind of food the rats are moſt fond of, and which has a ſtrong flavour, to hide that of the drugs, will equally well anſwer the end. If, indeed, the cocculus indicus be well powdered, and infuſed in ſtrong beer for ſome time, half the quantity here directed will ſerve as well as the quantity before mentioned. When the rats appear to be thoroughly intoxicated with the cocculus, or ſick with the nux vomica, they may be taken with the hand, and put into a bag or cage, the door of the place being firſt drawn to, leſt thoſe which have ſtrength and ſenſe remaining ſhould eſcape. By theſe methods, when well conducted, a very conſiderable part of the rats in a farm, or other houſe, and the contiguous buildings, may be taken and deſtroyed.

In the Tranſactions of the Bath Agricultural Society, the following compoſitions are adviſed for deſtroying theſe miſchievous creatures, and which are ſtated to have been attended with great ſucceſs. Firſt: To a quart of oatmeal, add ſix drops of oil of rhodium, one grain of muſk, and two or three of the nuts of nux vomica finely powdered; make them into pellets, and put them into the rat-holes. This, it is ſaid, was at firſt greedily eaten, and did great execution; but the wiſe animals, after a time, ceaſed to eat it. Secondly: Three parts of oatmeal and one of ſtaves-acre, mixed well into a paſte with honey. Pieces of this paſte were laid in their holes, and again did great execution. Thirdly: There is a method of deſtroying them by laying a large box down on its front ſide, with the lid ſupported open by a ſtring over a pulley; and by trailing toaſted cheeſe and a red-herring from their holes to this box, and placing oatmeal and other food in it, which they are for a few nights to be permitted to eat unmoleſted; and finally to watch them by moon-light, the inſide of the box being painted white; and, when many of them are ſeen, to let down the lid; by which contrivance ſixty of them are ſtated to have been taken at one time.

Mr. Forſyth adviſes to take a pound of good flour, three ounces of treacle, and ſix drops of the oil of carraways: put them all in a diſh; and rub them well together till they are properly mixed: then add a pound of crumb of bread. The traps baited with this mixture ſhould be ſet as near their haunts as poſſible; but, for two or three days, ſo as not to fall or ſtrike on the rats going in, but letting them have free liberty to go in and out at pleaſure, as this makes them fearleſs. Some of the bait ſhould alſo, he thinks, be laid at the rat-holes, and a little of it ſcattered quite up to the traps, and ſo on to the bridge of each trap, where a handful may be placed. It may alſo, he thinks, be proper to ſcent the traps with the following mixture, for the purpoſe of enticing the rats into them: Take twenty drops of the oil of rhodium, ſix or ſeven grains of muſk, and half an ounce of oil of aniſeed; put them in a ſmall phial, and ſhake it well before uſing: then dip a piece of twiſted paper or rag in the mixture, and rub each end of the trap with it, if a box-trap, and put two or three drops on the bridge, leaving the paper or rag in the trap. Of whatever kind the trap is, it ſhould be ſcented; but once in a twelvemonth will be ſufficient. Then throw ſome chaff mixed with a little wheat about the bottom of the trap, in order to deceive the rats; for they are very ſagacious, and will not enter a ſuſpicious place. This will be neceſſary to be done only at the firſt time of ſetting the traps; for, after ſome rats have been caught and have watered and dunged into them, rats will enter boldly when they find others have been there before them: do not, therefore, waſh or clean out the trap, as ſome people do before they ſet it again, but let the dung and urine remain in it.

And it is uſeful, this writer remarks, when the holes are found quiet, and that no rats uſe them, to ſtop them up with the following compoſition. Take a pint of common tar, half an ounce of pearl-aſhes, an ounce of oil of vitriol, and a good handful of common ſalt; mix them all well together in an old pan or pot. Take ſome pieces of paper, and lay ſome of the above mixture very thick on them; then ſtop the holes well up with them, and build up the mouth of the holes with brick or ſtone, and mortar; if this be properly done, rats will, he aſſerts, no more approach theſe while either ſmell or taſte remains in the compoſition. But, with a view to deſtroy rats in places where traps cannot be ſet, it is recommended to take a quart of the above bait, then to raſp into it three nuts of nux vomica, and add a quarter of a pound of crumb of bread; mix them all well together, and lay it into the mouth of their holes, and in different places where they frequent; but firſt give them of the bait without nux vomica, for three or four ſucceeding nights; and, when they find it agrees with them, they will eat that mixed with the nut with greedineſs.

However, as it is frequently found that rats are very troubleſome in ſewers and drains, in ſuch caſes arſenic may be uſed with ſucceſs in the following manner: Take ſome dead rats, and having put ſome white arſenic, finely powdered, into an old pepper-box, ſhake a quantity of it on the fore-parts of the dead rats, and put them down the holes, or avenues, by the ſides of the ſewers at which they come in; this puts a ſtop to the live ones coming any further; for, when they perceive the arſenic, they will retire immediately; whereas, if they were put down without the arſenic, the live ones would eat them. It is by means of arſenic, notwithſtanding the above obſervations, that the moſt certain method of deſtroying theſe troubleſome vermin, (provided they can be made to eat it,) takes place; which we have found to anſwer beſt, when it is prepared by being finely levigated, and mixed up with very ſtrong old cheeſe and oatmeal.

In a note in the Agricultural Survey of Lancaſhire, it is ſtated, that it is greatly to be lamented that Mr. Heathcote's method of deſtroying rats and mice is not generally known and practiſed; if it were, there would be a total extirpation of thoſe obnoxious and deſtructive animals; for in one night he totally deſtroys them (where he is employed), be they ever ſo numerous, as can be well atteſted by hundreds in the neighbourhood of Ormſkirk, who have employed him. And it is added, that the compoſition he makes uſe of he puts in their holes and burrows; and, from the ſmall quantity he uſes, it is aſtoniſhing it ſhould have ſuch an effect: it will keep good two years. It is alſo ſtated, that a farmer recommends, for the deſtruction of rats, one ounce of pounded quick-lime to four ounces of tallow-cake, to be beaten together and made into balls, and placed in their runs, which has cleared many buildings. But it has been proved by experience, it is ſaid, that an ounce of aerated barytes finely powdered, mixed with the tallow, in place of lime, is more effectual.

9. Mus giganteus, the bandicote rat: grey; ears round and naked; the two exterior toes of the hind-feet ſhorter. We find an account of this ſpecies in the Linn. Tranſ. vol. vii. by Capt. Thomas Hardwicke. It is the M. Malabaricus of Shaw's Zoology; but, as it is not peculiar to the coaſt of Malabar, and is the largeſt known ſpecies of the genus, Capt. H. prefers the ſpecific denomination of *giganteus*. The female here deſcribed and figured weighed two pounds eleven ounces and a half: its total length, twenty-ſix inches and a quarter. The male is larger than a rabbit, and weighs upwards of three pounds. It is very miſchievous and predacious. In ſhape and general appearance it ſeems moſt to reſemble the Norway rat. Its colour is a pale cinereous brown; the ears thin, nearly bare, and rounded; the ſnout rather long; the fore-feet ſhaped like thoſe of the Norway rat, with four toes, and a claw in place of a fifth: the hind-feet have five toes, of which the two exterior are conſiderably ſhorter than the reſt: the tail is above eleven inches in length. This ſpecies is ſaid to be very common about the coaſts of the Malabar country. At Pondicherry it is frequent, infeſting houſes, like the brown rat. Its voice is ſaid to reſemble the grunting of a pig. Captain H. adds, "The bite of this animal is conſidered dangerous; and an inſtance of its effects came under my notice while at the military ſtation of Futtehgurgh, in the Dooab, where an European in the India Company's artillery died under a confirmed hydrophobia in about twelve days, after having been bitten by a rat. This opinion I reſt upon the judgment of the medical gentleman who attended the unfortunate man ſubſequently to the accident."

10. Mus perchal, the perchal rat: colour ferruginous brown; the hind-legs larger. This ſpecies is a native of India, and in its general appearance reſembles the Norway rat, but is of a longer ſhape, with a thicker and ſhorter tail in proportion. It is of a deep ſubferruginous brown above, and of a greyiſh caſt beneath; the hind-legs are larger than the fore: the ears naked and rounded, and the noſe rather blunt. This rat is ſaid to be very numerous about Pondicherry, infeſting houſes in the ſame manner as the rats of Europe. It ſeems to have been firſt deſcribed by Monſ. Sonnerat, and is evidently allied to the preceding. Both ſpecies are ſaid to be occaſionally eaten by the natives.

11. Mus muſculus, the common mouſe: brown, aſh-coloured beneath, with tetradactylous fore-feet, pentadactylous hind-feet, and long nearly-naked tail. The manners and appearance of this little animal are ſo univerſally known, that it ſeems almoſt unneceſſary to particulariſe it by a formal deſcription. It is a general inhabitant of almoſt every part of the old continent; but it is doubtful whether it be originally a native of America, though now ſufficiently common in many parts of the new world, as well as in many of its ſcattered iſlands. See the Plate, fig. 2.

The mouſe, though wild and extremely timid, is not of a ferocious diſpoſition, but may be eaſily tamed, and, ſoon after it has been taken, will begin to feed without fear, in the immediate preſence of its captors. The white variety is frequently kept in a tame ſtate, and receives additional beauty from the bright red colour of its eyes; a particularity which generally accompanies the white varieties, not only of this tribe, but of many other quadrupeds. The mouſe inhabits houſes and granaries in Europe, Aſia, and America; follows mankind; eats all kinds of ſweet and good proviſions, drinks little; is gentle, and very prolific. It is devoured by rats, cats, weeſels, owls, and hedge-hogs; is deſtroyed by elder and hellebore; and is ſaid to poſſeſs ſome trifling electrical properties while alive.

12. Mus ſilvaticus, the field-mouſe: tail long, ſcaly; body yellowiſh-brown, beneath white; breaſt yellow. This animal chiefly frequents dry and elevated grounds, and is found in woods and fields in great plenty. It appears to be common in all the temperate parts of Europe, and even in Ruſſia. It ſometimes varies in ſize, individuals being occaſionally met with which exceed the reſt in magnitude, though differing in no other reſpect. Its general length is about four inches and a half from noſe to tail; and the tail, which is ſlightly covered with hair, meaſures four inches. The colour of the animal is a yellowiſh brown above, and whitiſh beneath; the colours being pretty diſtinctly marked or ſeparated: the eyes are full and black, and the ſnout rather blunt. Theſe animals retire into holes among bruſhwood, and under the trunks of trees, where they amaſs great quantities of acorns, nuts, and beech-maſt. According to Buffon, a whole buſhel has ſometimes been found in a ſingle hole. Theſe holes are about a foot or more under ground, and are often di-

vided into two apartments, the one for living in along with their young, the other for a magazine of proviſions; and conſiderable damage is often done in the fields by hogs, who, allured by the ſmell of the acorns and other proviſion, dig into theſe hoards, and devour both the food and the inhabitants. M. de Buffon affirms, that in France more miſchief is done by the field-mice than by all the birds and other animals put together; and adds, that the only way to prevent this is by laying traps, at ten paces aſunder, through the whole extent of the ſown ground. No other apparatus, he ſays, is neceſſary than a roaſted walnut, placed under a ſtone ſupported by a ſtick; the animals come to eat the walnut, which they prefer to acorns, and, as the walnut is fixed to the ſtick, whenever they touch it the ſtone falls and kills them. When M. de Buffon firſt practiſed this experiment, he deſired that all the field-mice thus taken in traps might be brought to him; and found with aſtoniſhment, that above a hundred were taken each day from a piece of ground conſiſting only of about forty acres. From the 15th of November to the 8th of December above two thouſand were deſtroyed in this manner. When the froſt becomes ſevere, they retire into their holes, and feed on the ſtores they have collected. They abound, like many other animals of this genus, chiefly in autumn, and are far leſs common in the ſpring; for, if proviſions happen to fail them in the winter, it is thought that they deſtroy each other; a circumſtance which is known occaſionally to take place in many other ſpecies.

The author of "Phytologia" obſerves, that "the deſtruction of grain, after it is ſown, by field-mice, which mine their way very quickly under newly-ploughed lands near the ſurface, is ſuppoſed by Mr. Wagſtaff, in the papers of the Bath Society, to be effected in ſome ſeaſons to a very great extent. And that the tuſſocks of wheat, ſeen to ariſe in many fields, are owing to the granaries of theſe diminutive animals, which he has found to contain nearly a hatful of corn, which grows into a tuft if the owner becomes accidentally deſtroyed. It is alſo further aſſerted, that they feed much on the young plants, as they ariſe from the ſeed; and multiply at that time very faſt. He detects their habitations by ſmall mounds of earth being thrown up, on or near the apertures of their dwellings, or of the paſſages which lead to their neſts or granaries; and, by following the courſe of theſe paſſages, he found and deſtoyed the parents and the progeny."

β. A variety (as in the common mouſe) has ſometimes been ſeen perfectly white, with red eyes.

γ. American long-tailed field-mouſe. Mr. Pennant adds this to the former ſpecies, imagining it to be a variety. It is ſimilar in moſt points to the European animal, but the hind-legs are longer in proportion: a dark ſtripe runs down the back; the cheeks and ſides are orange-coloured, and the under parts are of a ſnowy whiteneſs; the ears are large, naked, and open; the whiſkers very long, ſome of the hairs being white and ſome black; the tail duſky above, and whitiſh beneath. It is often found in the province of New York.

13. Mus meſſorius, the harveſt-mouſe: ferruginous above, white beneath, with long ſlightly-hairy tail, and ears longer than the fur of the head. This ſmall ſpecies ſeems to have eſcaped the notice of Britiſh naturaliſts till it was obſerved by the late Mr. Gilbert White, of Selburne, in Hampſhire, in which county it is frequent. Mr. White, in the year 1767, communicated the animal to Mr. Pennant, who introduced it into the Britiſh Zoology. "Theſe mice," ſays Mr. White, "are much ſmaller and more ſlender than the Mus domeſticus medius of Ray, and have more of the ſquirrel or dormouſe colour: their belly is white; a ſtraight line along their ſides divides the ſhades of their back and belly. They never enter houſes, but are often carried into ricks and barns with the ſheaves; they abound in harveſt, and build their neſt amidſt the ſtraws of corn above ground, and ſometimes in thiſtles. They breed as many as eight at a litter, in a little round neſt compoſed of the blades of graſs or wheat. One of theſe neſts I procured this autumn (1767), moſt artificially platted, and compoſed of the blades of wheat; perfectly round, and about the ſize of a cricket-ball; with the aperture ſo ingeniouſly cloſed, that there was no diſcovering to what part it belonged. It was ſo compact and well filled, that it would roll acroſs the table without being diſcompoſed, though it contained eight little mice that were naked and blind. As this neſt was perfectly full, how could the dam come at her litter reſpectively, ſo as to adminiſter a teat to each? Perhaps ſhe opens different places for that purpoſe, adjuſting them again when the buſineſs is over; but ſhe could not poſſibly be contained herſelf in the ball with her young, which moreover would be daily increaſing in bulk. This wonderful procreant cradle, an elegant inſtance of the effects of inſtinct, was found in a wheat-field, ſuſpended in the head of a thiſtle." Mr. White adds, that "though theſe animals hang up their neſts for breeding amidſt the ſtraws of ſtanding corn, above ground, yet in the winter they burrow deep in the earth, and make warm beds of graſs; but their grand rendezvous ſeems to be in corn-ricks, into which they are carried in harveſt." A neighbour of Mr. White's houſed an oat-rick, in which were ſome hundreds aſſembled under the thatch. The meaſure of the animal is juſt two inches and a quarter from noſe to tail, and the tail juſt two inches long. Two of them in a ſcale juſt weighed down a copper halfpenny, which is about the third of an ounce avoirdupois, ſo that they may be conſidered as the ſmalleſt of Britiſh quadrupeds. It is repreſented, of the natural ſize, in the title-page of Shaw's Gen. Zoology, vol. ii.

The habits of the harveſt-mouſe are generally ſo little known, that we need make no apology for inſerting the enſuing extract from Bingley's Memoirs of Britiſh Quadrupeds. "About the middle of September 1804, I had a female harveſt-mouſe given to me by Mrs. Campbell, of Chewton-houſe, Hants. It had been put into a cage immediately when caught, and a few days afterwards produced eight young ones. I entertained ſome hopes that the little animal would have nurſed theſe, and brought them up; but, having been diſturbed in her removal about four miles from the country, ſhe began to deſtroy them, and I took them from her. The young ones, at the time I received them, (not more than two or three days old,) muſt have been at leaſt equal in weight to the mother. After they were removed, ſhe ſoon became reconciled to her ſituation; and, when there was no noiſe, would venture to come out of her hiding-place, at the extremity of the cage, and climb about among the wires of the open part, before me. In doing this, I remarked that her tail was, in ſome meaſure, *prehenſile;* and that, to render her hold the more ſecure, ſhe generally coiled the extremity of it round one of the wires. The toes of all the feet were particularly long and flexile, and ſhe could graſp the wires very firmly with any of them. She frequently reſted on her hind-feet, ſomewhat in the manner of the jerboa, for the purpoſe of looking about her; and in this attitude could extend her body at ſuch an angle as at firſt greatly ſurpriſed me. She was a beautiful little animal; and her various attitudes, in cleaning her face, head, and body, with her paws, were peculiarly graceful and elegant. For a few days after I received this mouſe, I neglected to give it any water; but, when I afterwards put ſome into the cage, ſhe lapped it with great eagerneſs. After lapping, ſhe always raiſed herſelf on her hind-feet, and cleaned her head with her paws. She continued, even till the time of her death, exceedingly ſhy and timid; but, whenever I put into the cage any favourite food, ſuch as grains of wheat or maize, ſhe would eat them before me. On the leaſt noiſe or motion, however, ſhe immediately ran off, with the grain in her mouth, to her hiding-place. One evening, as I was ſitting at my writing-deſk, and the animal was playing about in the open part of its cage, a large blue-fly happened to buzz againſt the wires. The little creature, although at twice or thrice the diſtance of her own length from it, ſprang along the wires with the greateſt agility, and would certainly have ſeized it, had the ſpace betwixt the wires been ſufficiently wide to have admitted her teeth or paws to reach it. I was ſurpriſed at this occurrence, as I had been led to believe that the harveſt-mouſe was merely a granivorous animal. I caught the fly, and made it buzz in my fingers againſt the wires. The mouſe, though uſually ſhy and timid, immediately came out of her hinding-place, and, running to the ſpot, ſeized and devoured it. From this time I fed her with inſects, whenever I could get them; and ſhe always preferred them to any other kind of food that I offered to her.

“ When this mouſe was firſt put into her cage, a piece of fine flannel was folded up into the dark part of it, as a bed, and I put ſome graſs and bran into the large open part. In the courſe of a few days all the graſs was removed; and on examining the cage, I found it very neatly arranged betwixt the folds of the flannel, and rendered more ſoft by being mixed with the knap of the flannel, which the animal had torn off in conſiderable quantity for the purpoſe. The chief part of this operation muſt have taken place in the night; for, although the mouſe was generally awake and active during the day-time, yet I never once obſerved it employed in removing the graſs. On opening its neſt about the latter end of October, 1804, I remarked that there were, amongſt the graſs and wool at the bottom, about forty grains of maize. Theſe appeared to have been arranged with ſome care and regularity, and every grain had the corcule, or growing-part, eaten out, the lobes only being left. This ſeemed ſo much like an operation induced by the inſtinctive propenſity that ſome quadrupeds are endowed with, for ſtoring up food for ſupport during the winter-months, that I ſoon afterwards put into the cage about a hundred additional grains of maize. Theſe were all in a ſhort time carried away; and, on a ſecond examination, I found them ſtored up in the manner of the former. But, though the animal was well ſupplied with other food, and particularly with bread, which it ſeemed very fond of, and although it continued perfectly active through the whole winter, on examining its neſt a third time, about the end of November, I obſerved that the food in its repoſitory was all conſumed, except about half a dozen grains. This intereſting little animal died in the month of December 1806, after a confinement of two years and a quarter. I have ſome reaſon to believe that its death was occaſioned by water being put into its cage in a ſhell, picked up on the ſea-ſhore, that had been much impregnated with ſalt.”

14. Mus agrarius, the ruſtic mouſe: yellowiſh-brown, with long ſcaly tail and black dorſal ſtreak. This ſpecies is found in Germany, as well as in Ruſſia and the more temperate parts of Siberia, as far as the Irtiſh: in the former, it is found chiefly about villages and corn-fields; in the latter, in woods. In Ruſſia it is often migratory, and very noxious to the grain; it is called there *ſhitnik*, or the corn-mouſe, for it abounds in the ſheafs and ricks. At times they wander in vaſt multitudes, and deſtroy the whole expectations of the farmer. In the years 1763 and 1764, they made great ravages in the rich country about Caſan and Arſk; and came in ſuch numbers as to fill the very houſes, and became through hunger ſo bold as to ſteal even the bread from the table before the very faces of the gueſts. At the approach of winter they all diſappeared.

They make their retreats a little below the ſurface, which in thoſe places appear elevated; each has a long gallery with a chamber at the end, in which they place their winter food, which conſiſts of various ſorts of ſeeds. It is found of a much larger ſize in the cultivated regions about the rivers Oby and Jeneſei than elſewhere. In general it is rather leſs than the field-mouſe, and is of a ferruginous colour above, and whitiſh beneath: on the back is a duſky line: the head is oblong, the noſe ſharp, and the ears ſmall and lined with fur: above each foot is a duſky circle; and the tail is only half the length of the body.

15. Mus minutus, the little mouſe: ferruginous above, whitiſh beneath, with long ſcaly tail. This ſpecies, according to Dr. Pallas, is frequent in the birch-woods of Siberia, as well as in many of the temperate parts of Ruſſia, frequenting corn-fields, and barns. Its general colour is a deep tawny above, and white below; the noſe is ſharpiſh and of a duſky colour, with a whiteneſs at the corners of the mouth; the ears are hid in the fur; the feet grey; the length from noſe to tail is little more than two inches, and the weight not half a dram. The Siberian variety is a richer or more fulvous colour than thoſe of other regions. This animal, Dr. Pallas ſays, is very frequent in autumn and winter in corn-ricks and about granaries, and is often found intermixed with the Mus agrarius, inhabiting ſimilar places. It ſeems extremely nearly allied to the harveſt-mouſe, and it is not impoſſible that it may in reality be the ſame animal; the differences appearing almoſt too ſlight for a ſpecific diſtinction.

16. Mus ſoricinus, the ſoricine mouſe: yellowiſh-grey, with long ſnout, round furred ears, and hairy tail of moderate length. This is an extremely-ſmall ſpecies, and has the general appearance of a Sorex, or ſhrew, having a long and ſlender or ſharp-pointed ſnout. It is a native of Straſburg, where it was firſt diſcovered by profeſſor Herman. Its colour is a pale yellowiſh, or ſubferruginous brown, whitiſh beneath; the ears are ſhort and rounded, and are covered with hair. It meaſures two inches from noſe to tail; and the tail is nearly of ſimilar length, or rather a trifle longer.

17. Mus vagus, the wandering mouſe: cinereous, with black dorſal band, very long naked tail, and plaited ears. This, which was diſcovered by Dr. Pallas, is frequent throughout the whole Tartarian deſert, and is of a migrating nature. It is a ſmall ſpecies, ſcarcely exceeding the Mus minutus in ſize, and meaſuring little more than two inches and a half from noſe to tail, and the tail three inches. It is of a pale aſh-colour above, ſlightly mixed or undulated with black, and marked with a black dorſal line: the ends of the limbs are whitiſh. This ſpecies wanders about in great multitudes, migrating from place to place chiefly by night. It is of a very tender or delicate nature; and during the nights, even of June, is often found rolled up, as if falling into a ſtate of torpidity. It is ſaid to inhabit chiefly the fiſſures of rocks, the cavities under large ſtones, or hollow trees.

18. Mus betulinus, the birch-mouſe: body fulvous, with a black dorſal band, plaited ears, and very long naked tail. This is ſo nearly allied to the preceding, that it might almoſt paſs for the ſame ſpecies, or at leaſt for a variety; but it is ſtill ſmaller than that animal, and ſcarcely exceeds two inches and a quarter in length; the tail being at leaſt three inches, or longer in proportion than in the former. It inhabits the birch-woods of Siberia, living in the hollows of decayed trees. Like the former, it is of a tender nature, and ſoon becomes torpid in cold weather. In aſcending the branches of trees, it is obſerved to coil round the twigs with its tail, in the manner of an opoſſum. Dr. Pallas has often obſerved it aſcending the ſtems of ſome of the ſtronger graſſes, which were ſcarcely bent with its weight. He alſo kept ſeveral of them a conſiderable time; they grew very tame, and delighted in being held in the hand. This ſpecies is of a rufous aſh-colour above, and of a pale aſh-colour beneath, and along the back is a duſky line; the noſe is pointed, and red at the tip; the ears ſmall, brown, and briſtled at the ends; and the limbs weak and ſlender.

19. Mus pumilio, the lineated mouſe: cinereous-brown, with black front, four black dorſal lines, and nearly naked tail of middling length. This ſmall and elegant ſpecies was firſt deſcribed by Sparman; and is a native of the foreſt-regions on the Slangen-river, a great way

eaſtward from the Cape of Good Hope. It is one of the leaſt of the genus, being little more than two inches long from noſe to tail. Its colours and other particulars are ſufficiently deſcribed in the ſpecific character.

20. Mus ſtriatus, the ſtriated mouſe, called by Pennant the oriental rat: rufous-brown, with longiſh naked tail, and the body marked with ſeveral longitudinal rows of white ſpots. This beautiful little animal was firſt deſcribed and figured by Seba, from whom other authors have taken their deſcriptions. It is about half the ſize of a common mouſe; and is of a rufous or fulvous colour, with ſeveral parallel rows of roundiſh white ſpots, diſpoſed longitudinally along the upper parts of the body; the ears are ſhort and roundiſh; the noſe blunt; the tail thick and whitiſh, and of the ſame length with the body, and nearly naked. This ſpecies is, according to Seba, a native of India. He aſſures us that he purchaſed it alive of a ſailor, who had brought it from India, and had tamed it to ſuch a degree, that every day it would come out of its cage to be fed, and would ſit on its maſter's ſhoulders, and even feed occaſionally from his lips. Seba adds, that it continued equally tame while it lived with him; but, as if lamenting the loſs of its former maſter, died in a ſhort time. After this deſcription, ſo particularly detailed by Seba, it ſeems ſtrange that ſome authors have appeared to doubt the real exiſtence of the animal as a genuine ſpecies. Dr. Pallas, however, ſeems to ſuſpect, that either the ſame or a ſimilar ſpecies inhabits the regions about Mount Caucaſus, having heard ſome reports of ſuch an animal; yet confeſſes his doubt as to the ſpecimen deſcribed by Seba, on account of his having diſcovered in Seba's collection a ſpecimen inſcribed "Mus ſtriatus, Indicus," which was nothing more than the young of the Sciurus getulus, or ſtriped Barbary ſquirrel, with the tail ſtill naked, or reſembling that of a mouſe.

21. Mus Barbarus, the Barbary mouſe: body brown, with ten pale ſtreaks; tail of middling length, fore-feet tridactyle, hind-feet pentadactyle. This appears, from the deſcription of Linnæus, to be ſo nearly allied to the preceding, as ſcarcely to be ſeparated from it. It is, ſays Linnæus, ſmaller than a common mouſe; and is brown above, pale or whitiſh beneath; on each ſide the back are ten pale ſtripes, and ſometimes a ſcarcely-perceptible line occurs between the lateral ſtripes. The tail is naked, obſcurely annulated, and of the length of the body. The animal is a native of Barbary.

22. Mus Mexicanus, the Mexican mouſe: a large reddiſh ſpot on each ſide of the belly. This ſpecies is in general of a whitiſh colour, mixed with red: head whitiſh. Inhabits Mexico; and is about the ſize and proportions of the common mouſe. Deſcribed and figured by Seba.

III. *Tail round, hairy.*

23. Mus Virginianus, the Virginian mouſe: tail entirely hairy, thick at the baſe, long, tapering. This alſo is from Seba; and is about the ſize of the field-mouſe. It has pointed ears, a black pointed noſe, and long whiſkers: its fur is very ſhort; and its limbs very ſlender. The colour of this animal is univerſally white: the thickneſs at the baſe of its tail is its ſpecific difference. It is found in Virginia.

24. Mus ſaxatilis, the rock-mouſe: tail longiſh; ears longer than the fur; fore-feet three-toed, with the appearance of a fourth. The rock-mouſe has an oblong head, noſe rather pointed, ears oval and downy, at the edges brown; whiſkers ſhort, limbs ſtrong, tail not half ſo long as the body, with a few hairs ſcattered over it. The colour above is brown, ſlightly mixed with grey; the ſides incline more to the laſt colour; belly of a light cinereous; ſnout duſky, ſurrounded with a very ſlender ring of white. It is in length four inches, the tail one and a half. It inhabits Siberia, and particularly beyond Lake Baikal, and the Mongolian deſert. It makes its burrows in a wonderful manner, conſidering the weakneſs of its feet, between the crannies of the rocks which had been forced open by the violence of froſt, or the inſinuation of roots of plants; it chooſes its habitation amidſt the rudeſt rocks, and lives chiefly on the ſeeds of Aſtragalus, or milk-vetch. The burrows conſiſt, firſt, of a large winding oblique paſſage, through which the animal flings out the earth; ſecondly, of one or more holes pointing downwards, which likewiſe wind among the rocks; and at the bottom is the neſt, formed of ſoft herbs. It was firſt deſcribed by Pallas.

25. Mus cayanus, the blue mouſe; (ſky-coloured rat of Pennant:) blue above, whitiſh beneath, with tetradactylous fore-feet, pentadactylous hind-feet, and ſlightly-hairy tail of middling length. This is a ſpecies deſcribed by Molina in his Hiſtory of Chili, of which country it is a native, and is about the ſize of the M. Sylvaticus; and of a fine pale blue colour, with rounded ears. It inhabits ſubterraneous burrows, which it forms of the length of many feet, and on each ſide of which are ſeveral holes or receptacles in which it depoſits its winter proviſions, conſiſting chiefly of tuberous roots, &c. It is a timid animal, and is alſo ſaid to be very cleanly. It breeds twice a-year; producing ſix at a time. The peaſants of Chili frequently rob the ſubterraneous retreats of this ſpecies of the hoards which they contain.

26. Mus amphibius, the water-rat: blackiſh-brown above, aſh-coloured beneath, with ears ſcarcely projecting from the fur, ſubtetradactyle fore-feet, and tail about half the length of the body. The water-rat is a general inhabitant of the temperate, and even the colder, parts of Europe and Aſia; and occurs alſo in North America; frequenting rivers and ſtagnant waters, and forming its burrows in the banks. It is of a thicker and ſhorter form than many others of this genus, and has ſomewhat of the ſhape of a beaver. Mr. Ray, following an error of Willoughly, deſcribes it as having the fore-feet webbed; and Linnæus, in his Syſtema Naturæ, characteriſes it from that very circumſtance, but acknowledges that he had not himſelf examined the animal. In reality, however, there is no ſuch appearance in the feet of the water-rat, and the notion ſeems to have been haſtily adopted from obſerving the facility with which it ſwims and dives. The general length of the water-rat is about ſeven inches, and the tail about five. Its colour is blackiſh ferruginous above, and deep cinereous beneath: the noſe is thick and blunt; the eyes ſmall; the ears rounded, and hid in the fur. In colour it appears to vary in different regions, being ſometimes nearly black, and ſometimes paler than uſual. It alſo varies as to ſize, and the varieties have been miſtakenly conſidered as diſtinct ſpecies. This animal never frequents houſes, but confines itſelf to the banks of waters, and is ſuppoſed to live on fiſh, frogs, &c. and probably on various roots and other vegetable ſubſtances. Dr. Pallas, however, is unwilling to admit that it preys at all upon fiſh, though reported ſo to do by Buffon and others. At ſome ſeaſons of the year it is obſerved to have a muſky ſcent. The female produces her young in April, and generally brings about five or ſix at a time. The meaſures of this ſpecies, as given by Mr. Schreber are as follows: viz. from noſe to tail ſix inches and a half; and of the tail three inches. This is repreſented on the Plate at fig. 3.

27. Mus ſcherman, the Straſburg rat: deep brown above, cinereous beneath, with ſlightly-hairy tail of moderate length, ſmall feet, and ears ſhorter than the fur. This ſpecies is ſaid to be common about the neighbourhood of Straſburg; and appears to have been firſt deſcribed by Mr. Hermann, who in the year 1776 communicated a ſpecimen to M. de Buffon. The length of the animal from noſe to tail is ſix inches; of the tail about two inches and three quarters: the head is rather ſhort; the ſnout thick; the eyes ſmall, and the ears almoſt as ſhort as thoſe of a mole, and concealed beneath the fur. The general colour of the fur is a blackiſh brown, mixed with grey tawny; the hair being blackiſh at the root, and tawny towards the tip: the edges of the mouth are bordered with ſhort white hairs, and the whiſkers are black: the under parts of the

body are of a mouſe-grey; the legs, which are ſhort, are covered with duſky hair, as are alſo the feet, which are very ſmall: the tail is hairy, but not ſo well covered as that of the water-rat. This animal reſides in watery places and about gardens; and is ſaid to be very deſtructive to the plants in cultivated grounds. It ſwims and dives extremely well, and alſo burrows occaſionally under ground.

28. Mus alliarius, the garlic mouſe: cinereous above, whitiſh beneath, with rather large ſlightly-hairy ears, and tail about an inch in length. Firſt deſcribed by Pallas, who informs us that it is a native of Siberia, where it is chiefly found about the Jeneſei and Lena, and is frequent in the ſubterraneous magazines of bulbous roots, eſpecially the Allium angulatum, or angular garlic, formed by the Siberian peaſants. It meaſures ſomewhat more than four inches from noſe to tail, and the tail about an inch and a half; the tail is alſo marked along the top with a duſky line, the remainder being white.

29. Mus rutilus, the red mouſe: fulvous above, aſh-coloured beneath; tail about an inch long, ears longer than the fur, and ſubtetradactyle fore-feet. The length of this ſpecies is not quite four inches, and the tail is ſomewhat more than one inch long, and very hairy: the noſe and face are briſtly; the ears very ſmall, but longer than the fur; bare, but edged at the tips with reddiſh hairs. The colour of the animal on the upper parts is a pleaſant tawny red; the ſides tinged with light yellowiſh-grey, and the under parts are whitiſh. It is a native of Siberia, and is found from the Oby eaſtward to Kamtſchatka, in woods and mountains; and alſo within the arctic circle. It ſometimes frequents houſes and granaries; and is often found under logs of wood, trunks of trees, &c. It is ſaid to wander about during the whole winter; ſeemingly unaffected by the ſeverity of the ſeaſon; being very lively even amidſt the ſnows. They eat any thing that comes in their way.

β. A variety is found about Caſan, a little leſs than the Siberian kind, having the tail longer and more ſlender; and the red on the back not ſo much diffuſed as in the other: the ſame kind has alſo been diſcovered in the botanical garden at Gottingen.

30. Mus gregalis, the gregarious mouſe: (Baikal rat, *Penn.*) body greyiſh; tail ſhort; ears longer than the fur, *Gmel.* (ſhorter than the fur, *Shaw*;) fore-feet three-toed, with the rudiments of a fourth. This ſpecies has large thin ears appearing above the fur, according to moſt authors; whiſkers black, hair rough and hard; colour above a pale grey, the back darkened with duſky hairs, which gradually decline into the lighter colour; the body below of a dirty white. It inhabits Siberia, but not in the country beyond the Oby; it is moſt plentiful about the Baikal Lake and Trans-Baikal region, eſpecially thoſe places which abound moſt with the Lilium pomponium and Allium tenuiſſimum: they collect the roots of theſe, and of the Trifolium lupinaſtrum, for winter-food: they form their lodge beneath the turf, and have many minute entrances; the earth that they fling out is carefully heaped above their hole, in form of a hillock, to divert the rain. In this retreat the male, female, and the progeny of one year, reſide. This ſpecies is never obſerved to migrate. It varies in ſize, and the males are in general much ſmaller than the females. The uſual length ſeems to be about four inches, and the tail about an inch and a half; but ſome of the males do not exceed three inches from noſe to tail.

31. Mus œconomicus, the œconomic mouſe, or rat: brown above, whitiſh beneath; tail ſhort, ears naked, concealed by the fur, fore-feet ſubtetradactyle. This ſpecies, named from its provident diſpoſition and the ſkill with which it collects its proviſions, is a native of Siberia, inhabiting that country in vaſt abundance, and even extending as far as Kamtſchatka. Its curious hiſtory has been given with great exactneſs by Dr. Pallas, who informs us, that theſe little animals make their burrows with wonderful ſkill immediately below the ſurface in ſoft turfy ſoils, forming a chamber of a flattiſh arched form, of a ſmall height, and about a foot in diameter, to which they ſometimes add as many as thirty ſmall tubular entrances; and near the chamber they frequently form other caverns, in which they depoſit their winter-ſtores; theſe are ſaid to conſiſt of various kinds of plants, even of ſome ſpecies which are poiſonous to mankind. They gather them in ſummer, harveſt them with great care, and even ſometimes bring them out of their cells in order to give them a more thorough drying in the ſun. The chief labour reſts on the females; the males during the ſummer wandering about in a ſolitary ſtate, inhabiting ſome old neſts occaſionally, and living during that period on berries, without touching the hoards, which are reſerved for winter, when the male and female reſide together in the ſame neſt. They are ſaid to breed ſeveral times in the year, the female producing two or three young at a time.

The migrations of this little ſpecies are very extraordinary, and take place at uncertain periods. Dr. Pallas imagines that the migrations of thoſe inhabiting Kamtſchatka may ariſe from ſome ſenſations of internal fire in that volcanic country, or from a preſcience of ſome unuſual and bad ſeaſon. Whatever be the cauſe, the fact is certain: at ſuch periods they gather together, during the ſpring-ſeaſon, in ſurpriſing numbers, except the few that reſide about villages, where they can pick up ſome ſubſiſtence; and this makes it probable that their migrations are owing to want of food. The mighty hoſt proceeds in a direct courſe weſtward, occaſionally ſwimming with the utmoſt intrepidity over rivers, lakes, and even arms of the ſea. During theſe perilous adventures, ſome are drowned, and others deſtroyed by water-fowl, fiſh, &c. thoſe which eſcape reſt awhile to baſk, dry their fur, and refreſh themſelves, and then again ſet out on their migration. It is ſaid that the inhabitants of Kamtſchatka, when they happen to find them in this fatigued ſituation, treat them with the utmoſt tenderneſs, and endeavour by every poſſible method to refreſh and reſtore them to life and vigour. Indeed none of the ſmaller animals are ſo much eſteemed by the Kamtſchadales as theſe; ſince to their labours they owe many a delicious repaſt; robbing their hoards in autumn, and leaving there ſome kind of proviſion in return, accompanied with certain ridiculous preſents by way of amends for the theft. As ſoon as the migrating hoſt of theſe animals has croſſed the river Penſchim, at the head of the gulf of that name, it turns ſouthward, and reaches the rivers Judoma and Ochot about the middle of July: the ſpace thus traverſed, appears aſtoniſhing, on conſulting the map of the country. The flocks, during this time, are ſo numerous, that an obſerver has waited two hours to ſee them all paſs. Their return into Kamtſchatka is in October, and is attended with the utmoſt feſtivity and welcome on the part of the natives, who conſider their arrival as a ſure prognoſtic of a ſucceſsful chaſe and fiſhery; and they are ſaid equally to lament their migrations, which are uſually ſucceeded by rainy and tempeſtuous weather.

This curious ſpecies is generally of a tawny colour, darker on the back, and lighter or more approaching to an aſh-coloured whiteneſs beneath: its uſual length is about four inches and a quarter, and the tail one inch: its limbs are ſtrong; its eyes ſmall; its ears naked, very ſhort and round, and almoſt hid beneath the fur of the head.

This animal is alſo ſuppoſed to be an inhabitant of Iceland; at leaſt a ſpecies which muſt be greatly allied to it is found in that country, and is ſaid to be particularly plentiful in the wood of Huſafels. In that country, where berries are but thinly diſperſed, the little animals are obliged to croſs rivers to make their diſtant foraging-excurſions; and in their return are obliged to repaſs the ſtream; their manner of performing which is thus related by Mr. Olaffen, from the accounts of others, communicated to himſelf: "The party, conſiſting of from ſix to ten, ſelect a flat piece of dried cow-dung, on which they place the berries they have collected, in a heap, on the middle; and then, by their united force, drawing it to the water's edge, launch it, and embark, placing themſelves round the heap, with their heads joined over it, and their backs to the water, their tails pendent in the ſtream, and ſerving the purpoſe of rudders."

β. M. glareolus. This, from Mr. Schreber's figure, appears to be about the ſize of a common mouſe, and of an uniform pale ferruginous colour, whitiſh beneath: the head ſeems very large, and without any viſible diſtinction of neck; the body tapering from the ſhoulders; the limbs ſmall and ſlender, and the tail about an inch long: the eyes very ſmall; the ears entirely hid in the fur, and the noſe rather inclining to a ſharp form. It was obſerved by Mr. O. F. Müller, in the year 1777, in the iſland of Laland, among ſome ſea lyme-graſs (Elymus arenarius), growing on the ſand near the ſhore. Nothing particular is known of its manners; and it remains doubtful whether it be a diſtinct ſpecies, or a variety of the œconomic mouſe.

32. Mus laniger, the woolly mouſe: hair very long and fine; fore-feet tetradactyle, hind-feet pentadactyle, tail of middling length. The woolly mouſe is a South-American ſpecies; and is a native of Chili, where it reſides in ſubterraneous retreats, in a gregarious manner, and feeds on various kinds of roots. It breeds twice a-year, bringing five or ſix at a time. It is ſaid to be an animal of a very mild and gentle diſpoſition, very eaſily tamed, and often rendered domeſtic. The ancient Peruvians are ſaid to have manufactured various valuable articles from its fur, which is of a woolly nature, long, and of exquiſite fineneſs. This ſpecies is of a cinereous colour, and meaſures about ſix inches: the ears are very ſmall; and the noſe ſhort.

33. Mus arvalis, the meadow-mouſe: duſky-ferruginous above, deep aſh-coloured beneath, with ears longer than the fur, and ſubtetradactylous fore-feet; tail very ſhort. This ſpecies, which is very common in our own iſland, is readily diſtinguiſhed from the reſt of the Britiſh ſpecies by the ſhortneſs of its tail; the animal meaſuring, according to Mr. Pennant, ſix inches from noſe to tail, and the tail being only an inch and a half long. It is a general inhabitant of Europe, and even extends to Siberia. It is alſo found in equal plenty in many parts of North America. In its manners it reſembles the Mus ſylvaticus, or field-mouſe; but is more commonly found in moiſt rather than dry ſituations. It makes its neſt in meadows, and produces a litter of about eight at a time. Its favourite food is corn, which it amaſſes during harveſt-time. It is frequently found in corn-ricks and barns, and often in company with the harveſt-mouſe, as well as with the field-mouſe. Dr. Shaw ſays, "I know not how to reconcile the difference between the meaſures attributed to this ſpecies by M. de Buffon and Mr. Pennant; the former fixing its length at three inches, and the latter at ſix. It probably varies much in different climates; and accordingly M. de Buffon tells us, that he had ſeen ſome which meaſured four inches and three lines from noſe to tail. He alſo records a ſpecimen, taken in the park of Verſailles, which was entirely of a blackiſh aſh-colour, and which had a tail of greater length than uſual." Mr. Pennant has recorded a remarkable inſtance of attachment in the meadow-mouſe to its young. One, which had been ſeduced into an iron trap by placing its brood in it, was ſo intent on foſtering them as to appear quite inſenſible to its own ſtate of captivity.

34. Mus ſocialis, the ſocial mouſe: pale-grey above, white beneath, with very ſhort rounded ears, ſubtetradactyle fore-feet, and tail of half an inch in length. The ſocial mouſe is a native of the Caſpian deſerts between the Volga and the Yaik, and the country of Hircania. It lives in low ſandy ſituations, in large ſocieties; the ground in many places being covered with the little hillocks formed by the earth caſt out in forming the burrows, which are ſaid to be about a ſpan deep, with eight or more paſſages: they are fond of tulip-roots, which form a principal article of their food. They appear chiefly in the ſpring, when they are very numerous, but are rarely ſeen in autumn; and are ſuppoſed either to migrate in autumn, or to conceal themſelves among the buſhes, &c. and in the winter to ſhelter themſelves in hay-ricks. The head in this ſpecies is thick, and the noſe blunt; the whiſkers white; the ears oval and naked; the limbs ſhort and ſtrong, and the tail ſlender.

35. Mus lagurus, the hair-tailed mouſe: tail very ſhort; body cinereous, white beneath; ears ſhorter than the fur, ſubtetradactylous fore-feet, and a black line all along the back. This ſpecies is of a fine pale brown above, with blackiſh hairs intermixed, and has a black dorſal line or ſtripe running from the noſe to the tail, which is extremely ſhort and villoſe, ſo as to reſemble the ſcut of a hare in miniature: the throat, belly, and feet, are white. This little animal delights in dry ſandy plains of the harder kind, where it can form its burrows: it feeds chiefly on the roots of the dwarf Iris (Iris pumila), but alſo on grain and ſeveral other plants and ſeeds, even ſuch as are bitter, as the Pontic and ſea wormwood. It is an animal of a fierce diſpoſition. The length of this ſpecies is between three and four inches. It inhabits Siberia, and particularly the parts above the Yaik, Irtiſh, and Jeneſei. It is an animal that ſleeps much, rolling itſelf up like the marmot; and ſometimes migrates, in great troops, from one part of the country to another.

36. Mus torquatus, the collared mouſe: body ferruginous, with duſky variegations; ears ſhorter than the fur; interrupted white collar, and black ſpinal ſtripe; fore-feet five-toed; tail ſhort. This ſpecies is a native of thoſe parts of Siberia which border on the river Oby, and makes occaſional migrations. Its ſize is that of a large meadow-mouſe: its colour on the upper parts is an elegant ferruginous, variegated with numerous ſmall duſky undulations; and round the neck is a white collar, while the forehead and top of the head are duſky, which colour curves down beyond the cheeks on each ſide, ſo as to form a duſky collar next to the white one: the cheeks are white, as is alſo the belly: the breaſt and ſides are tinged with light orange-colour: the tail is extremely ſhort, and is brown, tipped with white hairs. This ſpecies is ſaid to feed chiefly on the rein-deer lichen (Lichen rangiferinus) and the viviparous biſtort (Polygonum viviparum), the roots of which are often found in its holes or burrows, which are formed with ſeveral paſſages dug under the turfy ſoil.

37. Mus lemmus, the lemming: tail ſhort; ears ſhorter than the fur, pentadactylous fore-feet; body white beneath, variegated above with black, white, and fulvous. The wonderful migrations of this ſpecies have long rendered it celebrated in the annals of natural hiſtory: it is remarkable, however, that no accurate figure of it was publiſhed till Dr. Pallas cauſed it to be engraved in his excellent work on the Glires. The firſt deſcriber of the lemming ſeems to have been Olaus Magnus, from whom ſeveral of the older naturaliſts have copied their accounts. Afterwards Wormius gave a more particular deſcription; ſince which, Ricaut in the Philoſophical Tranſactions, Linnæus in the Acta Holmienſia, and Dr. Pallas in his publication before-mentioned, have ſtill farther elucidated its hiſtory and manners. The lemming differs in ſize and colour according to the regions it inhabits: thoſe which are found in Norway being almoſt as large as a water-rat, while thoſe of Lapland and Siberia are ſcarcely larger than a field-mouſe; the Norvegian meaſuring more than five inches from noſe to tail, while thoſe of Lapland and Siberia ſcarcely exceed three. The colour of the Norway kind is an elegant variegation of black and tawny on the upper parts, diſpoſed in patches and clouded markings: the ſides of the head and the under parts of the body being white; the legs and tail greyiſh. In the Lapland kind the colour is chiefly a tawny-brown above, with ſome indiſtinct duſky variegations; and beneath of a dull white: the claws are alſo ſmaller than in the Norvegian animal. The head of the lemming is large, ſhort, thick,

and well furred; the ſnout very obtuſe; the ears very ſmall, rounded, and hid in the fur; the eyes ſmall; the neck ſhort and broad; the body thick; and the limbs ſhort and ſtout, eſpecially the fore-legs: the fore-feet are broad, furniſhed with five toes, which have ſtrong, compreſſed, and ſomewhat-crooked, claws, of which the three middle ones are longer than the reſt: on the hind-feet are alſo five toes, with ſmaller claws than thoſe of the fore-feet: the tail is very ſhort, thick, cylindric, obtuſe, and covered with ſtrong hairs, diſpoſed like thoſe of a pencil at the tip.

The natural or general reſidence of the lemming is in the alpine or mountainous parts of Lapland and Norway, from which tracts, at particular but uncertain periods, it deſcends into the plains below, in immenſe troops, and by its incredible numbers becomes a temporary ſcourge to the country; devouring the grain and herbage, and committing devaſtations equal to thoſe cauſed by an army of locuſts. Theſe migrations of the lemming ſeldom happen oftener than once in ten years, and in ſome diſtricts ſtill leſs frequently; and are ſuppoſed to ariſe from an unuſual multiplication of the animals in the mountainous parts they inhabit, together with a defect of food; and, perhaps, a kind of inſtinctive preſcience of unfavourable ſeaſons; and it is obſervable that their chief migrations are made in the autumn of ſuch years as are followed by a very ſevere winter. The inclination, or inſtinctive faculty, which induces them, with one conſent, to aſſemble from a whole region, collect themſelves into an army, and deſcend from the mountains into the neighbouring plains, in the form of a firm phalanx, moving on in a ſtraight line, reſolutely ſurmounting every obſtacle, and undiſmayed by every danger, cannot be contemplated without aſtoniſhment. All who have written on the ſubject agree that they proceed in a direct courſe, ſo that the ground along which they have paſſed appears at a diſtance as if it had been ploughed; the graſs being devoured to the very roots, in numerous ſtripes, or parallel paths, of one or two ſpans broad, and at the diſtance of ſome ells from each other. This army of mice moves chiefly by night, or early in the morning, devouring the herbage as it paſſes, in ſuch a manner, that the ſurface appears as if burnt. No obſtacles which they happen to meet in their way, have any effect in altering their route; neither fires, nor deep ravines, nor torrents, nor marſhes, nor lakes: they proceed obſtinately in a ſtraight line; and hence it happens that many thouſands periſh in the waters, and are found dead by the ſhores. If a rick of hay or corn occurs in their paſſage, they eat through it; but, if rocks intervene, which they cannot paſs, they go round, and then reſume their former ſtraight direction. If diſturbed or purſued while ſwimming over a lake, and their phalanx ſeparated by oars or poles, they will not recede, but keep ſwimming directly on, and ſoon get into regular order again; and have even been ſometimes known to endeavour to board or paſs over a veſſel. On their paſſage over land, if attacked by men, they will raiſe themſelves up, uttering a kind of barking ſound, and fly at the legs of their invaders; and will faſten ſo fiercely at the end of a ſtick, as to ſuffer themſelves to be ſwung about before they will quit their hold; and are with great difficulty put to flight.

It is ſaid that an inteſtine war ſometimes takes place in theſe armies during their migrations, and that the animals thus deſtroy each other. The major part, however, of theſe hoſts, is deſtroyed by various enemies, and particularly by foxes, owls, hawks, and weeſels, excluſive of the numbers which periſh in the waters; ſo that but a ſmall number ſurvive to return, which they are ſometimes obſerved to do, to their native mountains.

In their general manner of life they are not obſerved to be of a ſocial diſpoſition, but to reſide in a kind of ſcattered manner, in holes beneath the ſurface, without laying up any regular proviſion, like ſome other animals of this tribe. They are ſuppoſed to breed ſeveral times in a year, and to produce five or ſix at once. It has been obſerved that the females have ſometimes brought forth during their migrations, and have been ſeen carrying ſome in their mouths, and others on their backs. In ſome parts of Lapland they are eaten, and are ſaid to reſemble ſquirrels in taſte. It was once believed that theſe animals fell from the clouds at particular ſeaſons, and ſome have affirmed that they have ſeen a lemming in its deſcent; but an accident of this kind is eaſily accounted for, on the ſuppoſition of a lemming eſcaping now and then from the claws of ſome bird which had ſeized it, and thus falling to the ground; a circumſtance which is ſaid not unfrequently to take place when the animals are ſeized by crows, gulls, &c.

38. Mus Hudſonius, the Hudſon's Bay mouſe: no ears; tail ſhort; aſh-coloured above, white beneath, with yellowiſh-brown dorſal ſtripe, and pentadactyle hind-feet. The length of this ſpecies is about five inches, and the colour a pale cinereous, tinged with tawny, and marked with a browniſh dorſal ſtripe: the fur is long and very ſoft; the limbs ſhort and ſtrong; the tail very ſhort, and terminated by briſtly hairs. The female is ſmaller than the male, which is alſo diſtinguiſhed by the ſuperior ſize and ſtrength of the two middle claws of the fore-feet, which are not only very thick and ſtout, but are bifid at their extremities. This ſpecies is deſcribed by Dr. Pallas, but only from ſome ſkins which were received from Labrador; ſo that its particular hiſtory and manners are unknown.

39. Mus Lenæ, the Lena mouſe: tail ſhort, covered with coarſe hair; toes four before, five behind; body white. Inhabits the banks of the river Lena, in Ruſſia, in the government of Irkutſk. It is about three inches long.

40. Mus maulinus. This will be found among the Marmots, to which Gmelin thinks it may poſſibly belong, though he has left it here. Turton has removed it. See ARCTOMYS maulinus, vol. ii. p. 129.

IV. *Cheeks pouched.*

41. Mus acredula, the Siberian hamſter, or Yaik rat: yellowiſh-grey above, whitiſh beneath, with pouched cheeks and ſinuated ears. This ſpecies is a native of Siberia, and particularly of the deſerts about the Yaik. It meaſures only four inches, and the tail about three-quarters of an inch. The upper parts of the body are of a cinereous yellow mixed with brown, and the under parts whitiſh: the face alſo is whitiſh: the ſnout is blunt, the ears moderately large, the eyes full, and the body ſhort and thick. On the fore-feet are four toes, and on the hind-feet five, all furniſhed with claws of moderate ſtrength. This animal is ſaid to make its excurſions for food chiefly by night, confining itſelf during the greateſt part of the day to its burrow.

42. Mus cricetus, the common or German hamſter: reddiſh-brown, with three white ſpots on each ſide; abdomen black. Of the pouched rats, this ſpecies is the moſt remarkable; and indeed is the only European ſpecies provided with thoſe peculiar receptacles, which are ſituated on each ſide the mouth, and when empty are ſo far contracted as not to appear externally, but when filled reſemble a pair of tumid bladders, having a ſmooth veiny ſurface; concealed, however, under the fur or ſkin of the cheeks, which bulge out extremely in this ſtate. They are ſo large as to hold the quantity of a quarter of a pint, Engliſh meaſure.

The general ſize of the hamſter is nearly that of the common rat; but it is of a much thicker form, and has a ſhort tail. Its colour is a pale reddiſh-brown above, and black beneath. The muzzle is whitiſh, the cheeks reddiſh, and on each ſide the body are three moderately-large oval white ſpots, of which thoſe on the ſhoulders are the largeſt: the ears are moderately large and rounded, and the tail almoſt bare, and about three inches long: on the fore-feet are four toes, with a claw in place of a fifth; and on the hind-feet are five toes. Sometimes the hamſter varies in colour, being found either black with a white muzzle, or of a pale yellowiſh white. The male is always much larger than the female. On each ſide the lower part of the back is an almoſt bare ſpot, covered only with very ſhort down.

The common hamſter inhabits Siberia and the ſouth of Ruſſia. It is alſo found in Poland, as well as in many parts of Germany. They are very deſtructive in ſome diſtricts, devouring great quantities of grain, which they carry off in their cheek-pouches, and depoſit in their holes in order to eat during the autumn. The habitations which they dig, to the depth of three or four feet, conſiſt of more or fewer apartments, according to the age of the animal: a young hamſter makes them hardly a foot deep; an old one ſinks them to the depth of four or five feet; and the whole diameter of the reſidence, taking in all its habitations, is ſometimes eight or ten feet. The principal chamber is lined with dried graſs, and ſerves for a lodging; the others are deſtined for the preſervation of proviſions, of which he amaſſes a great quantity during the autumn. Each hole has two apertures; the one deſcending obliquely, and the other in a perpendicular direction, and it is through this latter that the animal goes in and out. The holes of the females, who never reſide with the males, are ſomewhat different in their arrangement, and have more numerous paſſages. The female breeds two or three times a-year, producing five or ſix, and ſometimes as many as ſixteen or eighteen. The growth of the young is rapid, and they are ſoon able to provide for themſelves.

The hamſter feeds on all kinds of herbs and roots, as well as on grain, and even occaſionally on the ſmaller animals. "In harveſt-time (ſays Mr. Allamand) he makes his excurſions for proviſion, and carries every article he can find into his granary. To facilitate the tranſportation of his food, Nature has provided him with two pouches in the inſide of each cheek. On the outſide theſe pouches are membranous, ſmooth, and ſhining; and in the inſide are a great many glands, which continually ſecrete a certain fluid, to preſerve their flexibility, and to enable them to reſiſt any accidents which may be occaſioned by the roughneſs or ſharpneſs of particular grains." On the approach of winter the hamſter retires into his ſubterraneous abode, the entry of which he ſhuts up with great care; and, thus remaining in a ſtate of tranquillity, feeds on his collected proviſion till the froſt becomes ſevere; at which period he falls into a profound ſlumber, which grows into a confirmed torpidity, ſo that the animal continues rolled up, with all its limbs inflexible, its body perfectly cold, and without the leaſt appearance of life. In this ſtate it may even be opened; when the heart is ſeen alternately contracting and dilating, but with a motion ſo ſlow as to be ſcarcely perceptible, not exceeding fifteen pulſations in a minute, though in the waking ſtate of the animal it beats a hundred and fifty pulſations in the ſame time. It is added, that the fat of the creature has the appearance of being coagulated, that its inteſtines do not exhibit the ſmalleſt ſymptoms of irritability on the application of the ſtrongeſt ſtimulants, and the electric ſhock may be paſſed through it without effect. This lethargy of the hamſter has been generally aſcribed to the effect of cold alone; but late obſervations have proved, that, unleſs at a certain depth beneath the ſurface, ſo as to be beyond the acceſs of the external air, the animal does not fall into its ſtate of torpidity, and that the ſevereſt cold on the ſurface does not affect it. On the contrary, when dug up out of its burrow, and expoſed to the air, it infallibly awakes in a few hours. Under other circumſtances, the waking of the hamſter is a gradual operation: he firſt loſes the rigidity of his limbs, then makes profound inſpirations, at long intervals; after this he begins to move his limbs, opens his mouth, and utters a ſort of unpleaſant rattling ſound. After continuing theſe operations for ſome time, he at length opens his eyes, and endeavours to riſe, but reels about at firſt, as if in a ſtate of intoxication; till at length, after reſting a ſmall ſpace, he perfectly recovers his uſual powers. This tranſition from torpidity to activity requires more or leſs time, according to the temperature of the air, and other circumſtances. When expoſed to a cold air he is ſometimes two hours in waking; but in a warmer air the change is effected in half the time.

The manners of the hamſter are generally repreſented as far from pleaſing. No ſociety appears to exiſt among theſe animals. They are naturally very fierce, and make a deſperate defence when attacked; they alſo purſue and deſtroy every animal which they are capable of conquering, not excepting even the weaker individuals of their own ſpecies. They are ſaid to be particularly fond of the ſeeds of liquorice, and to abound in the diſtricts where that plant is cultivated. According to Mr. Sultzer, they abound to ſuch a degree at Gotha, that in one year 11,564, in another 54,429, and in a third 80,139, of their ſkins were delivered in the Hotel de Ville of that capital, where the hamſter is proſcribed on account of the devaſtations it commits among the corn. In winter the peaſants go what they call a hamſter-neſting; and, when they diſcover their retreat, dig down till they find the hoard, and are commonly well paid; for, beſides the ſkins of the animals, which are valuable furs, they frequently find two buſhels of good grain in the magazine.

43. Mus arenarius, the ſand-rat: body cinereous; feet, ſides of the body, abdomen, and tail, white. The ſand-rat is about four inches in length, with a tail about one inch or rather more: the head is longiſh, and the ſnout ſharp; the cheek-pouches large, the ears large and oval, and the eyes rather ſmall. It is an inhabitant of the ſandy plains of Baraba, near the river Irtiſh, in Siberia, where it forms deep burrows, at the bottom of which is a neſt compoſed of the ſea-lyme-graſs and other plants. It is ſaid to be chiefly a nocturnal animal, and of a fierce untameable diſpoſition.

44. Mus phæus, the Aſtracan mouſe, or Zarizyn rat: aſh-brown above, white beneath. This ſpecies meaſures about three inches and a half in length, excluſive of the tail, which is about three quarters of an inch long: the forehead is elevated; the edges of the eyelids black; the ears naked and oval. The colour of the animal on the upper parts is pale cinereous or hoary, with a duſky ſtreak along the back: the ſides are whitiſh; and the circumference of the mouth, under ſide of the body, and the extremities of the limbs, milk-white. It is an inhabitant of the deſert of Aſtracan, and particularly about Zarizyn, where it is occaſionally taken in the winter-ſeaſon in places about ſtables and out-houſes. It is alſo common among the Hyrcanian mountains, and about the Perſian villages, where it commits great ravages among the rice. It does not grow torpid during winter, as is proved by the ſtomachs of ſuch as are taken in that ſeaſon being found full of food. This and the preceding ſeem to have been firſt diſtinctly deſcribed by Dr. Pallas.

45. Mus ſongarus, the ſongar-rat: cinereous above, white beneath; with black ſpinal line, and the ſides patched with white. This is a native of Siberia, where, like others of this tribe, it forms its burrows in dry ſandy places. Its length is about three inches, and its tail ſcarcely more than a quarter of an inch. It is an animal of a thick ſhape, with a large head, blunt noſe, ſmall eyes, and large oval ears, which are but very ſlightly covered with hair. Its colour on the upper parts is pale grey, with a black dorſal line, and the ſides marked with ſome large white ſpots or patches, which are confluent in ſome parts, and in others bounded with brown: the under parts and legs are white. This elegant ſpecies appears to have been firſt diſcovered by Dr. Pallas, who obſerves, that it makes a nearer approach to the hamſter in its form, and in the diſpoſition of its colours, than the reſt of this tribe; Dr. Pallas, in one of the neſts, which was formed of dried herbs, found ſeven young, which were ſtill blind: theſe he preſerved, and they ſoon grew perfectly tame, and

would feed from his hand, lap milk, and, when placed on a table, ſhowed no deſire to eſcape: they were kept in a box, with ſand, in which they delighted to burrow. They frequently ate in a ſitting poſture, like a ſquirrel; and waſhed their faces with their paws: they generally wandered about during the day, and ſlept all night rolled up: their voice reſembled that of a bat.

46. Mus furunculus, the Baraba rat: yellowiſh-grey above, whitiſh beneath, with black dorſal ſtreak. This ſpecies, which inhabits the ſandy plain of Baraba, towards the river Oby, is about the ſame length with the preceding; but the tail is much longer, meaſuring near an inch: the ſnout is of a ſharper form, and the body more ſlender. Nothing particular is known of its way of life, the ſpecimens from which Dr. Pallas drew up his deſcription, having been taken running about the plain, and their ſkins brought to him in a dried ſtate.

47. Mus burſarius, the Canada rat: aſh-coloured, with ſhort nearly-naked tail, and pouched cheeks; the claws of the fore-feet very large, and formed for burrowing in the ground; cheek-pouches very large. This, which is a ſpecies but lately diſcovered, ſeems to be the moſt remarkable of all the pouched rats for the proportional ſize of the receptacles. It is a native of Canada; and the individual deſcribed and figured in the Linn. Tranſ. vol. v. was taken by ſome Indians in the year 1798, and afterwards preſented to the lady of governor Preſcot. It is about the ſize of the grey or Norway rat; and is of a pale greyiſh-brown colour, rather lighter beneath: the length to the tail is about nine inches; and that of the tail, which is but ſlightly covered with hair, about two inches: the legs are ſhort; the fore-feet ſtrong, and well adapted for burrowing in the ground, having five claws, of which the three middle ones are very large and long; the interior much ſmaller, and the exterior very ſmall, with a large tubercle or elbow beneath it. The claws on the hind-feet are comparatively very ſmall; but the two middle are larger than the reſt, and the interior one is ſcarcely viſible: the teeth are extremely ſtrong, particularly the lower pair, which are much longer than the upper: the ears are very ſmall. The manners of this ſpecies are at preſent unknown; but it may be concluded that it lays in a ſtock of proviſions, either for autumnal or winter food. The pouches of the individual ſpecimen above deſcribed, when firſt brought to governor Preſcot, were filled with a kind of earthy ſubſtance; it is, therefore, not improbable that the Indians who caught the animal might have ſtuffed them thus, in order to preſerve them in their utmoſt extent. This curious animal is ſhown on the Plate at fig. 4.

48. Mus anomalus, the anomalous rat: tail long, ſcaly, partly naked; prickles mixed with hairs on the body. Deſcribed by John Vaughan Thomſon, eſq. in the Linn. Tranſ. vol. xi. "This unique and hitherto-unnoticed ſpecies (ſays Mr. T.) is a native of the iſland of Trinidad, where it is underſtood not to be very uncommon, although in the ſpace of ſix years' reſidence I only met with two ſpecimens. It is of the habit and ſize of the common rat; the noſe rather ſharp, the ears naked and rounded, and of moderate ſize: the feet have ſix callous tubercles beneath, are all five-toed, the innermoſt toes or thumbs extremely ſhort and ſmall; the whole armed with ſharp claws, thoſe on the exterior and interior toes being ſmall in proportion: tail about ſix inches in length, ſcaly, with a few ſcattered ſetoſe hairs: teſticles in the male very large, and ſituated under the baſe of the tail. The two upper teeth are placed without the rictus, or opening of the mouth, which is not larger than to permit a grain of Indian corn to paſs through it. The cheek-pouches are formed by a duplicature of the common integuments, open below, extending from the baſe of the upper teeth to the throat, and as high as the eye and ear: theſe cavities are lined throughout with ſcattered whitiſh hairs, and formed in the ſame manner as the abdominal pouch of the Didelphis, &c. not at all in the way deſcribed by Buffon of the Mus cricetus, and the other pouched rats hitherto diſcovered. The body is covered with fine lanceolate ſpines, declining towards the throat and belly into a coarſe ſetoſe hair, and every-where intermixed with a finer kind of hair. The whole of the upper parts are of a purpliſh-brown colour; lower part of the cheeks, throat, inſide of the limbs, belly, and under half of the tail, white; upper half of the tail nearly black. The habits of this tribe of rats are ſingular and curious: where numerous, they do incalculable miſchief in barns and granaries; for, not ſatisfied with what they can eat on the ſpot, they ſtow away and carry off in their cheek-pouches no inconſiderable quantity, to be depoſited in their retreats for times when food is not to be procured from without. The preſent ſpecies, in addition to being covered with ſpines, differs from the reſt included in the ſame ſection, in the great length of the tail. Some doubts might be entertained whether it did not more properly belong to the genus Hyſtrix; but indeed, when we examine into Nature with due attention, we find ſhe delights to mock the vain efforts of mortals to ſhackle and confine her within the bounds of generic characters, which are found to run ſo into each other, as to render all attempts at method more or leſs imperfect."

V. *Subterraneous or Ground Rats, reſembling Moles in habit and manner of life. They have no external ears; the eyes very ſmall; tail ſhort, or perhaps none.*

49. Mus talpinus, the mole-rat: body brown; fore-teeth wedged; fore-feet five-toed, and formed for digging. This ſpecies is about four inches long, with a large ſhort head, and thick truncated ſnout. Its upper teeth are long and flat, extending out of its mouth; its eyes are ſmall, hid in the fur; its ears are not viſible; its tail ſcarcely appears without the fur. Its upper parts are duſky; chin, belly, and limbs, whitiſh. It inhabits the open grounds of the temperate parts of Ruſſia and Siberia; it loves a black turfy ſoil, and is frequent in meadows near villages: its manners reſemble thoſe of the mole. They do not become torpid in the winter, but make their neſt deep in the ground, and keep themſelves warm by lining it with ſoft graſs. They are very eaſily taken, but ſoon grow ſick in confinement, unleſs a quantity of earth is put into the place where they are kept. They are in heat in the end of March or beginning of April; and the females have then a ſtrong muſky ſmell; they bring three or four at a time. They vary in colour; ſome are found quite black.

50. Mus maritimus, the African mole-rat: yellowiſh-brown above, whitiſh beneath, with very large and long naked teeth, pentadactyle feet, no external ears, and ſhort tail. Of all the ſubterraneous ſpecies this is the largeſt yet diſcovered, being of the ſize of a rabbit, and meaſuring a foot from noſe to tail, which is about two inches long, flattiſh, and covered with long briſtly hair horizontally diſpoſed on each ſide. The head is large, the noſe black, the end ſomewhat flattened and wrinkled: the eyes very ſmall, and hid in the fur: there is no appearance of external ears, the foramina alone being diſcoverable. The front-teeth are very large; the upper pair are the third of an inch long, and are furrowed lengthways; the lower pair are an inch and a quarter long, and naked, or naturally expoſed to view, the lip not cloſing over them; theſe lower teeth it has the power of ſeparating or divaricating at pleaſure, in the manner of the kanguroo. On the fore-feet are five toes, of which the interior is the longeſt; the claws very long and ſharp, that on the thumb being ſhorter than the reſt: the hind-feet, which are very long, large, and naked, have alſo five toes, with much ſhorter and weaker claws than thoſe of the fore-feet: the hair on the ſides of the feet is very ſtrong and briſtly. This large ſpecies is a native of the Cape of Good Hope, and is there known by the name of the *ſand-mole*, being chiefly found in the neighbourhood of the ſhores, and never in the interior parts of the country. It renders the ground, in the places it frequents, ſo hollow, by flinging up the earth in forming its burrows, as to be highly inconvenient to travellers; breaking every ſix or ſeven minutes under the horſes' feet, and letting

them in up to the ſhoulders. It is ſuppoſed to feed principally on the bulbous Ixiæ and Antholyzæ. From the frequency of this ſpecies about the Cape, it is ſuppoſed to be an animal of a prolific nature. See the Plate, fig. 5.

51. Mus Capenſis, the Cape mole-rat: rufo-cinereous above, paler beneath, with very large naked front-teeth; pentadactyle feet, and white muzzle. This animal meaſures about ſeven inches to the tail, which is very ſhort, nearly white, and flattiſh. The general colour is a duſky rufous aſh-brown, paler or more inclining to whitiſh beneath: the end or tip of the noſe is naked and black; the remainder white, and on each ſide are ſeveral ſtrong white briſtles: the chin, lower ſides of the cheeks, and ſpaces round the eyes, are alſo white, and on the hind-part of the head is an oval white ſpot; the teeth are exſerted or naked in a very remarkable degree, as will be evident from the figure (6); and it is very deſtructive to gardens, flinging up hillocks, and eating various kinds of roots.

52. Mus aſpalax, the Daurian mole-rat: yellowiſh-cinereous, with large cuneated front-teeth, and long claws on the fore-feet. In this ſpecies, though the upper fore-teeth are naked, the lower are covered with a movable lip. There is no appearance of external ears, and the eyes are extremely ſmall and deeply ſeated. The head is flat and blunt; the body ſhort, and ſomewhat depreſſed; the limbs very ſtrong, eſpecially the fore-legs, the feet of which are large, naked, and well adapted for burrowing in the ground, having five toes, the three middle of which are furniſhed with long and ſtrong ſlightly-curved claws: the hind-feet are alſo naked, and have five toes with ſmall claws. This animal burrows, like the reſt of this diviſion, raiſing numerous hillocks in its progreſs. It is a native of the Altaic Mountains, and of the country beyond Lake Baikal. It differs conſiderably in ſize in different regions; thoſe of the Altaic Mountains ſometimes meaſuring near nine inches in length. The Ruſſians call it the *earth-bear*.

53. Mus typhus, the blind rat: without eyes, ears, or tail. Next to the M. maritimus, this is perhaps the largeſt and moſt remarkable of its tribe; meaſuring between ſeven and eight inches in length, and being entirely deſtitute both of eyes and tail: the defect of the former is a very ſingular circumſtance, and the animal perhaps affords the only inſtance of a truly blind or eyeleſs quadruped. In the mole, the eyes, however ſmall and deeply ſeated, are yet perfect in their kind, and, though not calculated for acute viſion, ſtill enable the animal to avoid the danger of expoſure; but in the quadruped now under conſideration, there are merely a pair of ſubcutaneous rudiments of eyes, ſmaller than poppy-ſeeds, and covered with a real ſkin. It is probable, however, that even theſe minute organs are ſufficient to give an obſcure perception of light, and to enable the animal to conſult its ſafety by generally continuing beneath the ſurface. The external ears are alſo wanting; and the foramina leading to the internal organs are very ſmall, entirely hid by the fur, and ſituated at a great diſtance backwards. There is ſcarcely any diſtinction between the head and neck; and the whole form of the animal, like that of the mole, is calculated for a ſubterraneous life; the body being cylindrical, the limbs very ſhort, and the feet and claws, though ſmall and weak in compariſon with thoſe of moles, yet calculated for digging or burrowing in the ground. It delights in moiſt and turfy ſoils; and lives in great numbers in the ſame places with the earleſs marmots. It burrows beneath the turf to a very conſiderable extent, with ſeveral lateral paſſages made in queſt of the roots on which it feeds: at the intervals of ſome yards, there are openings to the ſurface to diſcharge the earth, which forms in thoſe places hillocks of two yards in circumference, and of a great height. It works its way with its great teeth, and caſts the earth under its belly with the fore-feet, and again behind it with its hind-feet; and it works with great agility, notwithſtanding its blindneſs. The colour of this animal is of a greyiſh-brown; the fur, which is very thick, ſoft, and downy, being duſky toward the roots, and greyiſh toward the tips: the head is lighter, and the abdomen darker, than the other parts: the lower lip is alſo whitiſh, and ſometimes a white mark extends along the forehead: the front-teeth are very large, and are naturally bare or exſerted: the lower pair being much longer than the upper. This ſingular ſpecies is a native of the ſouthern parts of Ruſſia, where it burrows to a great extent beneath the ſurface, forming ſeveral lateral paſſages, by which it may paſs in queſt of roots, &c. It is ſaid to feed in particular on the roots of the Chærophyllum bulboſum. In the morning-hours it ſometimes quits its hole to baſk in the ſunſhine; but, if diſturbed, inſtantly takes refuge beneath the ſurface; burrowing with great agility, and frequently in a perpendicular direction. Its bite is very ſevere when attacked: it emits a kind of ſnorting ſound, and gnaſhes its large teeth in a menacing manner, raiſing its head at the ſame time. It does not appear that it lies torpid during winter, nor whether it lays in proviſion for that ſeaſon. The Ruſſians call it *ſlepez*, or the blind; the Coſſacks, for the ſame reaſon, ſtyle it *ſochor nomon*. In the Ukraine, the vulgar believe that the touching of a hand, which has ſuffocated this animal, has the ſame virtue in curing the king's-evil, as was once believed to be inherent in the royal family of Great Britain. *Shaw's Gen. Zoology. Linn. Tranſ.* vol. v. vii. xi. *Syſt. of Nat. Hiſt.* by the Editor of this Work.

MUS, a town of the iſland of Sardinia: five miles weſt of Cagliari.

MUS ALPI'NUS, *ſ.* A name given by many authors to the mountain-rat, more commonly known by the name of the marmot. See ARCTOMYS, vol. ii.

MUS PHARAO'NIS, or PHAROAH'S RAT, *ſ.* A name given by the people of Egypt to the ichneumon, a creature of the weaſel kind, which they are very fond of for its deſtroying ſerpents, and keep tame about their houſes, as we do cats. See VIVERRA ichneumon.

MUS TER'RÆ, *ſ.* in botany, a name given by ſome authors to the roots of the Bulbocaſtanum, or earth-nut. It was probably at firſt *muris terræ radix*, the earth-mouſe's root, and ſo called from the earth-mice or field-mice being very fond of them; but, the word *radix* being left out, it ſtands only *mus terræ*.

MU'SA, a town of Arabia, in the province of Yemen. This town is a kind of market for fruit and fowls to Mocha. It is populous, and ſurrounded with walls. It is eighteen miles eaſt of Mocha.

MU'SA, a river of Saxony, which runs into the Elbe near Meiſſen.

MU'SA, *ſ.* [corrupted, or rather refined, from *mauz*, the Egyptian appellation of this valuable plant, and made claſſical in the works of Linnæus, by an alluſion to *muſa*, a muſe; or, with much greater propriety, to *Antonius Muſa*, the phyſician of Auguſtus, who, having written on ſome botanical ſubjects, may juſtly be commemorated in the above name.] The PLANTAIN-TREE; in botany, a genus of the claſs polygamia, order monoecia; or rather claſs hexandria, order monogynia; natural order ſcitamineæ, *Linn.* (muſæ, *Juſſ.*) Generic characters—Calyx: a number of partial ſheaths, on a ſimple common ſtalk, each ovate-oblong, rather concave, large, alternate, containing many flowers; perianthium none. Corolla: ſuperior, unequal, ringent, the petal conſtituting the upper lip; the nectary the lower. Petal erect, ligulate, abrupt, five-toothed, its two ſides meeting at the baſe. Nectary of one leaf, heart-ſhaped, boat-like, compreſſed, pointed, ſhorter than the petal, and inſerted withinſide of its baſe, ſpreading outwards. Stamina: filaments ſix, awl-ſhaped, five of them within the petal, erect, the ſixth within the nectary, reclining; antheræ linear, longitudinally attached from the middle of the filament to its ſummit; ſome of them, in one flower or another, imperfect. Piſtillum: germen inferior, very large, bluntly triangular; ſtyle cylindrical, erect, the length of the petal; ſtigma capitate, roundiſh, with ſix ſlight notches. Pericarpium: berry pulpy, with a coriaceous coat, with three or ſix ſlight angles, gibbous at one ſide, of one cell, ſpongy or hollow in the centre. Seeds: numerous, imbedded in the pulp, roundiſh, roughiſh, excavated at the baſe.—*Eſſential Character.* Calyx a many-flowered ſheath, of one leaf; petal one, ligulate, five-toothed; nectary of one leaf, oppoſite to the petal; berry inferior, with many ſeeds. Moſt of the ſtamens abortive in ſome flowers, piſtil in the others. There are four ſpecies, beſides varieties.

1. Muſa paradiſiaca, the plantain-tree: flower-ſtalk drooping; male flowers permanent; fruit oblong. This plant riſes with a ſoft herbaceous ſtalk fifteen or twenty feet high; and the lower part of the ſtalk is about a yard in circumference, diminiſhing gradually to the top, where the leaves come out on every ſide, which are often more than ſix feet long, and near two feet broad, with a ſtrong fleſhy midrib, and a great number of tranſverſe veins running from the midrib to the borders. The leaves are thin and tender, though very large, ſo that, where they are expoſed to the open air, they are generally torn by the wind. Theſe leaves come out from the ſide of the principal ſtalk, incloſing it with their baſe; they are rolled up at their firſt appearance, but, when they are advanced above the ſtalk, they expand quite flat, and turn backward; as theſe leaves come up rolled in the manner before mentioned, their advance upward is ſo quick, that their growth may be almoſt diſcerned by the naked eye; and, if a line be drawn acroſs, level with the top of the leaf, in an hour's time the leaf will be nearly an inch above it. When the plant is grown to its full height, the ſpike of flowers will appear from the centre of the leaves, which is often near four feet in length, and nods on one ſide. The flowers come out in bunches, thoſe on the lower part of the ſpike being the largeſt; the others diminiſh in their ſize upward; each of theſe bunches is covered with a ſpathe or ſheath, of a fine purple colour within, which drops off when the flowers open. The upper part of the ſpike is made up of male or barren flowers, which are not ſucceeded by fruit. The fruit is eight or nine inches long, and above an inch diameter, a little incurved, and has three angles; it is at firſt green, but, when ripe, of a pale yellow colour; the ſkin is tough, and within is a ſoft pulp of a luſcious ſweet flavour. The ſpikes of fruit are often ſo large as to weigh upwards of forty pounds. It is a native of the Eaſt Indies, and other parts of the Aſiatic continent; probably alſo of Africa. Cultivated generally between the tropics. Said to have been tranſported to the Weſt Indies from the Canary-iſlands, to which it is believed that it was carried originally from Guinea. It ſeems to have migrated with mankind from Aſia into the numerous iſlands of the Southern Pacific Ocean, where it is univerſal in all the iſlands that are inhabited, and has degenerated into numerous varieties. It was not known in America before the arrival of the Spaniards. It was cultivated here in 1690, in the royal garden at Hampton-court; and commonly flowers with us from October to December.

Johnſon, the editor of Gerard's Herball, ſays, that April 10, 1633, his much-honoured friend Dr. Argent, then preſident of the College of Phyſicians in London, gave him a plant of the Muſa, which he received from the Bermudas. The fruit on it was unripe; but he hung up the ſtalk with the fruit thereon in his ſhop, where it became ripe about the beginning of May, and laſted until June; the pulp was very ſoft and tender, and it did eat ſomewhat like a muſk-melon. Gerard and other old authors name it *Adam's apple-tree,* from a notion that it was the forbidden fruit of Eden; whilſt others ſuppoſed this fruit to have been the grapes brought out of the promiſed land to Moſes. Dampier thus ſpeaks of it: "The plantain is the king of all fruit, not excepting the coco itſelf. The tree is three feet, or three feet and a half, round, and ten or twelve high. It is not raiſed from ſeed, but from the roots of other old trees. If theſe young ſuckers are taken out of the ground, and planted in another place, it will be fifteen months before they bear; but, if let ſtand in their own native ſoil, they will bear in twelve months. As ſoon as the fruit is ripe the tree decays, and many young ones grow up to ſupply its place. The fruit of it is ſo excellent, that the Spaniards give it the preference to all others, as moſt conducing to life. It grows in a cod ſix or ſeven inches long, and as big as a man's arm; the rind is ſoft, and yellow when ripe. It reſembles in ſhape a hog's pudding. The incloſed fruit is no harder than butter is in winter, and much of the colour. It is of a delicate taſte, and melts in one's mouth like marmalet. It is all pure pulp, without any ſeed, kernel, or ſtone. The fruit is ſo much eſteemed by all Europeans that ſettle in America, that, when they make a new plantation they commonly begin with a good plantain-walk; enlarging it as their family increaſes. Some or other of the trees are bearing moſt part of the year; and this is many times the whole food on which a family ſubſiſts. They thrive only in rich flat ground; poor ſandy ſoil will not bear them. When this fruit is uſed only for bread, it is roaſted or boiled when it is juſt full grown, but not yet ripe, or turned yellow. The Indians and Negroes eat them in a variety of ways, both raw and dreſſed, freſh and preſerved: they alſo make a fermented liquor with them, which they drink always new. The ordinary people of Mindanao wear no other cloth but what is made from the fibres of the trunk."

In the Weſt Indies the fruit is generally uſed when full grown, but before it ripens: it is commonly peeled and roaſted, and is thus diſtributed among the negroes, by whom it is moſtly uſed; though many of the whites prefer it to any of the bread kind, eſpecially whilſt young and tender. The negroes generally boil it with other meſſes, as ſalt-fiſh, beef, pork, pickle, or crabs; and find it a hearty wholeſome food. As the fruit ripens, it becomes ſoft and ſweetiſh, and is then generally made into tarts, or ſliced and fried with butter. The juice of the tree is a very rough aſtringent. The leaves are generally uſed to dreſs bliſters; and when dried are made into mats, or employed to ſtuff mattreſſes. The Spaniards dry and preſerve the fruit as a ſweetmeat. The ripe fruit and maize together are the beſt food for hogs put up to fat, and give them a moſt exquiſite flavour and firmneſs. On thruſting a knife into the body of the plant, the aſtringent limpid water that iſſues out is given with great ſucceſs to perſons ſubject to a ſpitting of blood, and in fluxes. The fruit of ſome out of the many varieties is eaten in the iſlands of the South Seas raw, of others roaſted or baked, according to their different qualities. The trees which bear the former are the chief ornaments of the gardens in Otaheite; the latter are in the mountainous tracts of the iſlands that are covered with woods. This fruit is eaſy of digeſtion, very wholeſome and agreeable to ſeamen after a long voyage: to many however its clammy ſweetneſs is unpleaſant; and it is reputed to diſagree with weak ſtomachs, and to bring on a conſtipation and flatulency of the bowels. On the annexed Plate, the plantain-tree is repreſented at fig. 1. Fig. *a* repreſents the fruit half ſtripped of its bark; *b*, the fruit cut through the middle; *c*, the fruit cut tranſverſely, diſtinguiſhing the three cells and the ſeeds; *d*, another variety cut tranſverſely, repreſented in the Hortus Malabaricus, but having the cells better diſtinguiſhed here.

2. Muſa ſapientum, the banana-tree: flower-ſtalk drooping; male flowers deciduous; fruit ovate. This ſpecies differs from the preceding in having its ſtalks marked with dark purple ſtripes and ſpots; the fruit is ſhorter and rounder, with a ſofter pulp of a more luſcious taſte. Dampier ſays the banana is leſs luſcious than the plantain, yet of a more delicate taſte. According to Long, it has a ſofter mellower taſte, and is more proper for fritters than the plantain. A very excellent drink, reſembling the beſt Southam cider, is made from the juice

of the ripe fruit fermented. A marmalade is likewiſe made of it, eſteemed an excellent pectoral, cooling and refreſhing. The banana-fruit has been noted for its efficacy in correcting thoſe ſharp humours which generate or accompany the fluxes to which Europeans are often ſubject on their firſt coming into the Weſt Indies. The roaſted fruit would be an uſeful ſea-ſtore; would keep a long time, packed in dry leaves, and ſtowed in tight caſks; and would require only a freſh roaſting or heating, when wanted for uſe. It was cultivated in 1731, by Mr. Miller, who ſays, "Theſe two fruits are among the greateſt bleſſings beſtowed by Providence upon the inhabitants of hot climates. Three dozen plantains are ſufficient to ſerve one man for a week inſtead of bread, and will ſupport him much better." Though the plantain and banana are generally conſidered as different, yet Loureiro, Forſter, and Gærtner, cannot find any certain ſpecific diſtinction, and agree that Linnæus's is inſufficient. Gærtner unites them under the character of a one-celled berried fruit, which ſeparates them from Muſa troglodytarum, that having a three-celled bellied fruit.

There are many varieties of plantain and banana, as might be expected in plants ſo extenſively cultivated. Rumphius has ſet down ſixteen, which he obſerved in the Molucca-iſlands. One of theſe is repreſented at fig. 2.

3. Muſa troglodytarum, the wild plantain: flower-ſtalk erect; male flowers deciduous. The ſtem of this is only four feet high, and about an inch in thickneſs. Leaves linear, three feet long, and five inches wide. Spathes linear, alternate, ſcarlet, many; berry ſcarlet, ovate, compreſſed, two inches long, not eatable. Seeds numerous, in a double row in each cell, fixed to the axis of the fruit, variouſly angular, jointed into one another as it were like the ſtones of a pavement, without any pulp between them, acuminate towards the umbilicus, very ſmooth, ferruginous or blackiſh. Thunberg ſays, that they are almoſt as large as linſeed, or the ſeed of flax. Gærtner aſſerts, that this is a genuine ſpecies of Heliconia; but this muſt be a miſtake. Native of the Molucca-iſlands.

4. Muſa coccinea, the ſcarlet plantain-tree: flowers capitate, erect; ſheaths ovate, permanent; ſtamens five. Native of China; and is ſaid to have been firſt introduced into the Britiſh ſtoves by T. Evans, eſq. of Stepney, about the year 1792. This is of much more humble growth than any of the foregoing, and remarkable for the rich ſcarlet colour of its ſheaths, which are imbricated and permanent, forming a cone-like head. The lowermoſt of them often ends in a leaf. Redouté very juſtly obſerves, that theſe ſcales ought to be called bractes, and not to be conſidered as a calyx. This author, as well as Mr. Andrews, deſcribes five ſtamens only in each flower, all alike perfect in ſome, abortive in others.

5. Muſa bihai (of Linnæus). See HELICONIA, vol. ix. p. 322.

Propagation and Culture. In Europe, ſome of theſe plants are preſerved in the gardens of curious perſons, who have hot-houſes capacious enough for their reception; but, as they grow very tall, and their leaves are large, they require more room in the ſtove than moſt people care to allow them. They are propagated by ſuckers, which come from the roots of thoſe plants which have fruited; and many times the younger plants, when they are ſtinted in growth, will put out ſuckers; theſe ſhould be carefully taken off, preſerving ſome fibres to their roots, and planted in pots filled with light rich earth, and plunged into the tan-bed in the ſtove: theſe may be taken off any time in ſummer; and it is beſt to take them off when young, becauſe, if their roots are grown large, they do not put out new fibres ſo ſoon; and, when the thick part of the root is cut in taking off, the plants often rot. During the ſummer ſeaſon theſe plants muſt be plentifully watered; for, the ſurface of their leaves being large, there is a great conſumption of moiſture by perſpiration in hot weather; but in the winter they muſt be watered more ſparingly. The pots in which theſe plants are placed ſhould be large in proportion to the ſize of the plants, for their roots generally extend pretty far, and the earth ſhould be rich and light. The degree of heat with which theſe plants thrive beſt, is much the ſame with the anana, or pine-apple; in which (ſays Mr. Miller) I have had many of theſe plants produce their fruit in perfection, and they were near twenty feet high.

The moſt ſure method to have theſe plants fruit in England is, after they have grown for ſome time in pots, ſo as to have made good roots, to ſhake them out of the pots with the ball of earth to their roots, and plant them into the tan-bed in the ſtove, obſerving to lay a little old tan near their roots for their fibres to ſtrike into; and in a few months the roots of theſe plants will extend themſelves many feet each way in the bark; and theſe plants will thrive a great deal faſter than thoſe which are confined in pots or tubs. When the bark-bed wants to be renewed with freſh tan, there ſhould be great care taken of the roots of theſe plants, not to cut or break them, as alſo to leave a large quantity of the old tan about them, becauſe, if the new tan is laid too near them, it will ſcorch their roots, and injure them. Theſe plants muſt be plentifully ſupplied with water, otherwiſe they will not thrive; in winter they ſhould be watered twice a-week, giving at leaſt two quarts to each plant, but in ſummer they muſt be watered every other day, and double the quantity given to them each time. If the plants puſh out their flower-ſtems in the ſpring, there will be hopes of their perfecting their fruit; but, when they come out late in the year, the plants will ſometimes decay before the fruit is ripe. The ſtoves in which theſe plants are placed ſhould be at leaſt twenty feet in height, otherwiſe there will not be room for them to expand; for, when the plants are in vigour, the leaves are often eight feet in length, and two feet broad; ſo that, if the ſtems grow to be fourteen feet to the diviſion of the leaves, and the houſe is not twenty feet high, the leaves will be cramped, which will retard the growth of the plants; beſides, when the leaves are bent againſt the glaſs, there will be danger of their breaking it, when they are growing vigorouſly; "for I have had in one night the ſtems of ſuch bent leaves force through the glaſs, and by the next morning advanced two or three inches above the glaſs."

"I have ſeen ſome bunches of the fruit of the firſt ſort, which were upwards of forty pounds weight, and perfectly ripe in England; but this is not ſo good a fruit as to tempt any perſon to be at the expenſe of raiſing it in England. The ſecond ſort is preferred to the firſt, for the flavour of its fruit, in all thoſe hot countries where theſe plants abound: the bunches of theſe are not near ſo large as thoſe of the firſt ſort, nor is the ſingle fruit near ſo long; theſe change to a deeper yellow colour as they ripen, but their taſte is ſomewhat like that of mealy figs. Some perſons who have reſided in the Weſt Indies, having eaten ſome of the fruit which were produced in England, thought them little inferior to thoſe which grew in America."

The plantain-tree is cultivated with great care in all our ſugar-colonies. It thrives beſt in a cool, rich, moiſt, ſoil; and is commonly planted in regular walks or fields: it is propagated by the ſhoots, and planted at convenient diſtances; but, as the root throws up a number of ſmall ſhoots every year, the ſpaces between the firſt plants are left pretty conſiderable. When the fruit is ripe, the ſtem decays gradually, and the root begins to throw up young ſhoots. The ſtem is then uſually cut down near the root, to give a ſtronger and quicker growth to the new plants. In the South-Sea iſlands, they put ſome wood-aſhes and burnt plants with a little ſhell-lime into the hole, when they plant the Muſa, by which they ſo accelerate the growth, as to have fruit in ſix and even four months; whereas in the common courſe it is eighteen months before fruit is expected. *Martyn's Miller.*

MU'SA (Antonius), an eminent phyſician at Rome in the time of Auguſtus, was a native of Greece, firſt of ſervile condition, but afterwards, probably on account of his medical ſkill, made a freedman. He ſettled in Rome, where he roſe to ſuch a degree of reputation that the emperor Auguſtus choſe him for his phyſician. His cure of this prince after his life had been deſpaired of is the circumſtance which has rendered him famous. This he appears to have effected by the uſe of cooling remedies, ſuch as lettuces; and likewiſe by ſubſtituting the cold to the warm bath, which laſt had been employed without benefit. For this ſucceſs he received a large pecuniary recompence, with the privilege of wearing a gold ring like the Roman knights. Suetonius further relates, that the joy and gratitude of the people on this occaſion was diſplayed by raiſing a ſtatue to the phyſician at the common expenſe, and placing it by the ſide of that of Eſculapius. It was natural that a remedy approved by ſuch an example ſhould become faſhionable; and we learn from Horace that he himſelf, on Muſa's authority, had renounced his uſual viſits to the warm baths of Baiæ, and uſed the cold bath in the midſt of winter. It may eaſily be credited that Muſa extended too far the uſe of his favourite application; and Dio affirms that it proved as hurtful to young Marcellus as it had been ſalutary to Auguſtus. This phyſician was alſo celebrated for his pharmaceutical ſkill, and many of his compoſitions were popular in the age of Galen and Aetius. He wrote ſeveral works, none of which have come down to modern times. According to Pliny, Euphorbus, phyſician to Juba king of Mauritania, was his brother.

MU'SACH, *ſ.* [Hebrew.] The cheſt in the temple into which the kings put their offerings. *Aſh.*

MUSAC'CHIA, a town of European Turkey, in Albania: thirty-ſix miles ſouth-ſouth-eaſt of Albaſano.

MUSÆ'US, an ancient Greek poet, was, according to Plato and Diodorus Siculus, an Athenian, the ſon of Orpheus, and chief of the Eleuſinian myſteries inſtituted at Athens in honour of Ceres: or, according to others, he was only the diſciple of Orpheus: but, from the great reſemblance which there was between his character and talents and thoſe of his maſter, by giving a ſtronger outline to the figure he was called his *ſon*, as thoſe were ſtyled the *children of Apollo* who cultivated the arts of which he was the tutelar god.

Muſæus is allowed to have been one of the firſt poets who verſified the oracles. He is placed in the Arundelian marbles, epoch 15. 1426 B.C. at which time his hymns are there ſaid to have been received in the celebration of the Eleuſinian myſteries. Laertius tells us, that Muſæus not only compoſed a theogony, but formed a ſphere for the uſe of his companions; yet, as this honour is generally given to Chiron, it is more natural to ſuppoſe, with ſir Iſaac Newton, that he enlarged it with the addition of ſeveral conſtellations after the conqueſt of the golden fleece. The ſphere itſelf ſhows that it was delineated after the Argonautic expedition, which is deſcribed in the aſteriſms, together with ſeveral other more ancient hiſtories of the Greeks, and without any thing later; for the ſhip Argo was the firſt *long* veſſel which they had built: hitherto they had uſed *round* ſhips of burthen, and kept within ſight of the ſhore; but now, by the dictates of the oracle, and conſent of the princes of Greece, the flower of that country ſail rapidly through the deep, and guide their ſhips by the ſtars.

Muſæus is celebrated by Virgil in the character of hierophant, or prieſt of Ceres, at the head of the moſt illuſtrious mortals who have merited a place in Elyſium. Here he is made the conductor of Æneas to the receſs where he meets the ſhade of his father Anchiſes.

A hill near the citadel of Athens was called *Muſæum*, according to Pauſanias, from Muſæus, who uſed to retire thither to meditate and compoſe his religious hymns; at which place he was afterwards buried. The works which went under his name, like thoſe of Orpheus, were by many attributed to Onomacritus. Nothing remains of this poet now; nor were any of his writings extant in the time of Pauſanias, except a hymn to Ceres, which he made for the Lycomides. And, as theſe hymns were likewiſe ſet to muſic, and ſung in the myſteries by Muſæus himſelf in the character of prieſt, he thence perhaps acquired from future times the title of *muſician* as well as *poet*; the performance of ſacred muſic being probably at firſt confined to the prieſthood in theſe celebrations, as it had been before in Egypt, whence they originated. However, he is not enumerated among ancient muſicians by Plutarch; nor does it appear that he merited the title of *ſon* and *ſucceſſor to Orpheus* for his muſical abilities, ſo much as for his poetry, piety, and profound knowledge in religious myſteries.

MUSÆ'US, called the GRAMMARIAN, author of a Greek poem on "The Loves of Hero and Leander," is ſuppoſed to have lived as late as the fourth century, ſince he is not referred to by any of the older ſcholiaſts, and ſome of his verſes appear borrowed from the Dionyſiacs of Nonnius. Nothing is known of him perſonally; yet his work is in a pure and elegant ſtyle, with much delicacy of ſentiment. It has been frequently reprinted, both in collections and ſeparately.

MUSÆ'US (John Charles Auguſtus), an ingenious German writer, was born in 1735 at Jena, where his father was provincial judge, but removed afterwards to Eiſenach, where he held the ſame ſituation. The ſon, being of an open lively diſpoſition, ingratiated himſelf ſo much with Weiſſenborn, ſuperintendant at Alſtadt, who was related to the family, that he took him under his protection, and carried him with him to Eiſenach, to which he went to be ſuperintendant-general. He was then nine years old, and remained in the houſe of his benefactor till he attained the age of nineteen. Having received an excellent education under the care of this worthy friend, who treated him as his own ſon, he ſtudied theology ſome time at Jena, took his degree there as maſter, and, after being made a member of the German Society, returned to his parents, and lived ſome years at Eiſenach, as a candidate for the miniſtry. About this time Richardſon's celebrated novel of Sir Charles Grandiſon made a great noiſe in Germany; and, as it was read with uncommon avidity, Muſæus, in order to ridicule this prevailing taſte, publiſhed, in the year 1760, a ſatirical parody on that work, intitled "Grandiſon the Second," which was received with a conſiderable degree of approbation. After this juvenile eſſay, Muſæus laid aſide his pen for ſome time, and in 1763 he was tutor to the pages at the court of Weimar, and was afterwards profeſſor, for ſeven years, in the gymnaſium. In order to improve his ſmall income, he gave leſſons in hiſtory and other branches of knowledge to young gentlemen and ladies of diſtinction; and, during the firſt ſix or eight years of his wedded ſtate, took into his houſe alſo boarders, whom he educated. At length, after a long interval, he again appeared as a writer, and applied the laſh of ſatire with ſtill more ſeverity to the ſcience of phyſiognomy, the abuſe and miſapplication of which he doubtleſs contributed to reſtrain. This work was read with great avidity; and, as the author now diſcloſed his name, which modeſty and diffidence had before induced him to conceal, he attained all at once to great celebrity. People hurried from all quarters to ſee the famed Muſæus, and to pay him the tribute of their admiration. He, however, poſſeſſed too much good ſenſe to be intoxicated by the praiſe beſtowed upon his talents; and, as the father of a family, was ſatisfied with having found the means of improving his ſmall income. As the way was now opened to the field of literature, he conceived the idea of writing "Popular Tales of the Germans," which he compoſed in the ſame original manner. He ſometimes, it is ſaid, collected a number of old women with their ſpinning-wheels, placed himſelf in the middle of them, and cauſed them to relate to him old ſtories, which he afterwards clothed in ſo agreeable a dreſs. He often called children from the ſtreets for the like purpoſe, and rewarded each with a ſmall piece of money. It is mentioned likewiſe by his biographer, that his wife, having returned one evening from a viſit, found her huſband ſeated by the fire-ſide, involved in clouds of tobacco-ſmoke, and liſtening with great attention to an old ſoldier, who was occaſionally ſmoking his pipe and narrating tales of ancient times. Muſæus now became a favourite writer of the Germans; and his Popular Tales were much read, and are ſtill read with pleaſure. The "Viſions of Friend Heins," in Holbein's manner, which he publiſhed in 1786, abound in philoſophical reflections, and diſplay great wit and humour. He began afterwards a new ſeries of tales, under the title of "Oſtrich Feathers," the firſt volume of which only he lived to finiſh. He died in October 1787, of a diſeaſe of the heart, in the fifty-ſecond year of his age.

If Muſæus was eſtimable as a writer, he was ſtill more ſo as a man. The principal traits in his character were uninterrupted cheerfulneſs, univerſal benevolence, and ſo much modeſty, that nothing but confined circumſtances induced him to become a writer. His amuſements were ſimple and innocent. In a word, he was one of thoſe few fortunate beings who, in the courſe of their life, never have an enemy. He wrote ſatires, but they excited no animoſity againſt him. In his manner, as a writer, he had ſomething peculiar and characteriſtic; and, being fully maſter of the German language, he ſought out many expreſſive words conſigned to oblivion, and brought them again in circulation. He introduced alſo into his works many foreign words, but with ſo much propriety, that no room is left for criticiſm. His works, beſides thoſe already mentioned, are, 5. The Female Gardener, a comic opera in three acts; Weimar, 1781, 8vo. The idea of this piece is taken from the French romance, La Jardiniere de Vincennes. 6. Moral Amuſements for Children; new edition, Gotha, 1794, 8vo. This is an imitation of Monget's Hochet's Moraux, which appeared at Paris in 1782. The poſthumous works of Muſæus were publiſhed by his pupil, Auguſtus von Kotzebue, at Leipſic, 1791, 8vo. *Gen. Biog. Suppl.*

MUSAGA'TA, a town of Portugal, in the province of Beira: nine miles ſouth-eaſt of St. Joao da Peſqueira, and nine ſouth-ſouth-weſt of Torre de Moncorvo.

MUSAGE'TES, in mythology, the appellation of Apollo, as the conductor of the Muſes. The ſame name was alſo given to Hercules.

MUSA'LI, in Hindoo mythology, a name of one of the Ramas. (See RAMA.) The word is derived from the large wooden peſtle uſed for ſeparating rice from the huſk. This peſtle is called *muſal*, and in images and ſculptures is ſeen in the hand of Bala Rama, indicating that, as well as a warrior, he was alſo a benefactor to mankind. In his hand a plough is alſo ſometimes ſeen, and one of his names, Halayudha, or "plough-armed," is thence derived; alſo Haladhera, or the "plough-bearer;" more correctly, perhaps, Haladhara; like Gangadhara, or Murlidhara, as mentioned in the article MURLI, p. 227.

MUSA'NO, a town of Italy, in the Treviſan: five miles weſt-north-weſt of Trevigio.

MU'SAPH, *ſ.* The code of the Turkiſh laws. A book ſaid to contain all the laws of the Turks. *Aſh.*

MUSA'RD, *ſ.* [*muſard*, Fr.] A dreamer; one who is apt to be abſent of mind. *Obſolete.* The word is now *muſer.*—She that maie be no *muſarde. Chaucer's Rom. R.*

MU'SART, or MASSURT, a ſnowy ridge of mountains, which paſſes ſouth in Aſiatic Ruſſia from Bogdo Alim, and is ſuppoſed to join the mountains of Thibet. It is ſaid to give riſe to the rivers Sihon and Talas.

MUSA'Y, a town of Hungary: ten miles from Munkacz.

MUS'CA, *ſ.* the FLY; in entomology, a genus of inſects of the order diptera, of which the generic characters are—Mouth with a ſoft exſerted fleſhy proboſcis, and two equal lips; ſucker furniſhed with briſtles; feelers two, but very ſhort, and ſometimes none at all; antennæ generally ſhort. More than five hundred ſpecies are deſcribed by Gmelin: in two ſections; viz. I. with two ſhort feelers; and II. without any feelers. The latter, however, includes only eleven ſpecies of the vaſt number already mentioned. Theſe grand ſections are again ſeparated into ſtill ſmaller diviſions.

Although the number of known ſpecies in this genus is ſo very large, yet it is probable it bears no ſort of proportion to the number that is ſtill unknown, or that, at preſent, has not been arranged under ſpecific characters. Mr. Harris, in his Engliſh Entomology, has deſcribed a greater number of ſpecies than Linnæus enumerated as exiſting in the world; and yet England is not the country that is likely to be moſt productive of this inſect. The ſouthern countries of Europe afford a much greater variety of ſpecies than thoſe that are more north: in hot climates, in general, they are always numerous, and, in a multitude of inſtances, they multiply to a degree that is almoſt intolerable. In Spain, they were formerly ſo numerous, that the fly-catcher, we are told, was not only a profeſſion, but a number of men were commiſſioned by government to give chaſe to theſe troubleſome invaders.

Next to the number of flies, their variety claims our attention. The different ſpecies are extremely diverſified in their external form, their ſtructure, their organization, their metamorphoſes, their manner of propagating their ſpecies and in providing for their poſterity. A full explanation of theſe different parts of their economy, would require a large volume, and would conſtitute a narrative to many readers not unintereſting. Such an undertaking, however, is incompatible with the limits preſcribed to our work. In addition, therefore, to what has been already ſaid under the article ENTOMOLOGY, vol. vi. it may be ſufficient to obſerve, in this place, that the larvæ, in the different tribes of flies, differ far more in habit than the complete inſects; ſome being terreſtrial, and others aquatic. Thoſe of the more common kinds are emphatically diſtinguiſhed by the title of *maggots*, and ſpring from eggs depoſited on various putrid ſubſtances. Several of the aquatic kinds are of ſingularly curious formation, and exhibit wonderful examples of the proviſion ordained by Nature for the preſervation of even the meaneſt and ſeemingly moſt contemptible of animals. Several are inhabitants of plants, feeding during this ſtate on other living inſects. The general form of the chryſalis or pupa is that of an oval, differently modified according to the ſpecies, and formed by the external ſkin of the larva, which hardens round the chryſalis. Some ſpecies however caſt their ſkin before their change into the pupa-ſtate.

Some of theſe inſects have trunks inſtead of a mouth; others have that organ armed with teeth; and many have both a mouth and a trunk. The proboſcis of flies is a machine contrived for pumping the blood from the veſſels of large animals, and the nectar from the petals of flowers; and the ſcience of hydraulics has not enabled men to conſtruct machines more complicated, more exactly arranged, or better adapted to theſe purpoſes. Some of them poſſeſs conſiderable firmneſs and ſolidity, thoſe eſpecially that are deſtined to pierce the ſkins of cattle. In order to ſee them at work, all that is neceſſary is to expoſe a ſyrup to attract them, and to take up a lens for their inſpection.

Each eye of the fly contains in it an aſſemblage of a great number of ſmall ones, which probably have the effect of multiplying the ſurrounding objects, and creating repreſentations of them, which the experience of the inſect corrects. From the eye if you paſs along and ſurvey the body, you find it provided with the organs of reſpiration. Four ſmall ſtigmata, for this purpoſe, are found upon the thorax, and a greater number diſperſed over the annuli of the abdomen. The covering of the different parts of the abdomen are ſcaly, and do not conſiſt all of one piece, but admit of the contraction and dilatation of that part, according to the circumſtances of the animal.

Each of the feet terminates in a ſmall bunch of *ſetæ*, reſembling a bruſh. On the 27th of June, 1816, a paper, by ſir Everard Home, was read before the Royal Society, giving an account of the mechaniſm by means of which inſects can walk contrary to gravity, as up perpendicular walls, or along the roofs of rooms. In the common bottle-fly, every toe is ſupplied with two ſuckers, very ſimilar in appearance to the pieces of wet leather and ſtring with which boys lift up ſtones. Theſe ſuckers appear to be put in action by the voluntary muſcles of the inſect. In the horſe-fly, each toe is ſupplied with three ſuckers. Theſe ſuckers may be ſeen by means of a lens, when a common fly is walking along the inſide of a tumbler. The author concluded his paper with the deſcription of certain cuſhions upon the feet of ſome inſects, to take off the effect of a ſudden change from a ſtate of rapid motion to a ſtate of reſt.

The interior organization of this genus when examined with a proper apparatus, preſents two pulmonary ſacs of a white colour, arranged longitudinally along the body. The action of the heart may alſo be diſcerned, as well as the liquor it contains, continually driven along the great artery leading to it, and returning by the ſame courſe. During their larva ſtate, flies go through a greater variety of metamorphoſes than even the ſilk or butterfly worms: in their progreſs from the vermicular to the chryſalis ſtate, they paſs through a change unexperienced by other inſects. From the ſhortneſs of their lives, all theſe viciſſitudes muſt rapidly ſucceed each other: this circumſtance does not prevent many ſpecies from conſtructing a cocoon for their laſt metamorphoſis, of a curious fabric. The greater part of theſe cocoons are of ſilk, with a mixture of other materials; thoſe moſt common with us ſatisfy themſelves with their own ſkin, which becomes an incruſtated covering to protect them during their dormant ſtate. When the different members have acquired ſufficient firmneſs, the fly is ready to burſt from its ſhell in its winged form. The covering of the chryſalis, eſpecially of thoſe that are metamorphoſed in their own ſkin, would ſeem by its hardneſs an effectual bar to that event. About the time, however, of its change, the head of the fly is capable of being ſwollen and dilated in an unuſual manner; and it is by means of this dilatation that the fly burſts its covering, and opens a paſſage for its eſcape.

The food of flies is as various as their different kinds; ſome being ſupported wholly by vegetable ſubſtances, while others are carnivorous; and among the latter there are ſome that only devour fleſh in a ſtate of putrefaction.

The want of accurate inveſtigation, ſince the ſubject of entomology has been well underſtood, leaves us in a ſtate of uncertainty as to the number of inſects which are nurtured within the human body. It ſeems probable, however, that the moſt frequent inſtances which occur, are thoſe of our moſt common domeſtic inſect, the varieties of the fly. The larvæ of ſeveral ſpecies are aquatic, or at leaſt inhabit moiſt and wet places, and therefore ſeem to be adapted to exiſt in the fluids of the human ſtomach: and the author of the article Insect in Dr. Rees's Cyclopædia ſtates, that he is in poſſeſſion of ſome larvæ of the common houſe-fly, which were rejected alive from the ſtomach of a man by vomiting; (ſee Edin. Med. and Surg. Journal, for Jan. 1811, p. 41.) and of others of the ſame fly, which were paſſed by ſtool by another perſon. The larva of another ſpecies of fly is alſo figured, in the Journal juſt referred to, by Dr. Cheyne, now of Dublin: and ſeveral examples of the larvæ of flies, diſcharged from the human inteſtines, are on record. Dr. Wahlhom, of Upſal, has related the caſe of a girl, who, after ſuffering conſiderable pain in the ſtomach and left ſide, diſcharged by ſtool a number of larvæ on ſeveral ſucceſſive days, after which ſhe was relieved from the complaint. One of theſe larvæ, while it was kept in a phial, was converted into a fly, which proved to be the Muſca nigra of Linnæus. Dr. Wahlhom alſo ſtates, that a few years ago there was a girl in Upſal, from whom a large quantity of worms were brought away, and theſe were *fly-worms;* for an account of which he refers to Dr. Dubois's Treatiſe de Tænia. (See Med. Chirurg. and Anatom. Caſes and Experiments, communicated to the Royal Academy of Sciences at Stockholm, 1757, caſe 24.) Ruyſch has deſcribed and delineated both the larvæ and the flies which originated from them, after they were diſcharged (it is affirmed) by urine, by a nobleman, in conſiderable quantities; and Tulpius has mentioned a ſimilar caſe, and has alſo figured the larvæ, which cloſely reſemble thoſe of the fly.

As the ſpecies are ſo extremely numerous, at the ſame time that of ſo many of them very little is known, we ſhall refrain from exhibiting a dry catalogue of 511 inſects; but ſhall ſelect for deſcription and figures ſome of the moſt remarkable. And, this being the caſe, we ſhall premiſe a few more general remarks, being the ſubſtance of a lecture or diſſertation by the late ingenious Mr. Curtis, author of the Flora Londinenſis, &c. and communicated by Mr. Bracy Clark to the editor of the Monthly Magazine.

Mr. Curtis denies *palpi*, or feelers, to this tribe; and he adds to that part of the generic character which relates to the *exſerted* fleſhy proboſcis, "capable of being drawn in cloſe to the head;" which he thus explains: "If we attentively obſerve the common houſe-fly, when it viſits the tea-table in ſearch of food, we may diſtinctly ſee it put forth its proboſcis to ſuck up any ſweet liquid, and it then appears of a conſiderable length; but, if we catch the ſame fly, we find its proboſcis drawn in cloſe to its head." On examining the extremity of it with a magnifying glaſs, we find it furniſhed with two muſcular lips. Beſides this peculiar ſtructure of the trunk, which furniſhes the moſt eſſential character, the antennæ are deſerving of ſome attention. They are compoſed of ſeveral ſmall and ſhort pieces or joints, the terminal one of which is generally largeſt, and frequently flattened; from the middle or bottom of this terminal joint generally proceeds a lateral hair, which is ſometimes ſimple, ſometimes feathery; hence the Muſcæ are divided into ſuch as have antennæ *nudæ ſetariæ* and *plumoſæ*.

The body of the larvæ is compoſed of twelve joints, which run tapering towards the head. The head itſelf is ſmall; the mouth is armed with a hard and pointed kind of dart, contained within a caſe notched on the fore part, which ſerves it inſtead of jaws. Theſe larvæ have four breathing-holes, two of which are placed anteriorly, one on each ſide; the two others at the extremity of the body; they have no viſible eyes.

Authors have remarked, particularly Mr. Keller, painter of Nuremberg, who has written the hiſtory of the common houſe-fly, and illuſtrated it with moſt elegant plates, in which the ſeveral parts of the inſect are highly magnified, that they are uncommonly tenacious of life; he applied oil to ſeveral of them, which, though it proved inſtantly fatal to ſome caterpillars of moths, produced no effect on them; they even ſurvived ſeveral hours' immerſion in oil. Oil of turpentine however killed them in half an hour. See alſo the article Entomology, vol. vi. p. 843.

According to Mr. Keller, the eggs of the common houſe-fly were hatched in twenty-four hours after being depoſited: in fifteen or ſixteen days they changed to chryſalis, in which ſtate they remained about the ſame time before the perfect inſect was produced. The habitation of theſe larvæ varies according to the different ſpecies of flies to which they belong. Many of them have alſo ſome peculiarities which deſerve notice. There are ſome which are found on trees and plants, feeding on and making great havock among the Aphides, or plant-lice, the moſt deſtructive inſect which can infeſt any tree or plant, and the moſt common cauſe of what are called blights. Theſe have a long body, capable of ſtill greater extenſion; they ſtretch out their heads; and, in default of eyes, which they appear to want, ſeem to uſe it to feel for and ſeize the aphides; when they have found one of them, they pierce it with the dart at their mouth, then draw it within the ſecond ring of their body, and at their eaſe ſwallow their prey; and thus they continue devouring them one after another. As theſe larvæ feed ſolely on aphides, ſome naturaliſts have called the flies which they produce *muſcæ aphidivoræ*, or aphis-eaters. The larvæ of other flies feed on the fleſh of dead animals and other decayed ſubſtances; the blue fleſh-flies are of this number: every one knows how difficult it is in the ſummer to keep meat from their attacks; they depoſit their eggs on it, the meat is then called *fly-blown;* ſoon after, maggots are hatched from them, and theſe are the larvæ of the blue fleſh-fly. Larvæ of this kind, though with trouble and difficulty kept from the larder, may on the whole be conſidered as uſeful to mankind, inaſmuch as they deſtroy and carry away putrid ſubſtances. The larvæ of ſome of theſe flies, eſpecially that of the Muſca Cæſar, a ſhining green fly very common in hedges and gardens, are not content however with the fleſh of dead animals, but attack living ones. The harmleſs and uſeful animal the ſheep is particularly obnoxious to their attacks, and not unfrequently. The ſheep knows its enemy, and tries all in its power to avoid it, but in vain: the fly uſually ſettles on the rump, where it is leaſt liable to be moleſted, and there among the wool lays its eggs; theſe, when hatched, quickly find their way to the ſkin of the animal, which having deſtroyed they penetrate into the fleſh; and, when they happen to be depoſited near the abdomen, frequently enter the bowels of the animal, and deſtroy it. Sometimes the ſheep is attacked in ſeveral parts at the ſame time; thus diſeaſed it has motions peculiar to itſelf, and will frequently wander from the reſt, hide itſelf in ſome hedge or ditch, and die unobſerved. The ſkilful and attentive ſhepherd ſeldom loſes any of his flock from this cauſe; he quickly diſcovers the malady, and without loſs of time applies a remedy, cuts off the wool, clears away the larvæ, and pours train-oil into the wound, to which he ſhould add ſome oil of turpentine.

Cheeſe in a decayed ſtate, and bacon not thoroughly cured, are the favourite food of the larvæ of another ſpecies of fly, much ſmaller than the preceding; the dealers in theſe articles give to theſe larvæ the name of *hoppers*. If attentively obſerved, they may be ſeen to form themſelves into a kind of ring, and with great elaſticity throw themſelves to the height of five or ſix inches. Swammerdam was the firſt that noticed this manœuvre, and has deſcribed it with that accuracy for which he is diſtinguiſhed. It is the M. putris. Muddy and ſtinking waters, ſuch as drain from dunghills and neceſſaries, are the favourite abodes of another ſet, differing conſiderably in their make from the above, having their bodies furniſhed with a long tail; hence they have been called by Reaumur *vers à queue de rat*, or rat-tail maggots; ſuch are frequently obſerved in the country creeping about neceſſaries. A very remarkable circumſtance attends theſe; they have no ſpiracula, or breathing-holes, in the body, as the other larvæ have, but the tail is tubular, and they breathe through an orifice at the extremity of it; when in the water, they are ſaid to be capable of extending this tail five inches if neceſſary, and are frequently obſerved carrying it to the ſurface of the water to draw in air: we may obſerve, that the liquor in which theſe larvæ are found is generally ſhallow.

A few ſpecies of flies live in their larva ſtate after the manner of ichneumons; in the bodies of living caterpillars we have frequently obſerved them produced from the larvæ of the Phalæna potatoria, or drinker-moth, as well as the Phalæna ſalicis, ſatin-moth; whether they lay their eggs on the outſide, or whether they pierce the ſkin of the caterpillar, we have not yet had an opportunity of obſerving. Moſt kind of fungi, or muſhrooms, as they decay, are full of the maggots of various flies. The larvæ of ſome flies live in the heads of the compound flowers; others on the parenchymatous or fleſhy part of the leaves of trees and plants, betwixt the two ſkins; ſome in the ſtalks of thiſtles, where they produce extraordinary tubercles; in ſhort, the habitations of the ſeveral ſpecies are ſo numerous, that it would be taking up too much time to mention all of them; we have enumerated thoſe of the moſt conſequence, and by them we ſee that the maggots of flies are by no means an inactive ſet of beings, but of great conſequence in the œconomy of nature.

Fond as theſe inſects are in their larva ſtate of filth and putridity, in their perfect ſtate they are more delicate in the choice of their food, ſupporting themſelves generally by the nectar which they ſuck from flowers; there are, however, a few inſtances to the contrary. Though, in general, a very harmleſs genus, we are acquainted with two ſpecies that are of a ſanguinary nature, and which feed on the juices of other flies, which they previouſly kill: the Muſca ſtercoraria, or dung-fly, which we generally obſerve on cow-dung, is one of this ſort; there is another ſpecies ſomewhat ſimilar to it, but leſs hairy, found occaſionally in the ſhop-windows in London, and doubtleſs elſewhere; firſt obſerved by Mr. Benjamin White, ſen. of Fleet-ſtreet, bookſeller, in his ſhop-windows, feeding on the Muſca domeſtica, or common houſe-fly. One would think that the trunk of this inſect was ill adapted for an inſtrument of death; but certain it is that it makes uſe of it to pierce the body, as well as to ſuck the juices, of the fly. We have many times been an eye-witneſs to it: on placing this fly, which we call *necatrix*, under a wine-glaſs with the Muſca domeſtica, we have ſeen it preſently ſeize, kill, and ſuck its blood. The chief difference that we diſcern in the proboſcis of this and other flies is, that it is ſtronger and apparently much ſtiffer.

Flies, after they have gone through their changes, are not long before they copulate: this act is performed in a very ſingular manner; for here the part of the male is open, and receives the female inſtrument, which enters the body of the male, to have the eggs impregnated. In noticing this manœuvre, ſo contrary to what we obſerve in all other animals, one is ready to think oneſelf miſtaken as to the fact, and that the female muſt receive the male part; indeed, authors of no ſmall reputation, deceived by its appearance, have conſidered and figured it ſo; but the obſervations of later authors have clearly proved the contrary; indeed this required no extraordinary diſcernment, for, beſides that the bodies of ſuch flies as have the penis-like inſtrument, which eaſily protrudes on preſſing the abdomen, are larger than the others, on placing it before a moderate magnifying-glaſs, one may diſtinctly diſcern the eggs, than which no greater proof can be adduced of its being a female. Theſe parts are admirably repreſented in a highly-magnified ſtate, by Mr. Keller, before-mentioned, who has moſt clearly and ſatiſfactorily decided this matter. The inſertion of the female inſtrument is only to be ſeen in ſuch flies as are actually in copulation, and in which ſtate, the female, having abſolute dominion over the male, flies with him, where ſhe liſts; not in thoſe temporary attempts at copulation, which flies are perpetually exhibiting.

The generality of flies are oviparous; a few are viviparous, that is, bring forth larvæ inſtead of eggs; ſuch produce a ſmall number of young, compared with the oviparous ones.

Next to Phalænæ, or moths, the genus Muſca is by far the moſt numerous in point of ſpecies, and of theſe there are many that have ſeveral broods in a year; the common houſe-fly is one of this ſort. When we conſider that in one ſeaſon a ſingle female houſe-fly is capable of producing twenty millions eighty thouſand three hundred and twenty, (Keller's calculation,) we ſhall not wonder at their ſwarming ſo much in autumn. This ſpecies breeds chiefly about ſtables and in neceſſary-houſes; and near ſuch they will always be found moſt numerous.

Various are the means uſed to get rid of theſe troubleſome gueſts, who not only peſter us with their numbers, but contaminate our furniture: the moſt ſucceſsful antidote is arſenic diſſolved in water, with the addition of a little ſugar; this they readily ſip, and it quickly proves fatal. The compoſition has been held, and is ſtill held, as a ſecret by ſome; but, where there are children or ſervants, it will perhaps be better to bear the annoyance of the flies, than run the riſque of poiſoning ſome part of the family. *Monthly Mag.* Dec. 1814.

We ſhall now proceed to enumerate the moſt remarkable ſpecies of this extenſive genus.

I. *With two ſhort feelers; and the antennæ feathered.*

1. Muſca meridiana: hairy, black, front golden, wings ferruginous at the baſe. This is an European inſect, and found in our own country. It has been deſcribed and figured by Harris in the work already referred to. There is a variety that has a faint rufous ſpot at the baſe on each ſide of the abdomen.

2. Muſca carnaria: hairy, black; thorax with paler lines; abdomen ſhining, and teſſellate. It is found in almoſt all parts of Europe, in putrid carcaſes and meat. The Muſca carnaria, or common large blow-fly, as every one knows, depoſits its eggs on animal fleſh, either freſh or putrid. The larvæ, or maggots, hatch in a few hours, and, when full grown, which happens in eight or ten days, are of a white or yellowiſh-white colour, with a ſlight tinge of pale-red, and of a lengthened ſhape, with a ſharpened front, in which the mouth is ſituated; and from this the body gradually enlarges in ſize to the laſt ſegment, which is of a very broad and flattened form, ſurrounded by ſeveral ſlightly-prominent tips, and furniſhed with a pair of ſpecks reſembling eyes; ſo that an inaccurate ſpectator might eaſily miſtake this part for the head, and the proper head for the tail. When the animal changes to a chryſalis, the ſkin dries round it, and the whole aſſumes an oval form, and a reddiſh colour, ſoon changing into a reddiſh-brown. In ten days more the fly itſelf emerges, which is too well known to require particular deſcription.

To this inſect has been applied the obſervation, *Tres muſcæ conſumunt cadaver equi æque cito ac leo;* "Three flies will deſtroy the carcaſe of a horſe as quick as a lion." Signifying that the number of larvæ proceeding from the flies, and the quick evolution of the ſucceſſive broods, deſtroy the ſame quantity of fleſh in a given time as the predacious quadruped who devours a great quantity at certain intervals only. The blow-fly is ſhown, in two different poſitions, on the preceding Plate, at fig. 3, 4.

3. Muſca vomitoria, the blue-bottle: thorax black, abdomen ſhining blue, front fulvous. This well-known inſect is repreſented at fig. 5.

b. Antennæ naked, or merely a briſtle.

4. Muſca fera: black; ſides of the abdomen teſtaceous and diaphanous. This is an European inſect. The front and mouth are of a buff colour; thorax gloſſy black, hairy; abdomen orange-brown, with a broad unequal black ſtripe down the middle, the tail hairy; wings hyaline; the rib at the baſe golden yellow; the legs black, the ends yellow.

5. Muſca lurida: hairy; thorax brown; abdomen black, the ſides at the baſe and legs teſtaceous. This reſembles M. fera, and is found in Germany. The antennæ are ferruginous with a black club; mouth whitiſh; thorax hairy, brown with a yellowiſh ſcutel; abdomen black, the baſe pellucid, teſtaceous at the ſides, which are joined by two black ſtreaks.

6. Muſca groſſa: hairy, black, wings ferruginous at the baſe. It is found in many parts of Europe, and in this country; it feeds on horſe-dung. This is the largeſt of European flies: it is much larger than the largeſt blow-fly, and is of a dark colour, with the wings dull orange-coloured at their baſe. In its general appearance it reſembles the M. meridiana, which is ſimilar in colours, but ſtands among the flies with plumed antennæ.

7. Muſca hyſtrix: very hairy, and black with a whitiſh mouth. Inhabits America.

8. Muſca tremula: hairy, gloſſy, and black; baſe of the wings and ſcale of the poiſers ferruginous. Inhabits Europe. This is leſs, and of a more oblong ſhape, than the M. fera.

9. Muſca rotundata: thorax black, with large ferruginous ſpots; abdomen ferruginous, with a black line, which in one ſex is compoſed of dots. Inabits Europe. Wings hyaline, with a pale gold baſe.

10. Muſca larvarum: blackiſh; ſcutel teſtaceous at the tip; abdomen teſſellate, whitiſh. This is found in England; it depoſits its eggs in the larvæ of moths and butterflies; the larva devours the garden-cabbage, making the root ſtrumous, and the head lax.

11. Muſca braſſicaria: thorax greeniſh; abdomen cylindrical and black; the ſecond and third ſegments rufous. It inhabits Europe, and is found at the roots of cabbages. The head is rufous; the wings browniſh hyaline.

12. Muſca napobraſſicæ: hairy, grey with longitudinal black lines down the back and ſides. This is found in different parts of Sweden, and is extremely deſtructive to the roots of turnips, eſpecially of thoſe growing in ſandy ſoils; its larva is white, and without feet; the head is pointed, and tipt with black; undergoes its transformation about the month of September; the pupa is brown, oblong, annulate with ſegments, and becomes a perfect fly in the following May.

13. Muſca pluvialis: cinereous; thorax with five black ſpots; abdomen with obſolete ſpots. It inhabits Europe, and appears in vaſt ſwarms before rain.

14. Muſca ſubſultans: black, with hayaline wings; hind thighs formed for ſkipping. Inhabits Europe; is very ſmall, and flies by a ſort of ſkipping motion.

15. Muſca labiata: hairy, blackiſh, with a ſhining ſilvery lip; wings white, immaculate. Found in Germany, and in its ſkipping motion reſembles the M. ſubſultans juſt noticed. The legs are black; the ſcale of the poiſers arched and ſnowy.

16. Muſca meteorica: black; abdomen pale grey; wings yellowiſh at the baſe. This is found in our own country; and, like the M. pluvialis, comes in ſwarms before ſhowers of rain.

17. Muſca frit: black; poiſers, end of the hind legs, and abdomen, of a pale green. It inhabits Europe; and is not larger than a flea. The larva is found in the ears of barley and other grain, to which it is ſo exceedingly deſtructive, that in one year corn to a vaſt amount has been deſtroyed by its ravages: in Sweden it is ſaid one-tenth of the corn is annually deſtroyed by this inſect.

18. Muſca pumilionis: black, beneath yellow; head and two lines on the thorax yellow; poiſers white; legs cinereous, tipt with black. The larva of this fly has a ſharp head, black at the extremity; the body is white, and compoſed of ten ſegments; it is changed into the pupa form about the end of May. The pupa is yellow, ſhining, and compoſed of ſegments; the perfect inſect appears about the month of June; but it is not known at what time it depoſits its eggs. The larvæ are perceived early in the ſpring, in the centre of the ſtalks of wheat and rye, very near the root. It has been thought that the eggs are depoſited in September or October, becauſe the earlieſt-ſown grain is moſt affected by them. White wheat is more liable to the depredations of this inſect than red. The ſtalks in which the larva is lodged do not advance in growth, but continue in a dwarf ſtate; and hence the inſect itſelf has obtained its ſpecific name. The ſtalks become yellow early in the ſummer, and ſoon after die away: but others uſually ſpring up on the ſame root, and ſupply their place. This inſect firſt attracted notice in our own country in 1791, when it excited a conſiderable degree of alarm, leſt it ſhould prove as miſchievous as the

Heſſian fly, that had done ſo much injury in America. An account of this inſect has been given by Mr. Markwick in the Linnæan Tranſactions, vol. ii. p. 76. but the firſt deſcription of it, and of the miſchief cauſed by it, was given in the Tranſactions of the Royal Academy of Sciences at Stockholm for the year 1778, by M. Bjarkander, who diſcovered it on the young ſhoots of rye early in the ſpring, and in ſuch quantities, that in ſome fields he found three or four ſtalks affected in a ſquare foot. See the Plate, fig. 6, 7.

19. Muſca lepræ: ſhining black; antennæ and legs white; eyes reddiſh gold. It inhabits America. It breeds in the legs of the natives who are afflicted with the elephantiaſis; and is ſmaller than a louſe.

20. Muſca putris: black; wings white, with a black rib. It inhabits Europe. The larvæ of this fly are the maggots found in decayed cheeſe, bacon, &c. well known in common language by the name of hoppers, and cheeſe-worms. In this ſpecies the nerves are diſtributed in a very curious manner. The brain is ſituated immediately above the origin of the œſophagus, behind the head; it is very large in proportion to the reſt of the body; it is rounded poſteriorly, and notched anteriorly, as if it were formed of two lobes. A pair of nerves ariſe from the anterior part of the brain, proceed forward, and are diſtributed to the mouth, and even to the parietes of that cavity. It ſhould be remarked, that theſe nerves experience a very conſpicuous enlargement previouſly to their diſtribution. Poſteriorly the brain preſents an aperture, which affords a paſſage for the œſophagus: the nervous part, ſituated on its ſides, may be regarded as the chords which produce the medulla, and all below the œſophagus as the medulla itſelf. Two pairs of nerves ariſe from the origin of the nervous medulla; theſe are directed forward, and principally diſtributed to the viſcera, and to ſome of the muſcles of the anterior rings. The third pair of nerves which this medulla produces is the moſt remarkable: it comes from the part which nearly correſponds to the third ganglion; we ſay nearly, becauſe in this inſect the ganglia are ſo cloſe to one another, that the medulla ſeems to form only one piece, on the ſurface of which we merely perceive twelve tranſverſe wrinkles, which indicate the number of ganglia. This third pair extends almoſt tranſverſely. At a certain diſtance from its ſeparation it ſwells into a ganglion, and then divides into ſeveral filaments; theſe are the ganglia which Swammerdam ſuppoſes are intended for the muſcles of the wings, when they ſhall exiſt in the perfect inſect.

21. Muſca aterrima: ſilky black; wings white, with a double black rib half-way down; legs long, compreſſed. Inhabits France; and is of the ſize of the M. putris.

22. Muſca cupraria; body glaucous bronze; thorax green; abdomen coppery; hence its ſpecific name; poiſers naked. This is an European inſect. The legs are black, ſometimes yellow.

23. Muſca aurata: thorax poliſhed, braſſy or greeniſh; abdomen poliſhed, obtuſe, browniſh-gold. Inhabits Europe. The head is black; ſegments of the abdomen blackiſh; wings duſky.

24. Muſca ænea: ſhining green bronze; head and legs teſtaceous. Found in the Eaſt Indies.

25. Muſca polita: poliſhed; thorax blue; abdomen braſſy; poiſers and legs yellow. Inhabits Europe.

26. Muſca viduata: black bronze; abdomen braſſy; ſcales of the poiſers fringed. Inhabits Europe; chiefly found in gardens.

27. Muſca faſciata: teſtaceous, with a black abdomen; wings brown at the tip, with a white band; legs long. It is found in the American iſlands; the body is very narrow. There is a variety of this ſpecies, that has its head and thorax black.

28. Muſca petronella: livid; front red; legs long, teſtaceous, with black joints. Found on the ſurface of waters in Europe.

29. Muſca cylindrica: gloſſy black; head globular, with teſtaceous eyes; legs long and yellowiſh. It is found chiefly in Germany. The antennæ of this ſpecies are ſmall, teſtaceous, with a black hair; thorax naked and thin; abdomen ovate, with teſtaceous ſpots beneath, at the baſe; wings white.

30. Muſca filiformis: body filiform, black; head ovate with red eyes; legs very long and teſtaceous. Found in Germany. In ſhape it is very long and narrow.

31. Muſca tipularia: body long and black; head and legs teſtaceous; wings tipt with brown. Found on the African continent, particularly in Barbary. The head is pale, with a ſcarlet crown.

32. Muſca petiolata: hairy and black; abdomen compreſſed; wings black. It is found in Cayenne. The head of this inſect is black, with a white mouth, and reddiſh eyes; poiſers ſnowy, abdomen long and black; the ſegments a little whitiſh at the edges; the legs are black.

33. Muſca elongata: teſtaceous; legs long, hind ſhanks black, the ends whitiſh. It inhabits Sierra Leona. In this ſpecies the eyes are large and brown; and the wings hyaline.

34. Muſca longipes: black; wings brown, with a white band at the baſe, and dots; the legs are long, and teſtaceous. This is found in Cayenne.

35. Muſca curſitans: black, with long pale legs; wings incumbent, white. It is found in many parts of this country, on trees and walls; reſembles a Cimex, and runs with great velocity.

36. Muſca cimicoides: black; wings incumbent, white, with two black bands. It inhabits Denmark; is found about trees; and, as the laſt, is very like a Cimex. The laſt ten ſpecies are diſtinguiſhed from the reſt by a globular head, with prominent rounded eyes, and a linear body with long legs.

37. Muſca pallipes: ſhining bronze; abdomen with two yellowiſh dots at the baſe; legs yellowiſh. It inhabits Germany; and is very ſmall.

38. Muſca ungulata: braſſy green; tail hooked; legs long and livid. It is found in many parts of Europe, about waters.

39. Muſca nobilitata; braſſy green; tail hooked; wings with a black ſpot tipt with white. Found in Europe, in gardens.

40. Muſca equeſtris: braſſy green; abdomen with five black bands; tail hooked; wings white; with a brown ſpot. This is found in Braſil. Sir Joſeph Banks has a ſpecimen of it in his muſeum.

41. Muſca cincta: cinereous; head and legs teſtaceous; wings clouded with a black rib. It inhabits Denmark. This is delineated at fig. 8.

42. Muſca clavata: teſtaceous; abdomen brown, the ſegments are pale at the baſe, and terminated by a clavate ſtyle. The antennæ and thorax are hairy; the wings are large and yellowiſh. See fig. 9.

43. Muſca diſcoidea: black; wings with white dots and marginal lines; head and legs teſtaceous. It inhabits Denmark, and is a large inſect. The eyes, thorax, and abdomen, of this fly, are black and immaculate.

44. Muſca umbrarum: cinereous; the abdomen marked with black bands; wings brown ſpotted with white. It inhabits many parts of Europe; and is found among flowers.

45. Muſca vibrans: wings hyaline, tipt with black; the head is red. It inhabits Europe; and is continually agitating its wings.

46. Muſca punctum: wings with a black lateral dot at the tip; abdomen bronzed. It inhabits France, in moiſt ſhady places.

47. Muſca cynipſea: wings with a lateral black dot at the tip; abdomen cylindrical. It inhabits Europe; and yields a fragrant ſmell.

48. Muſca groſſificationis: deep black; wings bluiſh, tipt with white. Is common in ſhrubberies, in many parts of Europe.

49. Muſca artemiſiæ: yellow; wings white, with five marginal black ſpots. Inhabits Denmark, and, as its name imports, on the Artemiſia vulgaris.

50. Muſca combinata: yellowiſh; abdomen black; wings white, with two black dots at the tip. This is found about many flowers in European fields and gardens.

51. Muſca ſtylata: cinereous; abdomen black; wings white, with two brown approximate dots, and a curve at the tip. This ſpecies is found in England, among woods and in meadows. Its antennæ are ferruginous; the front is yellow; the crown is cinereous; thorax hairy, cinereous, with a yellow lateral line; ſcutel and poiſers yellow; abdomen oblong, black, terminated by a ſtyle as long as the body; the legs ferruginous.

52. Muſca ruficauda: cinereous; wings white, with three coſtal black ſpots; ſtyle at the end of the tail rufous, with three black dots: hence its ſpecific name. It is found in France, and reſembles the laſt.

53. Muſca arcuata: teſtaceous; wings with two black ſpots and curve at the tip. Inhabits Germany, and reſembles the M. ſtylata.

54. Muſca flava, the yellow fly: yellow, as its name imports, with a black dot at the tips of the antennæ. This is one of the ſmalleſt, but moſt elegant, of the European flies; and is not very uncommon during the autumnal ſeaſon, being obſerved in gardens and in windows. It is about the eighth of an inch in length; and of a yellow colour, with gold-green eyes.

55. Muſca lineata: black, with yellow lines on the thorax; ſcutel and body yellow beneath. Inhabits many parts of Europe, in ears of barley, which it renders ſterile. The head is yellow, with a black crown; wings immaculate.

56. Muſca roſæ: braſſy-black; head rufous; legs teſtaceous. It inhabits Kiel, on flowers, and is very ſmall; wings hyaline.

57. Muſca ſerratulæ: wings white; thorax greeniſh; abdomen cinereous, with four lines of black dots. It is found on thiſtles in many parts of Europe.

58. Muſca urticæ: black; wings white with a terminal brown dot, and three diſtinct bands. It is found in England and other parts, on the nettle, as its ſpecific name imports.

59. Muſca ceraſi: body black; wings white, with unequal brown bands; the lower ones connected outwardly. It inhabits this country, and is found in the kernels of cherries.

60. Muſca furcata: cinereous, with a teſtaceous tail; wings brown, dotted with white. It inhabits the American iſlands; the eyes of this inſect, which is ſmall, are green.

61. Muſca ſolſticialis: wings white with four connected black bands; ſcutel yellow. It is an inhabitant of this country; and has been deſcribed and figured by Mr. Donovan. The head is pale; body bluiſh-black; abdomen ending in a long ſtyle; wings with a brown outer margin connecting the four bands; legs yellow, thighs black.

62. Muſca cibaria; ſmooth, with raiſed ſtemmata; abdomen cinereous, hooked; legs long. It is found very much in kitchens in divers parts of Europe.

63. Muſca terreſtris: brown; thorax with a brown dot without the lines; abdomen ſtriate beneath. It inhabits Sweden, and feeds on the ground.

64. Muſca arnicæ: wings hooked, grey ſpotted with black. It inhabits Europe, on the diſk of radiate flowers, particularly the Arnica montana.

65. Muſca ſonchi: wings hyaline, with a black marginal ſpot; the eyes are green. It inhabits Europe, under the receptacles of the Sonchus arvenſis.

66. Muſca ſubcutanea: wings white with flexuous brown bands; eyes green. It inhabits Europe, under the leaves of the heracleum.

67. Muſca lamed: wings hyaline, the outer margin varied with brown, the inner margin marked with a brown Hebrew ל. It inhabits Auſtria.

68. Muſca cornuta: yellowiſh, with two horns ſending out three branches from the upper ſide; wings hyaline, ſpotted with brown. It inhabits Carniola.

69. Muſca iridata: thorax ſplendid green; abdomen lucid, lanceolate, violet-brown. Inhabits Carniola.

70. Muſca cannabina: thorax bronzed; abdomen pellucid yellow, with alternately narrower black bands. Inhabits Carniola.

71. Muſca lupina: thorax cinereous, with four interrupted black lines; abdomen ſubteſſellate, the ſides diaphanous. Inhabits New Zealand.

72. Muſca chamæleon: ſcutel two-toothed, yellow; abdomen black, with three triangular yellow ſpots on each ſide, and one at the end. It inhabits Europe. This is one of the moſt remarkable ſpecies; it is a large black fly, with a broad flattiſh abdomen, having the ſides of each ſegment yellow, forming ſo many abrupt ſemi-bands acroſs that part. It proceeds from an aquatic larva of very conſiderable ſize, meaſuring two inches and a half in length, of a ſomewhat flattened ſhape, and of a brown colour, with a narrow or ſlender front; the body widening by degrees towards the middle, and from thence gradually tapering to the extremity or tail, which is terminated by a circle of radiating or diverging hairs. This larva is common in ſtagnant waters, during the ſummer-months, and paſſes into its chryſalis ſtate without caſting its ſkin, which dries over it, ſo as to preſerve the former appearance of the animal in a more contracted form, as fully explained under the article ENTOMOLOGY, vol. vi. p. 837. The perfect inſect is ſhown at fig. 10 of the annexed Plate.

73. Muſca vermileo, the worm-catcher: cinereous; abdomen with three rows of black dots; wings immaculate; thorax ſpotted. This is a middle-ſized fly, of a ſomewhat lengthened form, with a diſtant reſemblance to a Tipula; it is of a dull yellow colour, with tranſparent wings; the thorax marked above by two black lines, and the abdomen by triple rows of black ſpots. The larva meaſures about three quarters of an inch in length; and is of a pale yellowiſh-grey colour, ſlender or ſharpened in front, and growing gradually broader towards the tail. It is found in the ſouthern parts of Europe; and is not uncommon in ſome diſtricts of France. It is remarkable for practiſing a method exactly ſimilar to that of the Hemerobius formicaleo, in order to obtain its prey; excavating a circular pit or cavity in the dry ſand; concealing itſelf, waiting the arrival of any ſmall inſect which may happen to fall into it; and, after abſorbing its juices, throwing out the exhauſted remains to a conſiderable diſtance from the cavity. This larva ſeems to have been firſt obſerved and deſcribed by Reaumur, in the Memoirs of the French Academy for the year 1752. It aſſumes the ſtate of a chryſalis by caſting its ſkin, which of itſelf rolls to the hinder-part of the body: the chryſalis is of a dull reddiſh colour, and is rounded or clubbed at the upper-part, ſuddenly tapering from thence to the extremity; and, after lying nine or ten days, it gives birth to the perfect inſect.

74. Muſca colombaſchenſis: black, with white inciſures of the abdomen, ſhanks, and tarſi. This ſpecies is found in many parts of Ruſſia and Siberia, particularly in the ſpring and autumn. It is extremely troubleſome, and often fatal to the cattle which are attacked by it. It inſinuates itſelf into the nobler parts, and deſtroys the creatures thus affected in the courſe of four or five hours.

75. Muſca papataci: antennæ, body, and wings, hairy. It inhabits Italy; is very ſmall, and very troubleſome in the night during the whole ſummer. The eyes are black; the abdomen red.

76. Muſca pendula: downy; thorax black, with four yellow lines; abdomen yellow with tranſverſe black lines, connected by a longitudinal ſtripe. The pendulous fly is a moderately-large and very-beautiful inſect. Its colour is black, with four bright yellow ſtripes down the thorax, and three broad interrupted bars acroſs the abdomen. Its larva, which is an inhabitant of ſtagnant water, is of a remarkable appearance; it is furniſhed with a tail

of great length, compoſed of a double tube, the interior of which is very ſlender, extenſile at the pleaſure of the animal to a vaſt length, and terminated by a very ſmall ſpiracle. The length of this tube is, therefore, varied in proportion to the greater or ſmaller depth at which the inſect chooſes to continue; the tip reaching to the ſurface, in order to ſupply the requiſite quantity of air. Sometimes great numbers of theſe maggots are found coiled or twiſted together by their tails in ſuch a manner, that it is not eaſy to ſeparate any one from the reſt. The complete inſect is frequently ſeen on flowers during the autumnal ſeaſon. See fig. 11.

77. Muſca verſicolorata: downy; thorax with two faint whitiſh dorſal lines; abdomen rufous; back black, varied with cinereous. It inhabits Germany, and is very like the preceding.

78. Muſca tenax, the hardy fly: downy; thorax grey; abdomen brown; hind-ſhanks compreſſed and gibbous. The Muſca tenax is about the ſize of a drone, and of a brown colour, with tranſparent wings; and the firſt ſegment of the abdomen is yellowiſh on each ſide. It proceeds from a larva of ſingular appearance, being a long-tailed brown maggot, of rather ſlow motion, meaſuring about three quarters of an inch in length, without the tail, which is extenſile, and conſiſts of a double tube, the exterior annulated into numerous ſegments, and the interior terminated by a circle of hairs, ſurrounding a ſpiraculum or air-hole. This maggot is ſeen in muddy ſtagnant waters, drains, and other places of the like deſcription; and, notwithſtanding its unpleaſing appearance, exhibits, when accurately examined, many particulars well worthy of admiration. The feet, which are ſeven in number on each ſide, are wonderfully calculated for enabling the animal to aſcend walls or other perpendicular places, to ſeek ſome proper ſituation in which it may undergo its change into a cryſalis, being very broad, and beſet on their under ſurface with numerous ſmall hooked claws; thus giving it the power of clinging with ſecurity during its aſcent. Of this larva a particularity is ſtated, on the authority of Linnæus, which, if true, may indeed well be numbered among the miracula inſectorum; viz. that, being a frequent inhabitant of the turbid pulp uſed in the operation of paper-making, it is often expoſed to the action of the wooden mallets uſed in the proceſs, as well as ſqueezed in the ſtrongeſt preſſes; and yet ſurvives uninjured by theſe ſeemingly-deſtructive operations. This larva commonly changes to a chryſalis about the end of Auguſt; the ſkin contracting and drying round the body, and the tail continuing in a ſhrivelled ſtate. After thus remaining about the ſpace of a fortnight, it gives birth to the complete inſect, which has ſo much the general appearance of a drone, that it is very frequently miſtaken for ſuch. It is very common during the month of September.

This fly has a ſmall brain, formed of two lobes, which are ſituated very cloſe together, but diſtinguiſhed by a longitudinal furrow; the anterior part produces a large nerve, which is afterwards diſtributed to the antennæ and the proboſcis. The optic nerves are very thick, cylindrical, and equal in diameter to the length of the brain, on the lateral parts of which they reſt; they terminate at their extremities in very large bulbs, which correſpond to the breadth of the eyes. The firſt ganglion of the medulla is produced by two cords, which come from the poſterior part of the brain, and embrace the œſophagus as a collar; it is very ſlender, and ſituated in the breaſt; it furniſhes a pair of filaments to the muſcles of the anterior feet. The ſecond and the following ganglia, in all three in number, are united to each other merely by a ſingle cord. The laſt ganglion is one-half larger than that which precedes it. Poſteriorly it produces eight or nine filaments, which are intended for the parts near the anus; the firſt of the three is ſituated in the breaſt, where it furniſhes nerves for the muſcles of the wings and the feet; the other two ganglia are in the abdomen; the laſt but one is placed above the union of the third ring with the fourth; and the laſt on the interior and inferior edge of the fifth ring.

This curious inſect is ſhown in two different poſitions at fig. 12 and 13. the foot is ſhown magnified at *e*, and the tail at *f*.

II. *Feelers none.*

79. Muſca uliginoſa: black; abdomen ſnowy, tipt with black. It is found in Germany and in this country. The proboſcis is cylindrical, grooved on the back for the reception of the briſtle; there is a white dot in the front; the poiſers are white, the legs pale.

80. Muſca marginata: black; margin of the abdomen and ſhanks whitiſh. This ſpecies is common in France and England. The antennæ are united at the baſe; thorax black-bronze; abdomen depreſſed, with a few faint whitiſh ſpots on the back; the thighs are black, and the wings white.

81. Muſca nectarivora: black; antennæ cylindrical, perfoliated; wings white. This, wherever it is met with, is found in the flowers of fruit-trees; where it remains the whole day extracting their nectar. It has a ſmall and oblong body. *Shaw's Gen. Zool.* *Turton's Gmelin's Linn. Nat. Hiſt.* by the Editor of this Work, vol. xiii.

MUS'CA, *ſ.* in antiquity, a deſignation given to paraſites, buffoons, &c. who intruded themſelves into the company of thoſe that deſpiſed them, or found means to be admitted to entertainments where they were not welcome. The ſame name is uſed for officers of the popiſh inquiſition, who feign themſelves of the ſect of the priſoners, in order to draw a confeſſion of their opinions from them, and thereby betray them; there being perſons placed to overhear their converſation.

MUS'CADEL, or MUSCADINE, *ſ.* A rich wine, of the growth of Provence, Languedoc, Cividad, &c. The word is by ſome derived from *muſk*, the wine being ſuppoſed to have a little of the ſmell of that perfume; by others from *muſca*, a fly, becauſe the flies are extremely fond of its grapes; as the Latins had their *vinum apinum*, ſo called *ab apibus*, from the bees which fed on it.—The *muſcadine* ſtays for the bride at church. *Armin's Hiſt. of Two Maids*, 1609.—I'll undertake to ſleep ſixteen [hours] on the receipt of two cups of *muſcadine*. *The Hog hath loſt his Pearl.*

Quaff'd off the *muſcadel*,
And threw the ſops all in the ſexton's face. *Shakeſpeare.*

The proceſs for making muſcadine at Frontignac, is the following: The muſcadine grapes are allowed to grow half dried on the vine; and, as ſoon as they are gathered, they are trod and preſſed, and the liquor is tunned, without letting it ſtand to ferment in the fat; the lee which remains is ſuppoſed to produce the peculiar flavour of this wine. *Phil. Tranſ.*

MU'SCÆ VOLITAN'TES, *ſ.* Dark irregular veins and ſpots, ſeeming to fly before the eyes of many people, eſpecially on looking at bright objects, ſuch as white paper, the ſky-light, the candle, &c. Theſe have often the appearance of cobwebs, ſometimes that of ſmoke, duſt, &c. The reſemblance of many of theſe ſpots to flies has given them the name of *muſcæ volitantes*, q. d. "flies flying about." Sometimes they are called the "pin and web."

It is not eaſy to account for this phenomenon. Some will have its cauſe to lie in the aqueous humour; others in the retina. Monſ. de la Hire's account of them is this: They are (he ſays) of two ſorts: ſome permanent, which, in turning the eye upon a point of an object, appear always fixed in the ſame ſituation to that point; others ſeem to fly about, and to change their ſituation, though the eye be fixed. The ſhapes of both ſorts are changeable: thoſe of the firſt ſort are commonly like a dark ſpot upon a white ground; thoſe of the ſecond ſort appear like the knots of a deal board, ſome parts of them being very clear, and ſurrounded with dark threads; they are alſo attended with long fillets of irregular ſhapes, which are bright in the middle, and terminated on each ſide by parallel black threads. On fixing the eye upon an object, they appear to deſcend gradually.

The ſpots that appear fixed in reſpect to the axis of the eye, muſt, for that reaſon, be cauſed by ſome diſorder in a correſponding part of the retina, or in ſome part of the vitreous humour lying pretty cloſe to the retina. For an opacity of the coats or humours in any part remoter from the retina, by intercepting ſome part of the rays of every pencil, could only cauſe an uniform obſcurity or faintneſs of light in every place of the retina, and not a total defect of it in any particular place. Hence M. de la Hire attributes the cauſe of theſe permanent ſpots to ſmall drops of extravaſated blood upon the retina.

But he finds it more difficult to account for the moving ſpots. When the rays of the ſun are tranſmitted through a piece of bad glaſs, and fall upon white paper, the ſhadows of the little ſands, veins, and irregularities in it, appear not unlike thoſe ſpots. He therefore imagines the aqueous humour is ſometimes troubled with ſome little mothery or ropy ſubſtance; ſome parts of which, by the figures of their little ſurfaces, or by refractive powers different from the humour itſelf, may caſt their diſtinct images upon the retina. He ſuppoſed them in the aqueous humour rather than the vitreous; becauſe of its greater fluidity for a freedom of deſcent, and becauſe they will then appear to deſcend, as being ſituated before the pupil, or at leaſt before the place of the interſection of the pencil.

Pitcairn denies the cauſe of the muſcæ volitantes to lie in the aqueous humour; and ſays it is owing to, and a ſign of, an internal inflammation of the veſſels of the retina. Heiſter thinks them owing to ſome obſtruction of thoſe veſſels; and both theſe authors, and many others, think them forerunners of a gutta ſerena, or a cataract; and propoſe a cure by mercurials and decoctions of guaiacum. See Pitcairn's Elem. Medic. and Heiſter's Compend. Medic. Practic. Plempius has given a deſcription of the muſcæ volitantes, in his Ophthalmographia.

Dr. Porterfield, in the Medical Eſſays of Edinburgh, obſerves, that theſe ſpots may proceed from ſome little extravaſations, various ſwellings, or other defects in the retina, which, by intercepting the rays, will occaſion a defect in the picture; and by conſequence a ſimilar and correſponding defect or ſpot in the object. He obſerves alſo, that theſe ſpots commonly vaniſh, or at leaſt become leſs ſenſible, when the object is brought nearer the eye, and within the limits of diſtinct viſion. For the rays which are now exactly united upon the retina, by being more crowded, have their force augmented; by which means a ſenſible impreſſion is made upon the retina through theſe extravaſations. Hence theſe ſpots are moſt ſenſible to thoſe who have a ſmall pupil, and eſpecially to thoſe who are ſhort or long ſighted. Hence alſo, in the preſbytical eye, the ſpots, which were formerly very ſenſible, become faint when the object is viewed through a convex glaſs; for by means of this glaſs more rays enter the eye, which, being united exactly at its bottom, muſt ſtrike the retina ſtrongly enough to make a ſenſible impreſſion through theſe extravaſations, which will render the ſpots obſcure. The learned doctor farther obſerves, that what has been ſaid with reſpect to theſe ſpots, when occaſioned by extravaſations, or defects in the retina, will alſo hold when they are occaſioned by a calloſity, or any degree of paralyſis or inſenſibility in ſome parts of the retina, by which the impulſe received from the rays is made leſs ſenſible.

Many medical authors have looked on the muſcæ volitantes as forerunners of a cataract, or gutta ſerena. And we ſuppoſe it cannot be denied, that many who have fallen into thoſe terrible diſorders have had thoſe appearances before their eyes; and hence they might have been taken for prognoſtics. But, as it is no leſs certain, that many thouſands have the ſame appearances, and yet preſerve their ſight very well to the laſt, there ſeems to be no great reaſon to be alarmed about them; and far leſs ſhould people be running to quacks, and injuring their ſtomachs and conſtitutions by ill-judged phyſic on ſuch occaſions. St. Yves denies theſe appearances to be at all dangerous; and he thinks them owing to the ſeparation of ſome parts of the retina from the choroid. However, as the diſorder is troubleſome and alarming to the patient, he adviſes purgatives from time to time, and millepedes. We can ſay, from experience, that neither mercurials, nor ſea-water, nor other purgatives, nor millepedes, nor again Tunbridge or other chalybeate waters, have had any effect towards removing or diminiſhing theſe diſorders. A greater doſe of wine than uſual has been known to increaſe it for a little time; and Plempius has made the like obſervation.

All authors agree, that theſe appearances change their figure, which is true in ſome meaſure; but, though they ſeem, on a ſudden looking to the ſky, or other bright object, to vary in their figures; yet, when they begin to deſcend, they return in one conſtant figure before we loſe ſight of them. On the whole, it ſeems this phenomenon is not yet fully accounted for. The vaſcular form of moſt of theſe appearances, and their reſemblance to ſmall veins or arteries, make it difficult to conceive them floating in the humours of the eye; and, on the other hand, their ſeeming contortions, and change of figure, on ſuddenly looking up, or ſhaking the head, make it no leſs difficult to conceive them fixed and obſtructed capillaries, as many authors ſuppoſe.

MUSCA'RI, *ſ.* in botany. See Hyacinthus.

MUSCA'RIUS, in heathen mythology, one of the names of Jupiter.

MUSCA'RY, a town of Hindooſtan, in Guzerat: ſixteen miles ſouth-ſouth-weſt of Junagur.

MUS'CAT, *ſ.* A delicious grape having the flavour of muſk; a kind of ſweet pear.

MUS'CAT, in geography. See Mascat.

MUS'CHENBROECK (Peter de), a very diſtinguiſhed Dutch philoſopher and mathematician, was born at Utrecht in the year 1699. He was firſt profeſſor of mathematics in his own univerſity; and afterwards invited to the chair of natural hiſtory at Leyden, where he died full of reputation and honours in 1761. He was a member of ſeveral academies; particularly the Academy of Sciences at Paris. He was the author of ſeveral works in Latin, which are frequently referred to, and all of which diſcover great penetration and exactneſs in the ſubjects of which he treats. He was alſo conſummate in the knowledge of law. The following are the titles of ſome of his works: 1. Elements of Phyſico-Mathematico, 1726. 2. Elements of Phyſics, 1736. 3. Inſtitutions of Phyſics, 1748. 4. Introduction to Natural Philoſophy, 1762. Beſides ſeveral tracts in the Memoirs of the Paris Academy, for the years 1734, 35, 36, 53, 56, and 60. and ſeveral papers in the Phil. Tranſ. vols. xxxiii. xxxvii. xxxviii. &c.

MUS'CHLAU, a town of Moravia, in the circle of Brunn: twenty miles ſouth of Brunn.

MUS'CHUOF, a town of Arabia, in the province of Yemen: eight miles north-weſt of Damar.

MUS'CI, *ſ.* in botany, Mosses; a moſt diſtinct and natural order of plants, of the Linnæan claſs cryptogamia. The word occurs in the beſt Latin writers; but its origin is unknown. Ambroſinus deduces it, in his Phytologia, from μοσχος, "a young calf or lamb," as well as the "young ſhoot or tendril of a plant;" which is not an improper etymology, and is adopted by Ray. The older botaniſts have found ſtill more difficulty in defining the nature of a moſs, than in the derivation of its name. Ray ſays, "Moſſes are beſt diſtinguiſhed by their minuteneſs; their leſs ſucculent, or even arid, ſubſtance; their power of reviving quickly, by immerſion in water, after they have been dried; their dry or abject ſituations, expoſed either to extreme cold or to ſcorching heat, upon trees, timber, or ſtones, where no other plants could exiſt or endure; finally, their mode of producing fruit, which is unlike that of other vegetables." Dillenius, who takes the idea of a moſs in its wideſt ſenſe, and who has illuſtrated the whole order, as he underſtood it, in a moſt careful and learned manner, has ſcarcely improved upon the definition of Ray. He ſpeaks of Muſci as "an inferior tribe of plants; the moſt imperfect kinds of which conſiſt, either of ſimple and uniform parts, deſtitute of flower and ſeed; or of parts differing among themſelves, accompanied with ſomething in the place of flowers and fruits, which is analogous to thoſe organs. The more perfect kinds are compoſed of parts not ſo much differing in figure, but are beſides furniſhed with organs containing a pulpy matter, that becomes dry in ripening, and when arrived at maturity flies off, in the form of an extremely ſubtil powder, ſerving for the propagation of the plant." Linnæus firſt circumſcribed the natural order of Muſci within its juſt limits. It makes the ſecond order of his cryptogamia; and, except the genus Lycopodium, which does not ſo properly belong to this order as to the Filices, and porella, which is a miſtake, he includes nothing but what anſwers to the moſt correct and moſt recent ideas on the ſubject. See the article BOTANY, vol. iii. p. 256, 280, 299.

The lateſt obſervations on the fructification of moſſes, will be found in the Linn. Tranſ. vol. x. p. 312 & ſeq. in a paper by Mr. Robert Brown, the librarian of the ſociety; wherein he propoſes two new genera; Dawſonia, conſiſting of a ſingle ſpecies, and Leptoſtomum, of four ſpecies: all from New Holland.

MUSCICA'PA, *ſ.* the FLY-CATCHER; in ornithology, a genus of birds of the order paſſeres. Generic characters—Bill nearly triangular, notched on both ſides, bent in at the tip, and beſet with briſtles at the baſe; noſtrils roundiſh; toes (moſtly) divided to their origin.

Few genera, according to M. Vaillant, have been more confounded with others than the fly-catchers properly ſo called; that is to ſay, thoſe whoſe chief food is flies and other inſects caught upon the wing, either by lying in wait for them, or purſuing them as the ſhrikes do their prey. The ſpecies of this genus, therefore, though very numerous, are continually confounded with the pipits, the wagtails, warblers, &c. The fly-catchers in their habits greatly reſemble the ſhrikes, and are to be conſidered as real birds of prey of a lower order; and might be ranked immediately after the ſmalleſt of thoſe kinds which purſue birds weaker than themſelves, to feed upon their fleſh. They are well diſtinguiſhed by a flat bill widening towards the baſe; the upper mandible is triangular, divided in the middle of its length by a ſharp long ridge, which reaching to the tip forms a hook ſimilar in ſhape to that of all the carnivorous tribes. The feathers of the front of the head come very forward upon the bill, partly covering the noſtrils, which lie very forward, ſo that theſe birds appear to have a very long roſtrum, from which character, the great Linnæus miſtook one of the long-tailed fly-catchers for a paradiſe raven. The ſides of the mandibles are armed with long ſtiff briſtles. "I uſe the word *armed*," ſays Vaillant, "ſince they are of the utmoſt importance to them in their chaſe after winged inſects. Theſe briſtles are at the baſe of the mandibles; they incline obliquely inwards, thoſe of the upper mandible hanging downwards, and thoſe of the lower riſing in an oppoſite direction, ſo that, when the bird opens its bill, they join acroſs, and form a net on each ſide the mouth; when therefore this bird purſues a fly, if the little animal once gets in the direction of the open mouth, it can hardly eſcape, but muſt be engulphed by the bird continuing its courſe, for it cannot avoid the net by turning on either ſide. It often happens, indeed, when the bird ſhuts its mouth to ſecure the fly, that the latter is left on one ſide between the bill and the briſtles, and is ſometimes ſo fortunate as to eſcape; not very frequently however, for the bird, miſſing its prey, preſently opens its mouth, and makes a chop on that ſide where the poor fly is ſtruggling to diſengage itſelf from the net-work, where it is entangled as in a ſpider's web. The noiſe the fly-catcher makes in ſhutting its mouth, may be diſtinctly heard at a hundred paces diſtance in calm weather.

The ſame fierce and cruel diſpoſition may be obſerved in theſe birds as in the ſhrikes. Like them they are quarrelſome and revengeful; like them alſo they fix upon a certain diſtrict, from which they exclude, as much as their ſtrength will permit, not only all other birds that feed upon inſects, but even their own ſpecies. They confine themſelves chiefly to one ſpot, and upon a bare branch of a ſolitary tree they ſit watching for their prey; and we may obſerve in all the ſpecies of fly-catcher that upright attitude which is common, not only to the ſhrikes, but to all carnivorous birds, and in general to all that remain long in the ſame place watching for their prey. The fly-catchers have the tarſus rather ſhort than long; claws hooked, and very ſharp; and the ſole of the foot broad. They have large bright eyes, and can diſcern ſmall inſects at a very conſiderable diſtance. They are naturally ſhy, and very difficult of approach; they have no ſong, but utter a ſharp and plaintive cry.

The manners and habits of the real fly-catchers, as well as their conformation, are very various; and therefore Vaillant divides them into ſeveral ſections. Some have beautiful large creſts; and their tails differ greatly in ſhape; in ſome it is ſquare, in others tapered or graduated, (*etagée*,) like our magpie; ſeveral ſpecies have two long filaments in the middle of the tail, like ſome of the parakeets; others have it forked, like our ſwallows; while others have filaments on each ſide, as in ſome of the rollers. In ſhort, all the forms of tail which nature has divided among birds in general are united in this ſingle genus; a circumſtance which greatly facilitates the diſtribution of the ſpecies into diviſions. They are alſo extremely various in ſize, from the bigneſs of a nightingale to that of a ſhrike, as will appear from the figures on our plates. There are more than a hundred ſpecies.

The uſeful deſtination of the fly-catchers will occur to the moſt ſuperficial obſerver. The inſect-tribes elude the interference of man; and, though deſpicable as individuals, they often become formidable by their numbers. Inſtances are recorded of their multiplying to ſuch an amazing degree as to darken the air; of their devouring the whole vegetable productions; and of their carrying in their train the accumulated ills of famine and peſtilence. Happily for mankind, ſuch calamities are rare; and Nature has wiſely provided the proper remedies. Moſt birds ſearch for inſects' eggs; many feed on their groveling larvæ; ſome live upon their cruſtaceous cryſalids; and the fly-catchers ſeize them after they eſcape from priſon, exulting on their wings. Hence in autumn, when theſe birds migrate into other climates, the ſwarms of gnats, flies, and beetles, are in our latitudes more than uſually numerous. But in the tropical countries, where heat and moiſture conſpire to ripen the exuberance of inſect life, the fly-catchers are more eſſential. All nature is balanced; and the circle of generation and deſtruction is perpetual! The philoſopher contemplates with tender melancholy this cruel ſyſtem of war; he ſtrives in vain to reconcile it with his ideas of benevolence of intention; but he is forcibly ſtruck with the nice adjuſtment of the various parts, their mutual connexion and ſubordination, and the unity of plan which pervades the whole.

1. Muſcicapa paradiſi, the paradiſe fly-catcher: head creſted, dark green: body red, (ſometimes white;) tail wedged, the two middle feathers very long. This beautiful ſpecies has been deſcribed by Briſſon and Buffon, but (Vaillant ſays) very incorrectly: for both theſe writers (he adds) have deſcribed the female only, or the young male, ſince they omit to mention the two long feathers in the middle of the tail, which characteriſe the male of this ſpecies, in its perfect ſtate. Briſſon, indeed, in his Supplement, corrects his miſtake by ſaying that the bird has a long tail; which Buffon, who confounds this ſpecies with another, contradicts.

The paradiſe fly-catcher, at its full ſize, preſents the figure nearly of our ſparrow, (Fringilla domeſtica ;) but it is ſomewhat longer, and therefore of a more ſlender appearance. The head is ornamented with a tuft, or creſt, conſiſting of long ſtiff feathers, reaching more than half an inch farther back than the occiput, but not falling down on the neck, as incorrectly repreſented in Buffon's plates. The creſt, the front feathers which come down over the noſtrils, and the neck, are dark green, which reflect tints of black or of ſteel-blue, according as the rays of light ſtrike upon them. The breaſt is white mingled with grey, but whiter on the under parts, and quite white on the flanks, belly, thighs, and under tail-coverts. The back, rump, wings, and tail, are bright red, except ſome black about the outer edges of the wing-quills. The tail is much tapered, and the two middle feathers are ſometimes four or five times as long as the body, even to the length of two-and-twenty inches; but in cabinets we find them of various lengths, from the circumſtance of the birds ſeldom being killed at the time of their feathers attaining their full length, which is only at a particular ſeaſon. The bill is ſtrongly beſet with briſtly hairs, and is at its baſe of a lead-colour ; feet the ſame.

The female is ſomewhat ſmaller ; has no long feathers in the tail ; red colour not ſo bright ; creſt ſmaller and flatter, but very viſible. Whether the male has the long feathers in the tail only in the pairing-ſeaſon is not certain, but it is moſt probable. Certain it is, however, that *he changes his colour ;* for Vaillant gives us the figure of one entirely white, which he affirms to be a male of this ſpecies ; and he propoſes the following queſtions for the conſideration of naturaliſts who may have opportunities of obſerving the ſpecies in their native haunts : Does this bird aſſume a white garb every year at a certain ſeaſon ; or only once for all at a certain age ? Does it change from white to red, or from red to white ?

Buffon had already obſerved this change ; and he corrects Briſſon for giving the white bird under another name, no doubt conſidering it as a diſtinct ſpecies, though he does not ſay ſo. But Buffon, while he detects this error, directly falls into another, giving the white bird as the female, and the red one as the male of the ſame ſpecies ; for Vaillant had ſeen white males as well as red ones, all with long tails ; and females reſembling both theſe exactly, except that they wanted the two long tail-feathers. Of this he was fully convinced by the diſſection of nine of theſe birds ſent him from Columbo in a perfect ſtate by an officer who had ſerved five-and-twenty years at Ceylon ; and he obſerved alſo that they had not the thick fleſhy eyelid of the preceding ſpecies. This bird, in its white garb, does not change the colour of the head, creſt, and neck ; but all the under ſurface of the body, from the bottom of the neck to the under tail-coverts, as well as the back, rump, and under coverts of the tail, are as white as ſnow ; the ſcapulars are white alſo, but the ſides of the quills are black ; the ſmaller and greater wing-coverts are partly black and partly white, as well as the quills of the wings, producing an agreeable mixture of thoſe two colours in longitudinal ſtripes. The two long middle-feathers of the tail are entirely white, except that the ribs of the quills are black ; and frequently they have a black ſpot at the end. The lateral tail-quills are moſtly white ; like the middle ones, their ribs are black, and they have a black line on their outer barbs, which line becomes broader as the feathers approach the centre. Bill and legs bluiſh, as before. The female has leſs black, the ſtripes being leſs viſible ; her creſt alſo is ſmaller. Buffon deſcribes the white bird as being larger than the red one, a variation which Vaillant could not diſcern ; but in cabinets much difference may be obſerved in their ſize, as well as in that of all birds, from the ſtretching more or leſs of their ſkins in ſtuffing them. Some difference will appear in their colours if they are killed when their moult or change is not complete ; then their appearance partakes more or leſs of red or white. The female deſcribed by Vaillant was almoſt entirely white ; yet not without a tinge of red, more evident on the tail and wings. On the contrary, the male was almoſt entirely red, but the two long tail-feathers were equally divided between red and pure white. Vaillant ſaw many of the ſpecies thus diſtinguiſhed. But the changeableneſs of the colours has cauſed much confuſion in the deſcriptions of this bird, upon which Vaillant inſiſts at great length. He ſays that it is well deſcribed by Seba, tom. i. p. 48. N° 5. except that the creſt is too large ; and that Edwards has given the white variety in his N° 113. and the red one in his Gleanings, N° 325. though he places it among the birds of paradiſe, on account of the two long feathers in the tail.

This very beautiful ſpecies is found in India, at Senegal, and the Cape of Good Hope ; alſo at Madagaſcar. It frequents the borders of the Gambia and Niger, and lives on flies like the reſt of the genus. In India it is called *ſhawbul*, which means the *king* of the ſinging-birds ; as it is ſaid to have a moſt delightful note.

Of this ſpecies there are three other varieties, viz.

β. The cheſnut paradiſe fly-catcher : feathers on the head, and hind-part of the neck, greeniſh black, forming a long creſt ; upper parts of the body pale cheſnut ; fore-part of the neck and breaſt grey ; from thence to the vent white ; quills and tail pale cheſnut ; legs lead-colour.

γ. The blue-breaſted paradiſe fly-catcher : all the under parts nearly white ; breaſt pale blue.

δ. The gold-wing paradiſe fly-catcher : bill reddiſh, beſet with briſtles at the baſe ; irides fire-colour ; head and throat gloſſy greeniſh-black ; head creſted ; all the upper parts of the body pale cheſnut ; the under white ; the wing-coverts of an elegant gold colour ; quills and tail pale cheſnut ; tail like the former. Found at Braſil.

2. Muſcicapa mutata, the mutable fly-catcher : creſted ; tail wedged, two mid-feathers very long ; eyebrows blue. Size of a ſparrow ; length eleven inches and a half, of which the tail meaſures near eight inches. The bill is flatted at the baſe, three quarters of an inch long, and black, beſet with briſtles ; irides yellow. The creſt, neck, and back, are of a greeniſh black, the back mixed with white ; the breaſt and under parts are alſo white ; wings black ; the middle part of them all the way lengthwiſe white ; the two middle tail-feathers are four inches and a quarter longer than the others, and white their whole length, except at the tip, where there is a ſpot of black ; the ſhaft is alſo black ; the others are white within, and black outwards, and when cloſed appear wholly black ; legs black. Found in Madagaſcar, where it is ſaid to be called *ſchet*. Vaillant calls it *ſchet roux ;* he met with it on the coaſt of Natal, near Caffraria ; alſo in the Iſles of Bourbon and Madagaſcar ; it is probable they inhabit the whole eaſtern part of the continent of Africa inclining towards the line, but not nearer to the Cape than lat. 28. or 30.

β. The cinnamon fly-catcher : length eight inches and a half : bill black ; irides yellow ; eyelids blue ; head creſted, black ; the reſt of the body, and tail, bright cinnamon colour : round the knees mixed with white. Inhabits Madagaſcar.

γ. Green and cheſnut fly-catcher : the head of a very dark green, and gloſſy ; the top creſted ; irides yellow ; eyelids blue ; the reſt of the body of a fine cheſnut ; wings black, with the ſame long patch of white down the middle as in the others ; the two middle long feathers are white, bordered with black for half the length ; the ſhaft is alſo black ; the four next on each ſide cheſnut ; and the outer feather black, except on the inner web, which is white for nearly the whole length. This alſo inhabits Madagaſcar, where it is called *ſchet vouloulou ;* and is made by Vaillant a diſtinct ſpecies, under the name of *ſchet noir*.

3. Muſcicapa nubila, the clouded fly-catcher. Vaillant deſcribes this as a new African ſpecies ; he calls it *nebuleux*, clouded, though the general plumage is as white as ſnow, except the wings and tail, which are quite black ; ſo that perhaps a more appropriate name might have been ſelected.

It inhabits only the Great Namaquois country, and ſeems confined to the borders of a river called by that people the Fiſh-river; (which however muſt not be confounded with a river of the ſame name in Caffraria.) It haunts the foreſts of mimoſa-trees which run near that river almoſt in its whole extent. This bird is very nimble, and hard to be ſhot, becauſe it prefers thoſe trees whoſe roots are waſhed by the river, and moſt frequently perches on the branches that overhang the water, by which means it procures an ample ſubſiſtence, as it feeds only upon little flies that frequents moiſt places. It builds alſo a neſt at the end of a branch near the water, ſo that it is dangerous to get at them; and Vaillant could procure this beautiful ſpecimen only by ſending his ſervant into the water, who ſwam towards their retreats, and ſhot them in that ſituation.

Of the clouded fly-catcher the bill is longer and leſs flatted than in the preceding ſpecies, the legs are longer; it has no creſt, yet the head is larger. The mandibles are not furniſhed with that abundance of ſtiff hairs which are ſo uſeful to the fly-catchers properly ſo called, for ſecuring their prey, the common flies; for this ſpecies feeds by choice upon thoſe ſmall flies or gnats which appear in vaſt quantities together, and are therefore more eaſily caught and retained than a common fly ſingly on the wing, but which the common briſtled fly-catchers attain ſo dexterouſly. Vaillant therefore conſiders this and the following as belonging rather to the genus Motacilla than to that of the Muſcicapa; he ſays they might very properly follow the African warblers, under the title of "Warblers or wagtails with long tails."

This ſpecies is about the ſize of the preceding, but rather ſtouter in the body. The tail is tapered, the two middle feathers being nearly four times the length of the reſt; they are narrow at their origin, diminiſhing in breadth to the end, where of courſe they are very thin, and have more flexibility than in the preceding, and fall into a bend with their length. The bill, feet, and nails, are black; the eyes nut-brown. The female is ſmaller than the male; and, where he is white, ſhe is light brown, lighter ſtill on the forehead, throat, and belly; the wings and tail are black as in the male, but not of ſo deep a black. But ſhe is diſtinguiſhed, as are all the females of long-tailed birds, by wanting the two long tail-feathers. During winter the male alſo loſes his white colour and his two long feathers, and can hardly be diſtinguiſhed from the female. The neſt is generally at the end of a branch hanging over the water; it conſiſts of the tender ſtems and twigs of plants wrought in with moſs and the very thin fibres of the roots of plants. The eggs, five in number, are green dotted with brown. The male ſhares with the female the work of incubation, and utters a very ſmall note, *tcherit*.

4. Muſcicapa loricaria, the black-breaſted fly-catcher: black and white are the prevailing colours in this ſpecies alſo, but differently diſpoſed. The head, back of the neck, mantle, and a large patch on the breaſt, are entirely black; the throat and all the under parts of the body white; the ſcapulars, back, and wings, brown; but a large patch of white appears near the middle of each wing, formed from a part of ſome of the great ſcapular feathers, the laſt wing-feathers and part of the outer barbs of the mid-quills; alſo a ſmall white ſpot on the rims of the three primary feathers, and another near the pinion. The lateral tail-feathers are of a fine black edged with white; they are ſomewhat tapered, but the two middle feathers exceed theſe in length by almoſt three times the length of the body; they are entirely white, and ſo extremely thin, as to be continually in motion by the leaſt breath of wind; and it is very difficult to procure a ſpecimen with theſe feathers entire, as the leaſt rubbing injures their barbs or breaks them. The bill, feet, and nails, are black; the iris brown. The bill is ſhorter, not ſo ſtrong, the feet ſhorter, and the tail leſs tapered, than in the preceding; which will be ſufficient to diſtinguiſh the two ſpecies. The female wants the two long tail-feathers, as obſerved before; her breaſt-plate is red inſtead of black; her black in every part is leſs dark, and the white ſpot in the middle of the wing is not ſo large. The young male reſembles the female; and the adult male loſes his long feathers and black breaſt in the rainy ſeaſon, and is to be diſtinguiſhed from the female only by his ſize. Vaillant found this ſpecies near the tropic of Capricorn in the country of Coraquois and Kabobiquois; he did not diſcover its eggs or neſt, nor the name it bears in theſe countries.

5. Muſcicapa ſtriata, the ſtriped fly-catcher: length five inches; bill black; baſe of the under mandible yellowiſh; crown black; hind head black and white; throat yellowiſh white, ſpotted with brown; breaſt whitiſh; ſides ſpotted with black; belly white; back greeniſh aſh-colour, ſtriped with black; rump inclining to aſh-colour, and ſpotted with black; on the wing-coverts two bars; the upper one yellowiſh white, the lower white; tail brown; the outer feather has a ſpot of white on the inner web; the ſecond the ſame, but ſmaller; the third only margined with white within; legs yellow. The female has the head of a greeniſh yellow, ſtreaked with ſlender lines of black; over the eyes a yellow line; eyelids yellow; throat, cheeks, and breaſt, whitiſh yellow, ſprinkled with oblong ſpots of brown, from the ſides of the mouth to the breaſt; the reſt as in the male, but greener on the back, and ſtreaked more ſparingly. Inhabits North America, viſiting Severn River only in the ſummer ſeaſon.

6. Muſcicapa Martinica, the Martinico fly-catcher: length ſix inches: bill brown, beſet with hairs at the baſe; the feathers of the head, and reſt of the upper parts, brown; thoſe of the crown long, and whitiſh at their baſe, and, when erected into a creſt, appear mixed; the under parts are aſh-coloured; quills brown, with whitiſh edges; tail brown; legs aſh-colour. Native of Martinico.

7. Muſcicapa fuſca, the black-cap fly-catcher: ſize of the nightingale: bill black, briſtly at the baſe; top of the head black; the reſt of the upper parts brown; the under of a yellowiſh white; quills brown; tail the ſame, and forked; legs black. The female has the top of the head not of ſo deep a black. Theſe inhabit Carolina, where they breed: feed on flies and inſects; and depart elſewhere in winter.

8. Muſcicapa tyrannus, the fork-tailed fly-catcher: ſize of the creſted lark: bill black; at the baſe a few briſtles; the upper part and ſides of the head black; on the middle of the crown the feathers are yellow at the baſe; hind part of the neck, back, rump, and ſcapulars, cinereous; upper tail-coverts black; all the under parts white; the ſmaller wing-coverts cinereous; the greater brown; quills brown, the inner margins white; tail black, greatly forked, the outer feathers being nine inches and a quarter long, the middle ones not two; all of them are black, but the outer one has the exterior web white for half its length from the baſe; legs black. In ſome birds the yellow on the crown is wanting, and theſe are juſtly ſuppoſed to be the females. Theſe inhabit Canada and Surinam.

9. Muſcicapa forficata, the ſwallow-tailed fly-catcher: length ten inches, of which the tail is five: bill ſtraight, eight lines long, compreſſed, and weak; the colour of it black; irides red; the head and back light grey, with a tinge of red; the under parts of the body white; beneath the wing red; the ſmaller wing-coverts aſh-colour, with pale edges, in the form of ſcales; the greater coverts marked in the ſame manner, but blackiſh; the quills black, edged with grey. Tail greatly forked, the outer feathers five inches long, and the middle ones but two; theſe are all black, edged with rufous grey; legs black. Native of Mexico.

10. Muſcicapa Surinama, the Surinam fly-catcher: upper parts black, the under white; tail rounded, and tipped with white. Inhabits Surinam.

11. Muſcicapa fuliginoſa, the brown fly-catcher. This is a ſmall ſpecies, ſcarcely four inches long: the bill is

duſky, with a few hairs at the baſe; plumage above dark brown, the feathers edged with yellowiſh brown; the quills and tail have whitiſh edges; the under parts are all whitiſh, with a ferruginous tinge on the breaſt; legs duſky.

β. A variety of this bird has a tinge of green on the upper parts; the breaſt olive brown, the belly yellow, and the quills fringed with reddiſh yellow. Both found at Cayenne.

12. Muſcicapa aurantia, the orange-breaſted fly-catcher: length four inches and three quarters: bill flat and broad; colour duſky; the head and hind part of the neck are greeniſh brown; the back rufous, with a tinge of green; tail rufous; quills black, edged with rufous; under parts of the body white, except the breaſt, which is of a pale orange-colour; legs pale. Native of Cayenne, where it frequents the ſkirts of the woods, and the ſavannas. It is a ſcarce ſpecies.

13 Muſcicapa coronata, the crowned fly-catcher: length five inches and a half: bill brown; the head is furniſhed with a remarkable rounded coronet or creſt, not unlike that of the rock-manakin, and ending in the nape; the creſt, ſides of the head, and all the under parts, are of a moſt beautiful crimſom; the reſt of the body, wings, and tail, brown; the quills have grey edges; legs reddiſh. The female has no creſt: the colours much lighter; and, inſtead of the crimſon, thoſe parts which are ſo in the male, are only tinged with that colour. Theſe inhabit the borders of the Amazons' river, in South America, and are known there by the name of *putillas*.

14. Muſcicapa refeſcens, the rufous fly-catcher: ſize of a houſe-ſparrow; bill ſtout, ſhort, and duſky; the upper parts of the body are of a rufous colour; quills black; on the top of the head is a ſpot of brown; the under parts white, with a tinge of rufous; legs duſky.

15. Muſcicapa cinerea, the rufous-bellied fly-catcher: length eight inches and a quarter: bill more than an inch and a quarter long, the upper mandible duſky, the under grey; the head, hind part and ſides of the neck, deep aſh-colour; the feathers on the crown have dark ſhafts, thoſe of the back rufous brown; throat and fore part of the neck aſh-colour, margined with whitiſh; rump, upper tail-coverts, and breaſt, bright rufous; from thence to the vent the ſame, but paler; wings edged with rufous brown; tail bright rufous; legs brown. Native of Cayenne.

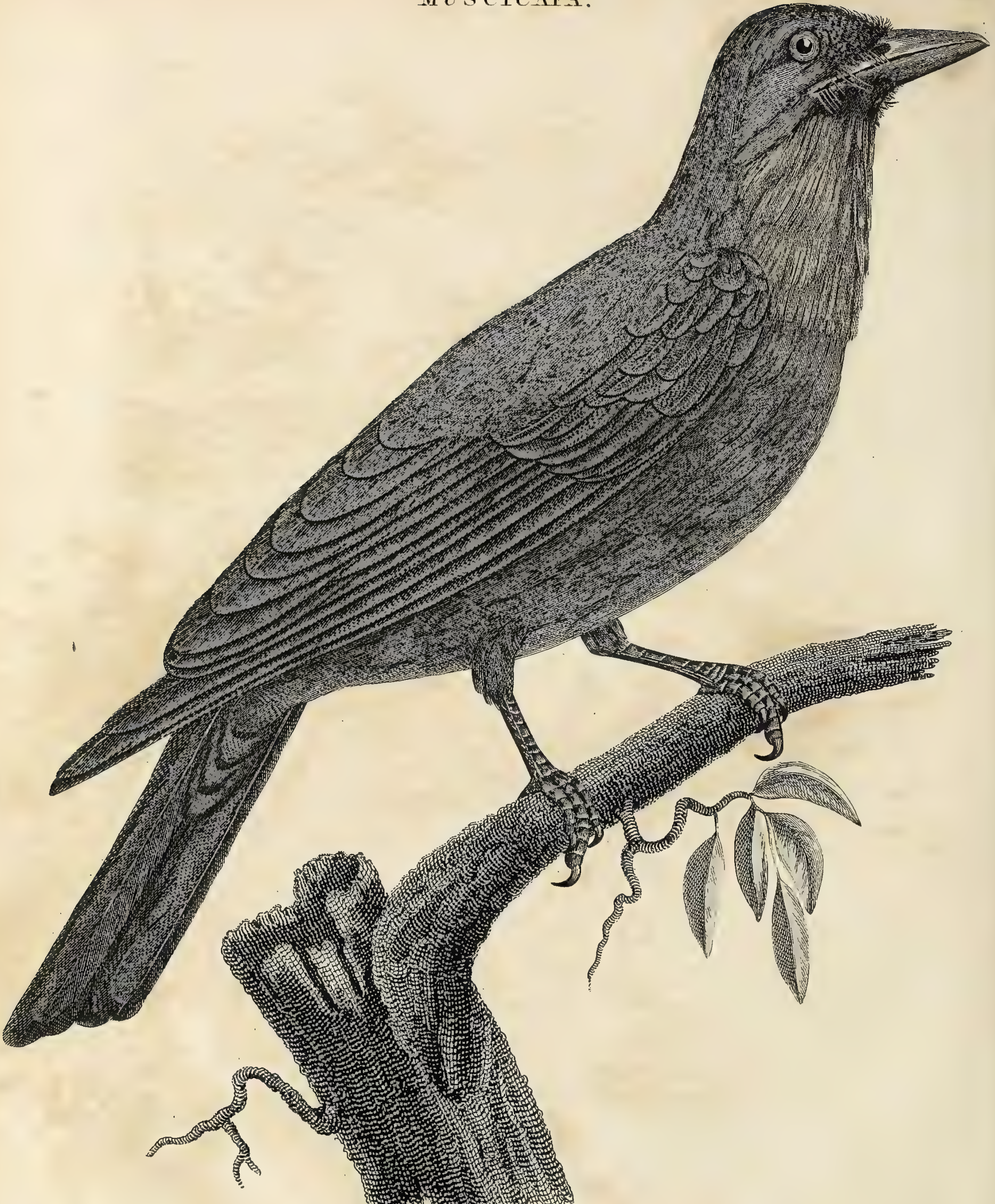
16. Muſcicapa pygmæa, the pigmy fly-catcher: a very minute ſpecies, meaſuring ſcarcely three inches in length. The bill is long in proportion, a little curved at the point, and duſky; the head, and hind part of the neck, rufous, ſpotted with black; the back and wing-coverts deep aſh-colour, with greeniſh edges; wings black, edged with grey; all the under parts ſtraw-colour; tail ſhort, and black; the ſcapulars and rump are of a pale aſh-colour; under the eye a pale ſtreak; legs fleſh-colour. Inhabits Cayenne.

17. Muſcicapa minuta, the minute fly-catcher: ſmaller than the golden-creſted wren: the plumage is deep olive grey, with a greeniſh tinge on the upper part of the back and belly; the wings are blackiſh, ſtreaked with yellowiſh white.

Both theſe minute ſpecies are found in various parts of South America, which abounds with the greateſt variety of this genus, as a proper check to the myriads of inſects, the peſt of thoſe parts.

18. Muſcicapa minuta Africana, the ſmall African fly-catcher. This pretty fly-catcher is the ſmalleſt of the genus, at leaſt in Africa; it ſeems to form a connecting link between the fig-eaters and the fly-catchers; the tarſus is longer than in the latter, and thus approaches the former; but the bill is more triangular and flat, and the mandibles are furniſhed with hairs like the reſt of the fly-catchers. The preſent ſpecies is extremely nimble in purſuing flies and ſwarms of gnats; but in the heat of the day, when the flies are at reſt, they ſeek their prey in the trees, and feed upon moths, ſpiders, and any inſects they can find. The male is betrayed among the leaves by a little cry, *zizizit;* but is not eaſily diſtinguiſhed on account of his agility and ſmall ſize, being not larger than our ſmall long-tailed titmouſe, which he reſembles in ſhape. The tail is tapered, white at the ſides, black in the middle. The firſt of the great wing-quills are black, the laſt partly white, which is the colour of the great coverts and part of the ſmall. The eye is of a fine red brown, the effect of which is heightened by a large black ſpot, which from the corner of the mouth runs acroſs the eye quite to the ear; this black ſpot joins on one ſide to a ſtripe of white which runs over the eye; and on the other to the throat, which is white, as are all the feathers which cover the ſternum, the belly, and under part of the tail. There is a ſmall ſtripe of red in the middle of the throat, and another under the belly; they look like blood iſſuing from a wound, and more ſo when you move back the feathers, as the under feathers are redder. The reſt of the plumage is of a bluiſh grey; the bill and toes are black, the feet brown. The female differs in the faintneſs of her colours, her inferior ſize, her tail which is ſhorter; and the red ſtripes we juſt mentioned are not at all apparent till the feathers on thoſe parts of the throat and ſternum are removed. This ſpecies inhabits Caffraria; but more plentifully among the Great Namaquois, and eſpecially about the Great or Orange River. Vaillant had not the good fortune to meet with a neſt of this ſpecies; the ſavages informed him that they neſted in the thickets, and that their eggs were white.

19. Muſcicapa parus, the oranor. This is a beautiful ſpecies, not African, but in many particulars like the preceding; the tail, however, is much more tapered, all the feathers differing in length except the four middle ones, which are alike and longeſt. This was ſent from Ceylon to M. Vaillant, by M. Temminck, caſhier to the Dutch India Company. Its habits and manners are not known; but, from its ſimilarity in many reſpects with the preceding, there is little doubt but its way of life is ſimilar alſo. The oranor is larger than the ſmall African fly-catcher, being nearly the ſize of our goldfinch; but the tail is as long as the body. The head, throat, back of the neck, ſcapulars, and mantle, are black with a gloſs of bluiſh grey. The four mid-quills of the tail are black; ſo are the wings, but with an orange-coloured ſpot. The lower part of the neck, breaſt, belly, and under tail-coverts, are of a beautiful red, with a few daſhes of a darker red; the rump, the lateral tail-feathers, and upper coverts, are red alſo; but, as the down and under parts of theſe feathers are white, this colour ſoftens the red when the feathers are diſplaced or any way agitated. The bill, feet, and nails, are dark brown; the colour of the eyes not known. The female is about the ſize of the male; indeed it appeared rather larger; but, as Vaillant had only ſtuffed birds to judge from, it was impoſſible to tell, ſince much depends upon the preparation; and no one muſt pretend to ſpeak deciſively as to proportions unleſs he has the perfect birds before him. As for the colours, they are ſufficient to diſtinguiſh the female at firſt ſight from the male. The head, back of the neck, mantle, ſcapulars, and back, are greyiſh, inſtead of black; the forehead is white, or very faintly red; the tail is ſhorter, but tapered in the ſame manner, and the lateral feather a fainter red; the rump, and upper tail-coverts, are as bright as in the male; the ſpot on the wing is of a very faint orange; the throat, neck, and all the under parts of the body, ſtill fainter. The feet and legs are light brown; the four mid-quills of the tail are black, as in the male. After all, Vaillant cannot ſay poſitively whether this ſpecimen, which he has deſcribed as a female, may not be a young male. This ſpecies bears ſome reſemblance to the M. ruticilla, N° 27. by Buffon called *petit noir aurore:* but this laſt is much ſmaller than the oranor, and its tail is not tapered. Another bird which it greatly reſembles in colour, is the Parus Malabaricus, or Malabar titmouſe, firſt made known by Sonnerat, tom. ii. 204. but very imperfectly deſcribed



The Purple-throated Fly-catcher.

Engraved for the Encyclopaedia [illegible]

and erroneouſly figured. Vaillant however inclines to think it the ſame ſpecies with the oranor.

20. Muſcicapa barbata, the whiſkered fly-catcher: length five inches: bill broad at the baſe, flat, and beſet with hairs, which are longer than the bill itſelf; the plumage on the upper parts is deep olive brown, except the crown of the head, which is of an orange-colour; the under parts are greeniſh yellow, changing to the laſt colour on the rump; legs brown. The female is bigger than the male: the bill leſs, and beſet with only a few ſhort hairs; the upper parts of a blackiſh brown, tinged with green; on the crown an oblong ſpot of yellow; throat, and upper part of the neck, whitiſh; the lower, and breaſt, brown, with yellowiſh edges; belly and vent pale yellow. This ſpecies is found at Cayenne: the male and female moſtly ſeen together. The neſt is generally placed on ſuch branches as are leaſt clothed with leaves, and is of a large ſize, being twelve inches deep, and five or more in diameter, wholly compoſed of moſs; it is only open on the ſide, about three inches from the top. The note is a ſoft whiſtle.

21. Muſcicapa rubricollis, the purple-throated fly-catcher: ſize of a blackbird: bill broad at the baſe, an inch and a quarter long, bent at the tip, and beſet at the baſe with a few hairs; the colour duſky; the whole plumage is black, except the chin, throat, and fore part of the neck, on which is a large bed of beautiful crimſon, inclining to purple; legs black. Some ſpecimens are wholly black, having not the leaſt trace of crimſon on the throat: and ſuch may be eſteemed as females or young birds. Theſe inhabit Cayenne, and other parts of South America: they are found in flocks, and precede in general the toucans in their movements; feed on fruits and inſects, to which laſt their bill ſeems fully adapted: are lively birds, always in action. Inhabit the woods, like the toucans; and, where the firſt are found, the others are ſeldom far off.

Vaillant places this among the chatterers. He obſerves, that it frequents foreſts, but feeds *only on fruits*, and therefore cannot be a fly-catcher; builds on large trees a very wide neſt, wherein the female lays four eggs. It expreſſes diſtinctly the words *pi-hau-hau*, but not with a ſharp cry as Buffon aſſerts, for it would not be poſſible to articulate *hau-hau*, which are guttural ſyllables, ſharply. The eyes are reddiſh brown; bill lead-colour; feet and nails black. The wings are large, and reach two thirds the length of the tail, the outer feather of which on each ſide is rather ſhorter than the reſt. Briſſon deſcribes the wings as reaching to the end of the tail, a miſtake which aroſe no doubt from his meeting with a ſpecimen badly prepared. The female is ſomewhat ſmaller, and differs only in wanting the purple throat, that part being entirely black like the reſt of the plumage. The firſt plumage of the young male is the ſame; at his firſt moult he begins to have a few pale-red feathers on ſome parts of his neck; there was a ſpecimen in this ſtate in the national cabinet at Paris. The brightneſs of the throat is not complete till the third year. This large ſpecies is very common throughout Guiana, and may be ſeen in almoſt every collection. It is repreſented on the annexed Plate, from Vaillant's Hiſt. d'Oiſeaux rares d'Amerique et des Indes, tom. i.

22. Muſcicapa crinita, the briſtly fly-catcher: ſize of the creſted lark: bill black, and very briſtly at the baſe; irides hazel; the head is creſted with long briſtly feathers, and of a dull green; hind part of the neck and back the ſame; wing and tail-coverts brown: the under parts, from the chin to the breaſt, aſh-colour; from thence to the vent yellow; quills and tail brown; legs black. Inhabits Carolina and Virginia in ſummer: builds there, and departs in autumn.

23. Muſcicapa ferox, the tyrant fly-catcher: length ſeven inches; bill brown; head, hind part of the neck, and thence to the tail, deep brown; from the chin to the breaſt aſh-coloured; from thence to the tail pale yellow; thighs olive brown; the wing-coverts deep brown, the greater ones edged with olive; quills and tail of the ſame colour; legs blackiſh. The female only differs in being paler. Inhabits Cayenne.

β. There is a variety of this bird a ſize ſmaller, but ſimilar in plumage, except that the brown inclines more to rufous.

24. Muſcicapa Ludoviciana, the Louiſianian fly-catcher: ſize of the laſt: bill long; head, neck, and back, grey brown; throat ſlate-colour; belly yellowiſh; on the greater wing-coverts is a mixture of white; the quills pale rufous; tail cinereous brown, edged with rufous. Inhabits Louiſiana.

25. Muſcicapa audax, the bold fly-catcher: length eight inches: bill ſtout, black, an inch and a quarter long; crown of the head yellow; forehead, chin, and throat, white; through the eye a duſky ſtreak; upper parts of the body and wings duſky, each feather edged with rufous brown; rump and tail ferruginous, with the middle of the feathers on the back duſky, like the other; the under parts, from the breaſt, pale yellow, marked with long narrow black ſtreaks on the ſides; legs duſky blue. The female wants the yellow on the head: and in ſome of the males the ſpot is of an orange-colour. This ſpecies is ſeen along the creeks at Cayenne, and perches on the low branches of trees, eſpecially the mangrove, catching the inſects which frequent the water. It is a bold and audacious bird, quite regardleſs of the preſence of man.

26. Muſcicapa atricapilla, the pied fly-catcher, or coldfinch: length four inches and three quarters; bill black; irides hazel. The colours of this bird are merely black and white; the upper parts of the body, wings, and tail, are black; the firſt of them inclined to duſky, and the forehead and under parts white; there is alſo a ſpot of white on the wing, and the outer tail-feather is white on the outer web, almoſt to the end; the upper tail-coverts are black and white mixed; legs black. The female is brown where the male is black; wants the white on the forehead; and the under parts are duſky white; the white on the wings is alſo leſs pure. This is indigenous to England; and moſt plentiful in Yorkſhire, Lancaſhire, and Derbyſhire. A neſt belonging to two birds of this ſpecies was taken in 1803, in Axwell-park, with a great number of young, and alſo the parent birds. The aſſiduity of the latter, which were almoſt unremittedly employed in taking flies for their numerous family, was highly intereſting. The dexterity and attention of the male bird appeared moſt conſpicuous.

There are two other varieties of this ſpecies. β is above ſix inches and a half in length, and differs in having a mixture of grey on the upper parts, the thighs mixed brown and white, and three of the outer tail-feathers white on the margin. γ more nearly reſembles the firſt, having only the outer tail-feather white on the margin, but differs in the white on the neck paſſing quite round it, like a collar. Theſe varieties the leſs ſurpriſe us, when we are aware that the bird varies in plumage in different ſeaſons of the year; the male only poſſeſſing the full black during the ſummer; after that, growing, by degrees, ſo like the female as not to be known from her. Hence ſuch variety of deſcription and ſentiment concerning this bird. It is met with in Lorraine and Brie, where it comes the middle of April. Builds in ſome hole of a tree, not very near the ground. The neſt is only a few fibres mixed with moſs, covering the bottom of the hole: the eggs ſix in number. It is found as far north as Sweden, and in Ruſſia; and has been obſerved between the river Kama and Samara.

27. Muſcicapa ruticilla, the black-and-orange fly-catcher: length four inches and three quarters: bill blackiſh towards the tip; head, neck, and upper parts, jet black; the wings are alſo black, with a deep orange bar acroſs the middle of them; ſides of the body orange; the belly, thighs, and vent, pale orange; the tail orange, with one-third of the end black; the two middle feathers wholly black. The female has the upper parts browniſh aſh-colour; the

under white; tail, wings, and ſides of the body, the ſame, but yellow inſtead of orange; legs in both brown. Theſe inhabit the ſhady woods of North America, as far as Hudſon's Bay, in ſummer; in winter they migrate, and are then ſaid to be found in Jamaica and the neighbouring iſlands.

28. Muſcicapa virens, the ſprightly fly-catcher: the upper mandible black, the under yellow; the head and upper parts are dark aſh-colour; the under, yellowiſh white; wings brown, edged with white; tail brown; legs black. Found in Carolina in ſummer: breeds there, and departs before winter. Length, ſix inches.

29. Muſcicapa viridis, the green fly-catcher: ſomewhat bigger than a lark: the bill ten lines long, and black; the head, and upper parts of the body, dull green; over the eyes a ſtreak of white, and beneath a ſmall white ſpot; in the direction of the under jaw a ſlender white line; the throat, and beneath as far as the belly, yellow; from thence to the vent dirty white; the quills are dull green; tail brown; legs and claws black. Total length, eight inches. This is found in Carolina, but not in the inhabited parts, being chiefly met with two or three hundred miles from the ſea. It frequents the banks of great rivers, and is very ſhy. It flies with the legs extended; and is ſaid to ſing well. Feeds on the ſeed of the purple-flowered ſolanum.

30. Muſcicapa Sibirica, the Siberian fly-catcher: general colour brown, inclining to aſh-colour beneath; the throat and vent ſpotted with white. Inhabits the parts about Lake Baikal, and in the eaſtern part of Siberia. It is alſo obſerved in Kamtſchatka.

31. Muſcicapa erythropis, the red-faced fly-catcher: the upper parts mottled, the under white; beneath the wings rufous; the forehead red. Inhabits the parts about the river Jeniſei, in Siberia.

32. Muſcicapa Cayanenſis, the Cayenne fly-catcher: rather leſs than a lark; ſeven inches long: bill duſky; top of the head brown; the feathers down the middle of it yellow at the baſe; from the bill, over the eye, a ſtreak of white; before and behind the eye a deep brown ſpot. All the upper parts of the body are brown, edged with olive; the upper tail and wing coverts brown, with rufous edges; the chin white; the reſt of the under parts yellow; quills and tail brown, with rufous edges; legs blackiſh. Native of Cayenne.

33. Muſcicapa Canadenſis, the Canada fly-catcher: length four inches and a half: bill grey brown; crown cinereous, ſpotted with black; between the bill and eye a yellow ſpot, and beneath the eye a black one. The upper parts of the plumage cinereous; the under yellow, marked with ſmall black ſpots on the fore part of the neck; the under tail-coverts are white; wing-coverts cinereous, within brown; quills and tail greyiſh brown, edged with cinereous; legs pale yellow. Native of Canada.

34. Muſcicapa cinnamomea, the cinnamon fly-catcher: length eight inches: bill ſtout, pretty ſtraight, and black; the plumage in general of a yellowiſh cinnamon-colour, in different ſhades, on the upper parts; the rump and under parts much paler, almoſt yellow; the wing-coverts are tipped with this laſt colour, which forms a bar on the wing; quills duſky, margined with ferruginous. Inhabits Cayenne.

35. Muſcicapa ſpadicea, the yellow-rumped fly-catcher: length ſeven inches: bill one inch long, and brown; the upper parts of the plumage of a reddiſh brown; the wing-coverts margined with rufous; the quills brown; the rump yellow; belly and vent buff-colour; tail even at the end, three inches in length, and of the ſame colour as the quills. Inhabits Cayenne, with the laſt.

36. Muſcicapa olivacea, the olive fly-catcher: length five inches and a half: bill lead-colour; baſe of the under mandible pale, and beſet with briſtles; irides red. All the upper parts of the plumage are greeniſh olive; through the eyes a browniſh ſtreak; and parallel to this, above them, a whitiſh one; the under parts are greeniſh white; quills and tail deep olive, edged with white; legs brown. This bird is found in Carolina and Jamaica alternately; viſiting the firſt in ſummer, and retiring to the laſt in the winter months. It is called at Jamaica by the name of *whip tom kelly*.

β. There is a variety of this bird without the pale ſtreak over the eyes, and with two pale bands acroſs the wings; the under parts yellowiſh white. It inhabits Canada.

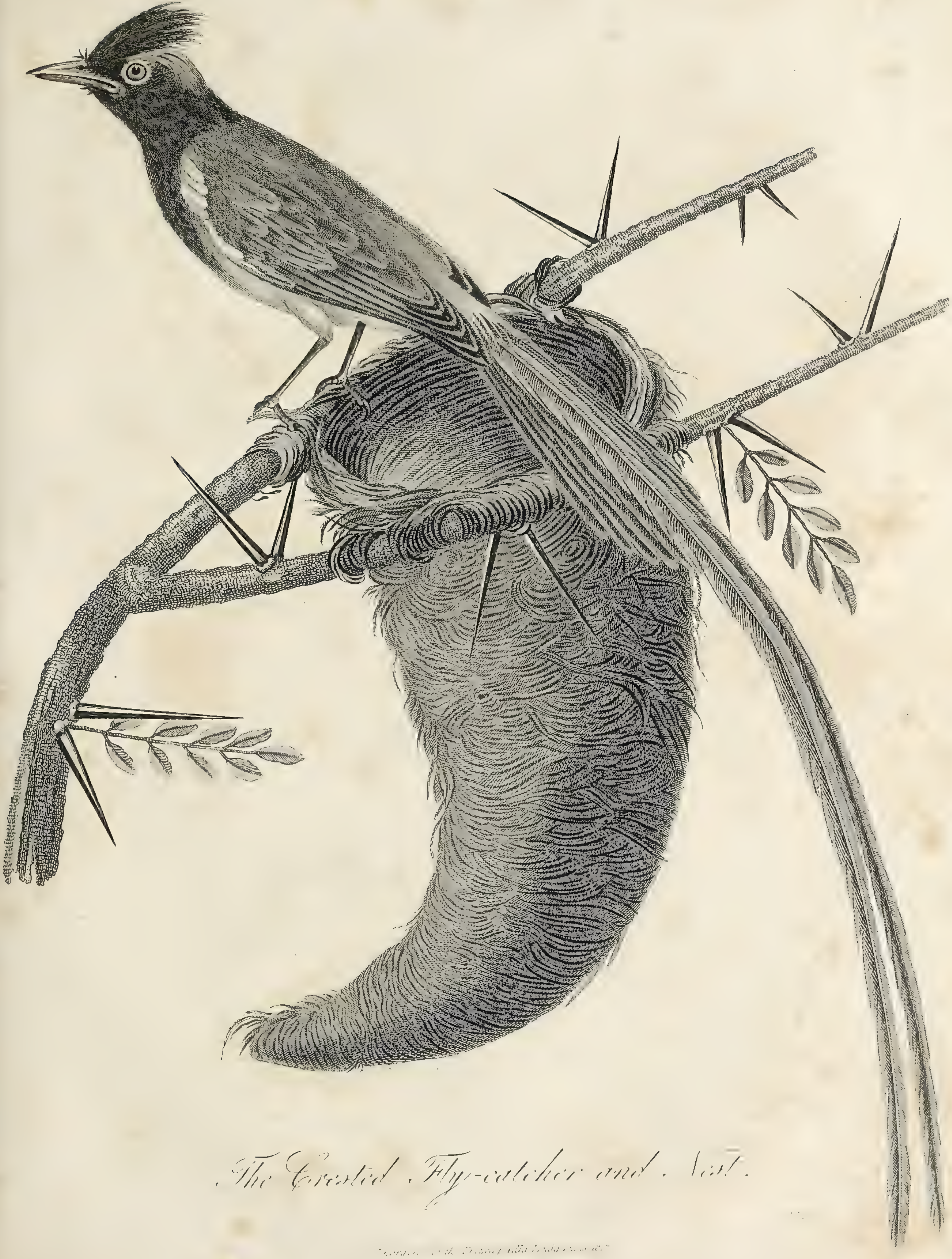
37. Muſcicapa Senegalenſis, the Senegal fly-catcher: length four inches and a quarter: bill black; top of the head brown; from the bill a ſtreak of white paſſes over the eye to the hind-head; cheeks black; hind part of the neck, and throat, rufous white; back, rump, and ſcapulars, blackiſh and grey, mixed with a little white; upper tail-coverts black; breaſt pale rufous; fore part of the neck, belly, vent, and edge of the wing, white; thighs brown and white, mixed; acroſs the wing-coverts a white bar; quills brown, edged with grey; tail black; the four middle feathers plain; the next, on each ſide, tipped with white; and the three outermoſt are white on the outer edges and tips; legs black.

β. There is a variety, which, inſtead of the rufous breaſt, has a band of black on the ſame part; and the upper parts of the plumage are black, clouded with white, which in the other bird are only duſky and grey; eight of the middle tail-feathers in this bird are black; the laſt but one black tipped with white; and the outer one white on the outer web and tip. Both varieties are found at Senegal; and by ſome ſuppoſed to be male and female.

38. Muſcicapa criſtata, the creſted fly-catcher. This ſpecies has been deſcribed by Briſſon; but, according to Vaillant, not correctly. The latter calls it *tchitrec*, ſo named from its cry by the coloniſts of the Cape about the river Duywenhock, where it is firſt met with. He does not object to the name given it by Briſſon, *gobe-mouche huppé du Sénégal*, becauſe it is really met with in that part of Africa alſo. But Briſſon appears not to have ſeen the ſpecies in its moſt perfect ſtate, ſince he omits to mention the long tail which diſtinguiſhes the male, but only in the ſeaſon of love.

The tchitrec is about the ſize and ſhape of our goldfinch, but ſomewhat longer. The two middle tail-feathers of the male are extremely long at a particular ſeaſon. Beſides his long tail, the male is diſtinguiſhed by a broad, thick, fleſhy, eyelid; it is movable, and of a fine blue colour, encircling the eye, and ſhaking about, as in ſome ſpecies of pigeons; he has alſo a beautiful tuft or creſt, the feathers of which have but narrow barbs at their origin, but ſpread out and increaſe as they riſe. This creſt is dark green, which, according as the rays of light intervene, takes ſometimes the blue gloſs of poliſhed ſteel; the ſame colour prevails over the neck, face, and breaſt, where it becomes leſs ſhining, and changes to ferruginous grey on the ſternum, and at length to white on the thighs, lower belly, and under tail-coverts. The back, wings, and tail, in ſhort the whole upper ſurface, are of a bright red; only the large wing-quills are tipped with black. The tail conſiſts of twelve feathers; of which, five on each ſide are tapering, and form exactly the ſhape of a ſpearhead; but the two middle feathers are very long, being commonly, when at the full extent of their growth, three times the length of the body. The bill is blue at its origin, black at the point; the legs and claws are bluiſh, the nails black.

The female is rather ſmaller; her creſt is not ſo large, nor her colours ſo bright. Her face, neck, breaſt, and under parts of the body, are ferruginous grey; the lower belly and under tail-coverts are of a duller white; the red on the back, wings, and tail, are not ſo ſtrong, and particularly have not the ſhining gloſs of thoſe parts in the male; the lid which encircles the eye is narrower, thinner, and of a paler blue. But what particularly diſtinguiſhes the female is the tail, the two middle feathers of which never, at any time of the year, extend beyond thoſe which are next to them. And it muſt be obſerved, that, after



The Crested Fly-catcher and Nest.

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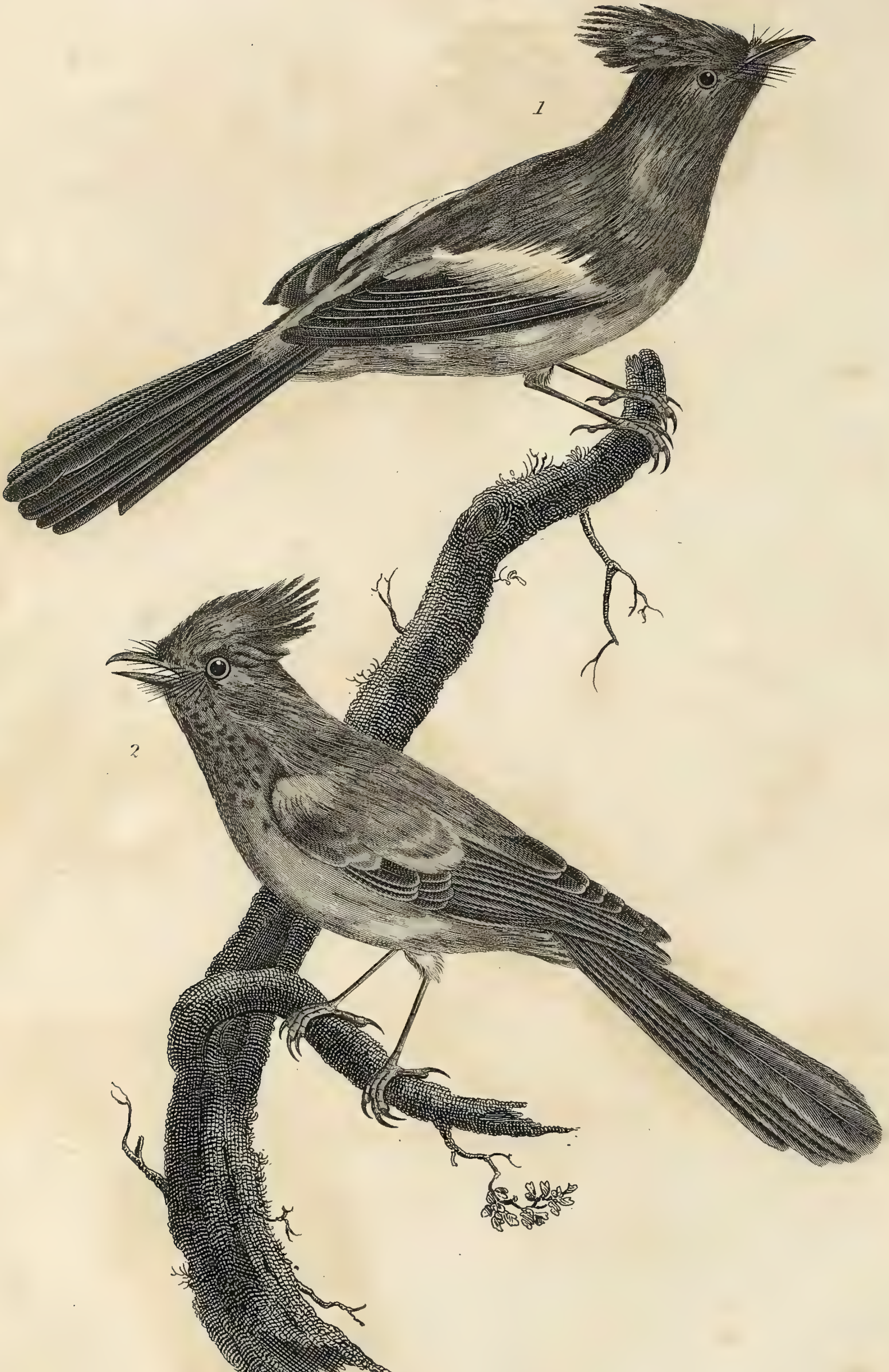

The Mantled Fly-catcher, male and female.

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the pairing-ſeaſon, the male, at his moulting, loſes his two long feathers; and, during all the rainy ſeaſon, his tail is not to be diſtinguiſhed from that of the female; his beautiful blue eyelids alſo ſink ſo as to be hardly viſible. He may ſtill however be diſtinguiſhed by his ſize, his creſt, and his plumage, which always retains a gloſs never ſeen in the female. But the male, when young, cannot be diſtinguiſhed by his exterior from the female.

This ſpecies is very plentiful along the eaſtern coaſt of Africa, from the Duywenhock to the land of Caffres; it is abundant alſo on the borders of the Sondag and Swartkop; but never near Cape-town. The male and female are rarely apart, even in the rainy ſeaſon, which may be called the winter of that country. They inhabit the woods, and prefer living in high trees, for they rarely alight upon ſhrubs or on the ground. The males are very quarrelſome; they fight almoſt as often as they meet; five or ſix will be ſometimes purſuing one another in a line; and, as their tails are very long, that is the part which commonly ſuffers, as ſoon as one catches his adverſary by the tail, he never quits him till he pulls out a feather, or at leaſt a piece of one, ſo that it is uncommon to kill a male with his tail unmutilated. Furthermore, the bird, in flying among the branches of trees in purſuit of winged inſects, is continually liable to wear or break the long feathers of the tail. In ſhort, it is ſo difficult to meet with this bird in full perfection and beauty, that, of one hundred and four males which M. Vaillant ſhot, he declares he found but fourteen uninjured.

The neſt is of a remarkable conſtruction, perfectly reſembling a horn ſuſpended point downwards, between the forks of a branch. It was two inches and a half wide at its greateſt diameter, which diminiſhed almoſt to a point downwards, and bending at the ſame direction. Its length, following its curvature, was eight inches, but the chord of the arc only ſix. It were hard to account for the fabrication of ſuch a neſt, ſince three parts of it ſeem entirely uſeleſs, the portion which was to contain the eggs being only three inches deep. It was formed of the filaments of the bark of ſhrubs interwoven; there was no ſoft lining, either of down, wool, or hair; the eggs were not laid, nor was the neſt complete, for the birds were at work upon it when it was taken away. It was probably intended to have been covered in, ſo as to leave a very ſmall hole at top; but this is only conjecture. This beautiful bird and his neſt are made the ſubject of Plate II.

39. Muſcicapa penulata, the mantled fly-catcher. This ſpecies is of the ſize and proportion of the preceding, but it has not the long tail-feathers which Vaillant diſcovered in that ſpecies: its colours alſo are different. It has a very beautiful creſt, which it raiſes at the ſame time that it ſpreads out its tapered tail in the manner of a peacock. The creſt and neck are, in the male, of a ſhining black, enriched with a beautiful ſhade of blue which comes down on the front of the neck; the mantle, rump, and upper tail-coverts, are of a bluiſh grey; a broad ſtripe of white runs acroſs the wing; of which the feathers in general are black, edged along with bluiſh grey. The tail is a little tapered, and of the ſame colour. The under plumage is in general white tinged with bluiſh grey. The bill and feet are bluiſh black; the iris brown. The mouth is briſtled, like the genuine fly-catchers.

The female is ſomewhat leſs; her creſt not ſo full nor ſo dark; the hinder part of her neck, back, breaſt, and tail-coverts, are bluiſh grey; the throat and front of the neck are ſpotted with faint black upon a cinereous ground, the belly white; the wings and tail are light brown; the feet, bill, and eyes, are lighter than thoſe parts in the male.

This ſpecies was met with in the Auteniquois foreſts, and in the mimoſa-woods of Caffraria. It is not ſo ſhy as ſome of the preceding ſpecies. "A pair of theſe birds," ſays Vaillant, "came habitually into my tent every day at the ſame hour, while I was encamped on the edge of a foreſt. They perched on my chair, on the edge of a trunk, or upon my table; and caught all the flies that came near them. I ſeveral times ſeized the male, but, when I let him go, he returned as uſual. The male had a ſharp cry, *ſchrret-ſchrret*, which I imagine to be his call; for, when the female ſeemed unwilling to enter my tent, the male began to repeat this note, and ſhe came in preſently. I was never able to diſcover the neſt of this ſpecies." On Plate III. the male is repreſented at fig. 1. the female at fig. 2.

40. Muſcicapa ſuperciliata, the ſpectacled fly-catcher. The eyebrows, for ſo they ſhould be called rather than ſpectacles, ſince they do not go round the eyes, are broad and white. This ſpecies haunts the great foreſts about the Gamtoo-river; and has not been met with in any other canton of Africa. It is ſomewhat ſtouter and larger than the preceding, and not creſted. Its broad flat bill is furniſhed with very long ſtiff hairs, which denote a genuine fly-catcher. Its colour would be very monotonous, but for the white eyebrows we have mentioned, ſome black on the front of the neck, and the white ſpots at the ends of the three feathers on each ſide of the tail, which is much tapered. The black or brown collar is ornamental, as it lies on the white ground of the throat and breaſt; the under parts of the body, as far as the under tail-coverts, are alſo white. All the reſt of the plumage is uniformly brown. The upper mandible is black, the under whitiſh; feet and nails light brown, eyes darker. The female is rather ſmaller than the male; her eyebrows hardly viſible, and no appearance at all of the dark collar; the white of the under ſurface is much of a greyiſh tinge; the brown of the upper ſurface is fainter and more delicate. This bird has the faculty of ſpreading out his tail into a fan, and laying it almoſt upon his back. His note is a ſharp cry, like ſome of the preceding ſpecies. They frequent the higheſt trees, on the tops of which they lie in wait to catch the flies that come within their reach. Their neſts they probably conceal very carefully; for Vaillant never could find one, though he was in that country about the time of their incubation.

41. Muſcicapa Borbonica, the Bourbon fly-catcher: length five inches and a third; bill grey; head greeniſh black, gloſſed with violet; throat, and all the under parts, aſh-colour; back, wing-coverts, and tail, pale cheſnut; quills black, edged with cheſnut; rump grey; legs brown. Inhabits the Iſle of Bourbon.

42. Muſcicapa melanoptera, the Senegal collared fly-catcher: length four inches and three quarters: bill black; the head, and all above, to the rump, deep aſh-colour; throat, and fore-part of the neck, browniſh cheſnut; the lower part bounded by a tranſverſe black line; breaſt and under parts white; thighs duſky and white mixed; wings black; acroſs the coverts a white band; quills black, edged with grey; tail black; the two middle feathers tipped with white; the outer one white on the outer web; legs cinereous. Native of Senegal.

43. Muſcicapa nigrifrons, the black-fronted fly-catcher: length four inches and a half: bill duſky; forehead, and ſides of the head, black, ending in a point behind each eye; the reſt of the upper parts of the plumage brown; the chin, and throat, yellow; belly olive-brown; tail the ſame, except the two middle feathers, which are plain brown; legs black.

44. Muſcicapa leucura, the white-tailed fly-catcher: ſize of the preceding: bill black; the plumage above, cinereous grey, beneath white; the two middle tail feathers black, the others black and white, divided obliquely, the outer feather nearly all white; legs black. From the Cape of Good Hope.

45. Muſcicapa Pondicerrina, the Pondicherry fly-catcher: bill black; the upper parts deep cinereous grey; over the eye a ſtreak of white, paſſing to the hind head; the wing-coverts tipped with a triangular white ſpot; all the tail-feathers, except the two middle ones, grey half-way from the baſe; the reſt of their length white; as are the fore-parts of the neck, breaſt, and belly; legs black. Found every-where on the coaſt of Coromandel. Its ſong

is very agreeable; and it is hence called the Indian nightingale.

46. Muſcicapa afra, the ſpotted yellow fly-catcher: length eight inches: crown of the head rufous, ſtreaked with black; wings and tail rufous, quills duſky brown. The body pale yellow, marked on the upper parts with irregular duſky ſpots; on the ſides of the neck two or three duſky blotches, and from the corners of the mouth a ſtreak of the ſame; the under parts are marked with irregular ſpots, placed tranſverſely, but in the thighs lengthwiſe; legs duſky aſh-colour. Brought from Caffraria, and the Cape of Good Hope.

47. Muſcicapa cana, the aſh-coloured fly-catcher: ſize of the cinereous ſhrike; length eight inches and a half; bill black; the head, nape, and throat, blackiſh aſh-colour; the neck, and upper parts, of a grey aſh-colour; from the breaſt to the vent the ſame, but paler; vent white; quills duſky, with cinereous edges; tail black, with aſh-coloured tips. Inhabits Madagaſcar, and known there by the name of *kinkimanou.*

48. Muſcicapa Madagaſcarienſis, the Madagaſcar fly-catcher: ſize of a lark; length ſeven inches and a half; bill ſtout and an inch in length; general colour of the plumage olive-green, paleſt beneath; throat yellow; on the fore-part of the neck and breaſt a yellowiſh tinge; legs grey. Native of Madagaſcar, where it is called *tictic.*

49. Muſcicapa undulata, the undulated fly-catcher: ſize of the nightingale, but ſhorter in the body; head blackiſh brown; wings rufous; the reſt of the plumage compoſed of an irregular mixture of whitiſh and brown, in ſhape of waves or ſmall ſpots. The female has a greater portion of white, with a mixture of pale rufous on the breaſt and belly; the brown on the various parts of the body inclined to grey. Inhabits the Iſle of France.

50. Muſcicapa tectec, the Indian fly-catcher: length four inches and three quarters: bill brown; head, and hind-part of the neck, brown, marked with ſmall rufous ſpecks; back, rump, and wings, the ſame; throat, and fore-part of the neck, dirty white; from the breaſt to the vent pale rufous; quills and tail brown, edged and tipped with rufous; legs brown. The female has thoſe parts of a dirty white, which are rufous in the male. Found at the Iſle of Bourbon, where it is called *tectec.*

51. Muſcicapa rufiventris, the rufous-vented fly-catcher: length of the preceding; colour black, except the vent and under tail-coverts, which are rufous; legs pale red. Native of the Iſle of Bourbon.

52. Muſcicapa comata, the tufted fly-catcher: bill black; head creſted; the cheeks and chin black; hind-part of the neck, back, wings, and tail, the ſame; the two middle feathers of the laſt tipped with white; rump, ſides of the neck, breaſt, and belly, white; vent yellow; legs bluiſh. Inhabits Ceylon.

53. Muſcicapa hemorrhouſa, the red-vented fly-catcher: length four inches and a half: bill bluiſh; head black, and ſlightly creſted; neck, and upper parts of the body, clouded brown; breaſt and belly white; vent red; tail black; legs duſky. Native alſo of the iſland of Ceylon.

β. Yellow-vented fly-catcher: vent yellow; tail long and duſky, croſſed near the end with a bar of white. Found in the iſland of Java. From the great ſimilarity of the two, this appears to differ from the laſt merely in ſex.

54. Muſcicapa pſidii, the Manilla fly-catcher: leſs than a ſparrow: bill black; irides of a pale yellow; crown of the head black; over the eyes a line of white, extending to the hind-head; from the baſe of the lower jaw to the eye another of black. The upper parts of the body are of a dull brown; quills and tail the ſame, but deeper; the under parts are white, except the vent, which is of a pale yellow; legs black. Inhabits Manilla, and is frequent about habitations; and is obſerved frequently to perch on the guavas, the fruit of which the natives ſuppoſe it to be fond of; but it is more probable that its ſearch is after the inſects which frequent thoſe trees.

55. Muſcicapa melanictera, the yellow-breaſted fly-catcher: ſize of a goldfinch: bill grey; head and cheeks black; back and wing-coverts cinereous brown, mixed with yellow; breaſt yellow; quills and tail duſky, edged with pale yellow; legs pale blue. Inhabits Ceylon, where it is called *malkala-kourla.* It is much admired by the natives for its ſong, and is frequently kept in cages for that purpoſe.

56. Muſcicapa nitens, the brilliant fly-catcher: ſize of the large humming-bird: bill ſlender, and long; head, back, and wing-coverts, a bright and beautiful green and gold; tail long, green on the outer webs, duſky within; wings duſky; throat and breaſt fox-colour; rump and belly yellow. Native of India.

57. Muſcicapa Sinenſis, the Chineſe fly-catcher: ſize of the bulfinch: bill black; irides red; the head black; over the eye a ſtreak of white, ariſing from the bill, and paſſing to the hind-head, making a ſort of wreath; the hind part of the neck, back, rump, wing-coverts, and tail, greeniſh grey; the quills yellowiſh green; throat white; fore part of the neck and breaſt greyiſh; belly and vent pale yellow; legs black. Native of China.

58. Muſcicapa griſea, the grey fly-catcher: upper parts black; acroſs the wing-coverts a band of white; fore part of the neck a lively grey; breaſt and belly pale red; the tail a little cuneiform; legs yellowiſh brown. This likewiſe inhabits China.

59. Muſcicapa flavicollis, the yellow-necked fly-catcher: length ſix inches and a half: bill red; the forehead duſky black; on each ſide the jaw a ſtreak of the ſame, like a whiſker; round the eye yellowiſh, paſſing in a ſtreak behind, where it is pointed. Upper parts of the body green; fore part of the neck yellow, inclining to red on the ſides of the breaſt; top of the head pale yellow; belly pale green, marked with three ſpots of yellow one above the other; quills duſky, edged with yellow; tail the ſame, and much forked; the two middle feathers tipped with white; legs reddiſh. This is alſo from China, and called there *quy-lum-long-fu.*

60. Muſcicapa flammea, the flame-coloured fly-catcher: head, neck, thighs, wings, and tail, black; the middle-coverts of the wings, the back, and under parts from the breaſt, bright flame-colour; there is alſo a mixture of the laſt in the ſecond quills; and the tips of the tail-feathers are of the ſame colour; legs black. The female has the head and back aſh-coloured; chin black; breaſt and rump orange; the reſt of the under parts yellowiſh white; the wings black, with a bar of orange acroſs the middle; the tail black above and yellow beneath. Found in various parts of India.

61. Muſcicapa fuſceſcens, the orange-vented fly-catcher: length ſix inches: bill red; head creſted; upper parts of the plumage pale brown; the under duſky white; rump and vent orange; tail ſomewhat forked; legs purpliſh. Native of China.

62. Muſcicapa Luzonienſis, the Luçon fly-catcher: ſize of the long-tailed titmouſe: bill black; irides brown; head, throat, and all the upper parts of the body, black gloſſed with violet; the under parts, from the breaſt, duſky grey; on the middle of each wing a ſpot of white; legs black. This inhabits the Iſle of Luçon and Madagaſcar; at the laſt, the inhabitants call it *teſſacourbé.*

63. Muſcicapa Philippenſis, the Philippine fly-catcher: ſize of the nightingale: upper parts of the plumage grey brown; above the eyes a ſtreak of white; the baſe of the bill beſet with long hairs; the under parts of the body whitiſh. Native of the Philippine iſlands.

64. Muſcicapa cærulea, the azure fly-catcher: general colour of the plumage gloſſy blue, except at the hind part of the head, and the breaſt, on both which is a black ſpot; belly, thighs, and vent, bluiſh white; quills and tail blue black; the firſt edged with blue grey; bill black; legs pale reddiſh brown.

Upon this ſpecies Vaillant obſerves, that Buffon has improperly called it ***Petit azur, ou Gobe-mouches bleu des Philippines,*** becauſe there are other azure fly-catchers, and becauſe it does not excluſively inhabit the Philippine Iſlands; neither ought it to be called *little*, as there are a great many ſmaller; and it is doubtful whether it inhabits the Philippines or not. Buffon's figure is alſo erroneous, as he has given the legs too great an elevation. It is ſix inches long from the tip of the bill to that of the tail, which is ſomewhat tapered. Vaillant adds, that the female is ſmaller than the male, her blue fainter, and that ſhe totally wants the black cap and collar. The male and female are commonly ſeen together; they frequent the large woods on the coaſt of Natal and Caffraria; they perch on the largeſt trees, and conceal their neſt in the thickeſt branches; it is made of fibres and twigs, with an outer wall of moſs; the eggs are commonly five, of a reddiſh grey colour.

65. Muſcicapa cyanocephala, the blue-headed fly-catcher: ſize of a linnet: bill brown; the head of a deep blue, nearly black; throat, back, wing-coverts, and tail for almoſt its whole length, of a deep red: the tips of the feathers black and forked; breaſt, belly, and vent, pale brown; legs brown. Inhabits the iſland of Manilla.

66. Muſcicapa Manillenſis, the Manilla fly-catcher: a ſize larger than the laſt: top and ſides of the head black, hind-head grey, below black; on the cheeks two tranſverſe bands of white; throat yellow; breaſt reddiſh; middle of the belly yellow; ſides and vent white. The upper parts of the bird are grey; middle of the back cheſnut, extending over the wings, which are croſſed with a ſtripe of white; quills black, edged with brown; the two middle tail-feathers are black, the others white; bill and legs brown. Indigenous to the iſland of Manilla.

67. Muſcicapa flabellifera, the fan-tailed fly-catcher: ſize of the titmouſe: the whole head is black, deſcending on the back-part lower than the nape, from whence it paſſes forwards in a narrow collar to the throat; the chin, throat, and ſides of the neck, except where this collar paſſes, are white, and over the eye is a white ſtreak like an eyebrow. The upper parts of the body are olive-brown, the quills darkeſt, and ſome of the wing-coverts tipped with white; the under parts yellowiſh ruſt-colour, growing whitiſh towards the vent; the tail is longer than the body, and wedge-ſhaped; the two middle feathers black, the others white; legs duſky. This inhabits the ſouthern iſle of New Zealand. Dr. Forſter ſays it is an exceeding familiar ſpecies, is conſtantly hunting after inſects, and flies always with its tail ſpread in the ſhape of a fan; it is eaſily tamed, and will ſit on any perſon's ſhoulder, and pick the flies off. It has a chirping note, not worthy to be called a ſong. It is called by the natives *diggo-wagh-wagh.*

β. This ſpecies is ſubject to variety. One met with in the iſland of Tanna, was darker in colour; the two middle tail-feathers of a ſooty black, with white ſhafts, the inner margins and tips whitiſh; the others have the inner webs deep black, the ſhafts paler black, and the outer webs almoſt wholly grey.

68. Muſcicapa ſupercilioſa, the ſupercilious fly-catcher: length four inches and a half: bill black; upper parts cinereous; eye-brows black. Under parts of the body pale reddiſh white; tail wedge-ſhaped, the two middle feathers black, the next white at the tip, the others all white; legs brown.

69. Muſcicapa Caledonica, the New Caledonian fly-catcher: ſize of a chaffinch; length ſix inches: general colour olive-green on the upper parts; yellowiſh white beneath; chin and vent yellow; quills ferruginous; legs duſky. Native of New Caledonia.

70. Muſcicapa lutea, the luteous fly-catcher: length ſix inches; bill three quarters of an inch, and lead-colour; general colour of the plumage yellow, mottled with duſky on the wing-coverts and quills; the tail is one inch and three quarters long, and duſky next the tip; legs of a pale aſh-colour; claws black. This ſpecies is common at Otaheite, where it is known by the name of *oo mamao pooa hou.*

71. Muſcicapa ochrocephala, the yellow-headed fly-catcher: length five inches and a half: bill ſtout, and bent only at the tip; noſtrils covered by a membrane; baſe of the bill briſtly; irides hazel; head, neck, and breaſt, golden yellow. Upper parts duſky pale yellowiſh green, inclining on the rump to aſh-colour; belly, thighs, and vent, white; legs black. Inhabits Queen Charlotte's Sound, in New Zealand.

72. Muſcicapa flavifrons, the yellow-fronted fly-catcher: ſize of the preceding: bill three quarters of an inch, of a pale lead colour; few or no briſtles at the baſe; the upper parts of the body yellow, round the back part of it a half creſcent of white; the wings are brown, edged with yellow; quills nearly black, edged with the ſame; tail olive-brown, with the end paleſt; legs pale blue. Found in the iſland of Tanna.

73. Muſcicapa nævia, the nævous fly-catcher: length eight inches and three quarters: bill black, bent at the tip, and furniſhed with a few hairs at the baſe; irides pale aſh-colour; eye-lids black. Above, the plumage is duſky black; beneath, paler; middle of the back and ſhoulders marked with white; legs black. Inhabits New Caledonia.

74. Muſcicapa multicolor, the many-coloured fly-catcher: length four inches and a half: bill black, and a little curved at the end; the lower mandible yellowiſh at the baſe: the head, neck, back, ſides, thighs, wings, and tail, black; forehead and lower wing-coverts white; breaſt and belly of a deep carmine; vent reddiſh; legs long and ſlender, and of a yellowiſh brown. The female is brown in thoſe parts where the male is black; the chin, and between the eye and bill, cinereous brown; breaſt and belly pale orange; vent, ſides, and thighs, yellowiſh white. This ſpecies inhabits Norfolk Iſland, in the South Seas; and, as Dr. Forſter informs us, is chiefly found in the moſt unfrequented parts of it.

75. Muſcicapa Sandwichenſis, the Sandwich fly-catcher: length five inches and a half: forehead buff-colour; over the eye a white line; the upper parts of the body brown; wing-coverts edged with pale ruſt-colour; greater quills brown, tipped with duſky white; tail brown; all the feathers except the two middle ones tipped with white; the chin is pale, marked with duſky ſtreaks; on each ſide of the neck a mixture of white; breaſt ruſt-colour; belly and vent yellowiſh white; legs black. Inhabits the Sandwich Iſlands.

76. Muſcicapa obſcura, the obſcure fly-catcher: length ſeven inches and three quarters: general colour brown, paleſt beneath, inclining to aſh-colour, with a tinge of rufous on the belly; tail three inches long, even at the end, and the feathers pointed; legs duſky. Native of the Sandwich Iſlands.

77. Muſcicapa maculata, the ſpot-winged fly-catcher: bill black; baſe of the under mandible yellow at the edges; plumage on the upper parts of the body ferruginous brown, the head paleſt; on each of the wing-coverts, at the tip, is a round ferruginous white ſpot; the rump ferruginous; quills duſky; under parts of the body pale reddiſh brown, changing to reddiſh white on the bottom of the belly; tail brown; the outer feather marked at the tip of the inner web with white; legs black. Native of the Sandwich Iſlands.

78. Muſcicapa torquata, the collared fly-catcher: length four inches and a half: head, throat, back, wings, and tail, black; ſides of the neck white, paſſing behind in a narrow white collar; breaſt rufous; belly, thighs, vent, and a large ſpot on the middle of the wing, white; bill duſky; legs brown. Native of the Cape of Good Hope.

79. Muſcicapa Capenſis, the Cape fly-catcher: top of the head and ſides black; throat white, paſſing almoſt to the nape on each ſide; the hind part of the neck, back, and rump, are brown; the tail, and its coverts, black; the feathers of the tail have white tips, and the outer feathers almoſt wholly white on the outer web; wing-coverts brown, acroſs them a rufous bar; quills duſky, edged with rufous grey; acroſs the breaſt a broad band of black: the reſt of the under parts white; legs yellowiſh brown. Found at the Cape of Good Hope with the laſt;

and is by Dr. Turton conſidered as the female of that ſpecies

80. Muſcicapa bicolor, the two-coloured fly-catcher: forehead, ſides round the eyes, fore part of the neck, rump, and under parts of the body, white; the reſt of the plumage black, except the baſtard wing, which is white, and a bar of the ſame on the greater coverts; the tail is black, but all the feathers are tipped with white. Inhabits Cayenne.

β. M. alba: white; the hind part of the head and neck, the wings and tail, and rump, black; the edges of the ſecondaries bordered with white; bill and legs black. The female is of an uniform grey colour. Inhabits the moiſt meadows of Guiana, where it is called *gillit*.

81. Muſcicapa Carolinenſis, the Carolina fly-catcher, or cat-bird: length eight inches: bill black; upper parts of the body and wings deep brown; the under aſh-coloured; crown of the head black; under tail-coverts dirty red; tail blackiſh; legs brown. This is found in Virginia in the ſummer ſeaſon, where it builds its neſt: the eggs are blue. It frequents the ſhrubs rather than tall trees, and feeds on inſects: its cry reſembles that of a *cat*, whence the name given it by Cateſby.

82. Muſcicapa ochroleuca, the golden-throat fly-catcher: crown of the head, upper part of the neck and body, dull olive: throat and ridge of the wing of a very rich golden yellow; breaſt and belly white, tinged with yellow; primaries and tail bright olive-green. Native of New York.

83. Muſcicapa nitida, the delicate fly-catcher: very ſmall: bill black; plumage pale green; wing-coverts edged with white; quills and tail duſky, with yellowiſh edges; legs black. Native of China.

84. Muſcicapa atra, the duſky fly-catcher: head duſky; back a dull cinereous olive; quills and ſecondaries duſky, the laſt edged with white; breaſt pale aſh-colour; belly whitiſh yellow; tail duſky; legs black. Brought from New York, by the name of *Phœby bird*, or *bee-eater*. It appears the latter end of March, or beginning of April: lays five ſmall white eggs, and diſappears in Auguſt. Preys chiefly on bees.

85. Muſcicapa Novæboracenſis, the New York fly-catcher: head cinereous green; on each ſide of the bill a yellow ſpot; back and wing-coverts pale green; acroſs the laſt two white bars; primaries and tail duſky, edged with green; throat pale aſh-colour; middle of the belly white; ſides fine yellow. Inhabits the ſtate of New York, and is a ſcarce ſpecies. Comes in May: breeds, and retires in Auguſt. It was ſent to England by the name of *ſmall green hanging-bird*.

86. Muſcicapa paſſerina, the paſſerine fly-catcher: upper parts of the body duſky black: beneath whitiſh; tail black. Inhabits the iſland of Tanna, in the Pacific Ocean.

87. Muſcicapa Acadica, the ſmall creſted fly-catcher: creſted: head, neck, and back, light cinereous green; breaſt and belly whitiſh, tinged with yellow; wings and tail duſky; coverts croſſed with two bars of white; ſecondaries edged with white; legs black. Inhabits Nova Scotia.

88. Muſcicapa aëdon, the long-tailed fly-catcher: length eight inches: ruſty brown; beneath yellowiſh white; middle tail-feathers long, ſubequal, the outmoſt each ſide much ſhorter. Inhabits Dauria; and ſings in the night very charmingly.

89. Muſcicapa Novæ Hollandiæ, the New-Holland fly-catcher: length ſeven inches: plumage brown, beneath whitiſh; under the eyes each ſide as far as the ears a yellow ſtreak; bill yellowiſh, dilated at the baſe; tail a little forked. Inhabits New Holland.

90. Muſcicapa ferruginea, the ferruginous fly-catcher: general plumage rufous: beneath whitiſh yellow; chin white; wings black, edged with ruſty; tail-feathers beneath glaucous, above black, edged with browniſh, the outmoſt ſhort, white; bill black, the mandibles edged with brown; legs brown. Inhabits Carolina: five inches and a half long.

91. Muſcicapa nigra, the black fly-catcher: length ſix inches; bill nearly an inch: the whole bird is black; but the bill, head, ſpace between the ſhoulders, and legs, are of a much deeper colour than the reſt. The wings extend one third on the tail. Inhabits Otaheite, and other iſlands contiguous thereto.

92. Muſcicapa ochracea, the ochre fly-catcher: length eight inches and a half: bill pale; head and back browniſh; neck and breaſt ferruginous aſh-colour; the feathers narrow, and ſharp at the ends; the region of the ears covered with a tuft of longiſh narrow feathers; belly the colour of ruſty ochre; quills, wing-coverts, and tail, black at the tips and inner ſides; the outer edge white; tail the length of the body; legs black; claws yellow. Inhabits the Cape of Good Hope.

93. Muſcicapa albifrons, the white-fronted fly-catcher: length five inches and three quarters: bill black, ſlender; forehead duſky white; hind-head, nape, ſhoulders, wing-coverts, and ſecond quills, ſooty black; prime quills brown, edged with ferruginous; fore-part of the neck and breaſt duſky white; the ſhafts of the feathers brown; belly pale ferruginous; tail two inches in length; all the feathers of an uniform black; legs black. Inhabits the Cape of Good Hope. Is greatly ſimilar to the coldfinch; but differs in wanting the white on the wings, and the tail-feathers being all of one colour.

94. Muſcicapa melanoleuca, the black-and-white fly-catcher: ſnowy, the feathers brown at the baſe; breaſt paliſh yellow; head and neck, as far as the middle, wings, tips of the tail-feathers, bill, and legs, black. The female is dirty-aſh where the male is brown, and brown where the male is black. Inhabits Georgia, in ſummer; ſix inches long.

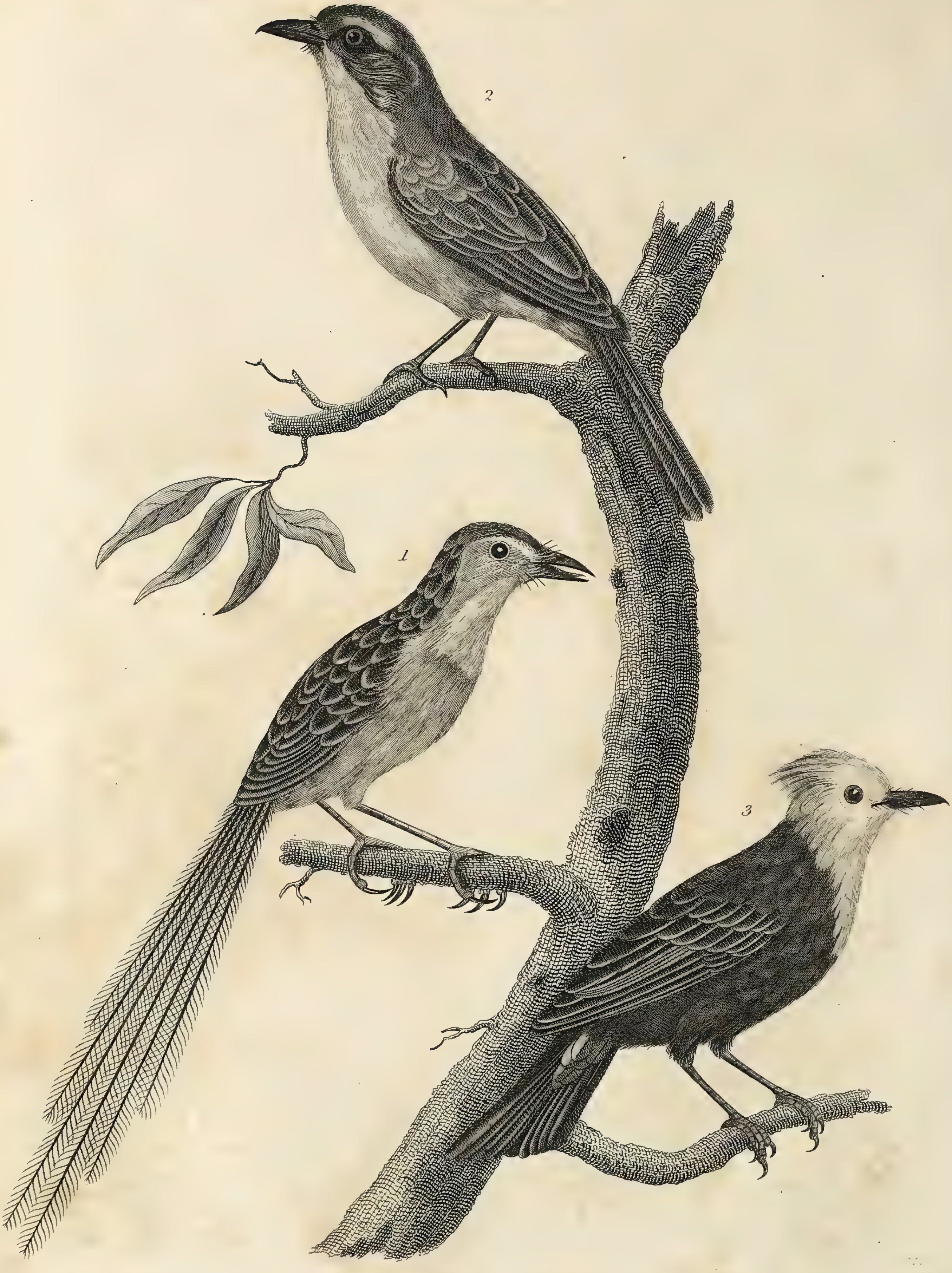
95. Muſcicapa petechia, the petechial fly-catcher: length ſix inches and a half: bill black; upper parts of the body deep brown; throat rufous; fore part of the neck and breaſt cinereous brown; from thence to the vent cinereous, marked with rufous ſpots; under tail-coverts rufous; quills brown; tail deeper brown; all, except the two middle feathers, edged with brown and white. Native of Martinico.

96. Muſcicapa virgata, the ſtreaked fly-catcher: length four inches and a half: bill black; crown of the head a little creſted, of an aſh-colour mixed with yellow. Upper part of the body brown; two rufous bars on the wing-coverts, and the quills edged with the ſame; ſome of the ſecondaries have whitiſh edges; the under parts are browniſh white, daſhed with longitudinal ſtreaks of brown; legs brown. Inhabits Cayenne.

97. Muſcicapa agilis, the active fly-catcher: ſize of the preceding: bill blackiſh, beſet with weak briſtles; plumage above olive brown; beneath dirty white, inclining to rufous on the throat; quills and tail duſky black, edged with olive brown; legs brown. Native of Cayenne. It preys on inſects, which it is perpetually making ſhort flights after in ſummer; and, in defect of flying inſects, it ſearches after them, like the wren, under the bark of trees.

98. Muſcicapa griſola, the ſpotted fly-catcher: about the ſize of the white-throat: bill duſky, and beſet with ſhort briſtles; inſide of the mouth yellow; the head large, browniſh, obſcurely ſpotted with black; the back of a mouſe-colour; wings and tail duſky; the firſt edged with white; breaſt and belly white; throat, and ſides under the wings, daſhed with red; legs black. Male and female much alike. This bird viſits us in the ſpring, and departs in September. It builds againſt any part of a tree that will ſupport it; often in the hollow cauſed by the decay of ſome large limb, or a hole in a wall, &c. alſo on old poſts, and beams of barns; and is found to return to the ſame place ſeaſon after ſeaſon. It is careleſs in placing the neſt: makes it chiefly of moſs; often with a mixture of wool and fibres. Lays four or five pale eggs, marked with reddiſh. It feeds on inſects, and collects them on the wing: for this purpoſe it ſits on a branch, poſt, &c. and, on one flying by, leaps after, and, having caught it, returns to

the



1. Soft-tailed Fly-catcher. 2. Blue-and-red Fly-catcher. 3. White-hooded Fly-catcher.

the place it ſprang from; and this it may be ſeen to do many times together. They frequent orchards where cherries grow, of which they are ſaid to be very great deſtroyers: hence, in Kent, are known by the name of *cherry-ſuckers.* They frequent the warmer parts of the European continent, but are found no-where more northward than in our realms. In the ſouthern parts of Ruſſia they are pretty common.—A ſmaller variety is found beyond Lake Baikal.

99. Muſcicapa variegata, the variegated fly-catcher: ſize of the white wagtail: general colour brown; the forehead, ſides of the head, and all the under parts, white; there is alſo a line of white from the ſhoulders to the middle of the back; the tail appears worn at the ends; the outer feathers white at the tip. Inhabits India. Marked by Dr. Turton as a third variety of the atricapilla, N° 26.

100. Muſcicapa dichroa, the party-coloured fly-catcher: above cinereous, beneath ochre; tail-feathers partly ochre, partly cinereous; bill and legs blackiſh. Inhabits Africa.

101. Muſcicapa deſerti, the deſert fly-catcher: general colour of the body ferruginous and ſooty; wings and tail blackiſh; bill yellowiſh; legs black. Inhabits the deſerts of Arabia.

102. Muſcicapa Javanica, the Javan fly-catcher: ſize of the ſpotted fly-catcher: tail very long, and rounded; body varied with black and ferruginous; beneath white; throat black; eyebrows white; bill and legs black; feathers of the body above tipt with ferruginous; eight of the tail-feathers tipt with white. Inhabits Java.

103. Muſcicapa alba, the white fly-catcher: plumage chiefly white; head yellowiſh; bill white, a little depreſſed; throat, and part of the neck, yellowiſh. Inhabits round Stockholm.

104. Muſcicapa Cambayenſis, the Cambay fly-catcher: general colour gloſſy black: back yellowiſh green; beneath tawny yellow; wing-coverts with a double white band; bill depreſſed, broad, blackiſh; wing-coverts tipt with white; legs bluiſh. Inhabits Cambay: ſize of the pied fly-catcher.

105. Muſcicapa malachura, the ſoft-tailed fly-catcher. We have placed this after all the Linnæan ſpecies, becauſe it has been recently diſcovered. An account of it, with drawings of male and female, was communicated to the Linnæan Society by major-general Thomas Davies, F.R. and L.SS. in the year 1798. The drawings were examined by Dr. Shaw, who then named the bird as above, and formed the following ſpecific character: Above brown, beneath ferruginous; throat (of the male) blue; tail long, wedged, with looſe webbed feathers. Bill browniſh black; head (of the male only) with a pale azure bar from the baſe of the bill over the eye; front and cheeks ferruginous; middle of the belly nearly white; feathers of the back and rump long, ſoft, ſilky; wings ſhort, browniſh-black, edged with rufous brown; body above ſtreaked with browniſh-black; tail above four inches long, the ſhafts black, ſlender, and armed each ſide with minute, ſlender, black, filaments, like hair. Inhabits marſhy places about Sidney and Botany-bay, New South Wales; lives among long graſs and ruſhes, in which it hides itſelf very dexterouſly; and, when diſturbed, its flight is very ſhort, like that of a graſs-hopper; and it no ſooner alights, than it runs with ſuch great agility, that many, who have been confident of their having covered birds with their hats, have, to their great ſurpriſe, ſeen them again take wing at no great diſtance: ſo that they are always difficult to catch. The length of the bird, from the point of the bill to the end of the rump, is no more than three inches; the bill three-eighths of an inch. The natives of New South Wales give it the name of *merion binnion,* or caſſowary-bird, on account of the great reſemblance of its tail to the feathers of the caſſowary. But no verbal deſcription can give an accurate idea of the tail and general aſpect of this curious bird; we have therefore, on Plate IV. fig. 1, given a repreſentation of the male, of the natural ſize, from the Linn. Tranſ. vol. iv.

We now proceed to deſcribe the remaining ſpecies, which Monſ. Vaillant has added to this genus.

106. Muſcicapa undulata, the undulated fly-catcher. With this ſpecies Vaillant begins a ſubdiviſion of fly-catchers, which, though they reſemble the only one (he ſays) we have in Europe, the M. griſola, differ however from the fly-catchers properly ſo called. The bill is not ſo broad, eſpecially at the baſe; the mouth is not furniſhed with thoſe long hairs which prevent the flies from eſcaping when once caught; and therefore, though they do hunt flies on the wing, they often loſe their prey. We have mentioned ſome of this kind already. Vaillant obſerved, that the true fly-catchers live ſolitary, perching and building their neſts on the tops of large trees; but theſe, on the contrary, are more in open places, build lower, and ſeveral are often ſeen together ſeeking their food, which, beſides flies, conſiſts of caterpillars, the eggs and larvæ of butterflies, and ſuch little inſects as are found on the branches and leaves of trees. They are alſo of a ſhorter and ſtouter make, with a ſhorter tail, little or not at all tapering; and their motions are not ſo briſk. Their ſong is alſo more harmonious, though not by any means to compare with the warblers. Vaillant therefore concludes, that we have not in Europe one ſpecies of fly-catcher properly ſo called; but that thoſe now to be treated of agree with the two European ſpecies that come neareſt to them.

"The preſent African ſpecies," ſays Vaillant, "ſo much reſembles the fly-catcher common in France, that they might eaſily be confounded; and, when firſt I ſhot it in Africa, I was almoſt perſuaded they were the ſame. Not being able to compare them, I was the more eaſily deceived, as the colours are ſimilar, and eſpecially as I had found many other African birds exactly ſimilar to the ſpecies in Europe. I however obſerved that my African bird was ſmaller; and I thought it ſtrange the ſpecies ſhould degenerate in a warm climate, in a country where inſects are ſo abundant, that it might on the contrary have been expected to be larger; it was not, however, till I had brought ſeveral of them, both males and females, to Europe, and had compared them with our fly-catchers, that I was ſatisfied they were two diſtinct ſpecies. This may ſerve as a hint of caution to other naturaliſts."

This bird, then, is ſmaller than the European ſpecies it ſo much reſembles, being only four inches and ſix or ſeven lines from the end of the bill to the tip of the tail, whereas the other ſpecies is five inches eight or ten lines in length; and the ſame proportions nearly ſubſiſt in the other parts; the bill indeed is broader at the baſe, and the wings are but two inches long, while thoſe of the European fly-catcher are two inches two lines, and their coverts reach beyond the middle of the tail, but in the African ſpecies not more than a fourth part. But we have ſtill more decided ſpecific differences. The tail of the European fly-catcher is ſomewhat forked, the mid-quills being ſhorteſt; in the African they are the longeſt. The African ſpecies has but fourteen feathers in each wing; the European ſeventeen; the former has two baſtard feathers, the latter but one. From theſe indelible marks, which climate cannot alter, we may conclude theſe two birds, notwithſtanding their general reſemblance, to be different ſpecies.

The bill, feet, and nails, are entirely black; the top of the head, back of the neck, mantle, wings, and tail, are of an uniform blackiſh-brown, darker on the large feathers of the wings and tail. Thus the preſent ſpecies has not thoſe ſtreaks of white on the forehead which appear on thoſe of Europe, nor thoſe daſhes of red on the wing-coverts; yet the laſt wing-feathers have a ſlight edging of rufous. The throat is white with brown undulations; breaſt of the ſame, with larger ſpots, but not well defined; neck and belly white; the plumage of the thighs rufous grey; the eyes brown. The female is ſmaller; her colours more delicate; her breaſt whiter, the brown not extending ſo far; in other reſpects they are exactly alike.

From this account the naturaliſt may judge of the reſemblances and the differences between this and the European ſpecies.

It inhabits in great numbers the Auteniquois country, and the whole coaſt of Natal. The male expreſſes very clearly *tzirer-chreſt;* the female has but a ſingle note. They build their neſts in coppices and thickets in a forked part near the trunk; they are compoſed of bits of herbs and hair, with an outer covering of moſs and a lining of hair. The female lays five eggs of a reddiſh-grey colour. The young birds at their firſt plumage have the wing-feathers all edged with red; and all the brown colour has a ſmall tinge of red, eſpecially about the rump. But Vaillant met with an entire brood, the young of which had the wing and tail feathers almoſt wholly white; a proof that it is not in cold countries only that birds vary to a white colour.

107. Muſcicapa ſtellata, the ſtarred fly-catcher: a little white ſtar on each ſide of the forehead between the upper mandible and the eye. The head is entirely covered with bluiſh grey, except the white ſpot; the throat is of the ſame colour, terminating in a white collar formed by a ſingle row of feathers. The mantle, back, rump, and upper tail-coverts, are olive-green with a tinge of yellow; the feathers of the tail are equal in length, and of the ſame colour, but the lateral ones are inwardly barbed with yellow. The wings are ſlate-colour, with an edging of lighter grey. All the under parts of the body and tail are yellow, inclining to olive on the breaſt and ſides. The bill and claws are blackiſh brown; the legs yellowiſh brown; the eyes browniſh red.

This ſpecies is ſomewhat larger than the preceding, being very near the ſize of our fly-catcher, but the legs are longer. The female is as large as the male; her head, neck, mantle, wings, and tail, olive-green, but duller than in the male; the throat and cheeks fainter olive; and the under ſurface pale yellow with a tinge of olive on the breaſt and under the tail. She has neither the grey head-piece, the white ſtars, nor the white collar, of the male. In the young birds, the male and female can hardly be diſtinguiſhed. The male, at the ſecond moult, receives his grey head-piece; but ſtill the white ſtars in the forehead cannot be perceived but by removing the feathers at the place they ſpring from; and the white necklace is not yet formed. He does not attain his complete plumage till a year old. His ſong has ſome reſemblance to that of our chaffinch. They build in trees, in the low forked branches: the neſt is made of fibres of herbs interwoven with a ſpecies of lichen very common on the trees of that country; the lining is very minute and flexible bits of roots, but contains nothing like down, feathers, or hair. The eggs are four, greeniſh-grey dotted with red; incubation laſts ſixteen days.

One ſingularity was obſerved in theſe birds: on each ſide the vent, the male has two fatty protuberances, ſhaped exactly like eggs, three lines long and two thick, and of a white colour: "Their ſhape and colour," ſays Vaillant, "made me at firſt ſuppoſe they might be external teſticles; but, having opened the bird, and found he had internal ones like all other birds, I found I had been deceived. I cut them in two, and found them to contain a yellowiſh oil, exactly ſimilar to what is expreſſed from the glands about the rump in all birds, and which ſerves to poliſh their feathers. I found, however, that the liquor did not ooze out upon ſqueezing theſe glands, or eggs, unleſs ſo ſqueezed as to burſt them: I therefore imagine them not to be intended for that purpoſe. The next idea was, that this appearance might proceed from ſome diſorder; but this I could not long entertain, becauſe ſeven males whom I had killed had all of them theſe protuberances, and I never met with them upon any female; neither did any of the males I killed appear to be diſeaſed. I have not been able to clear up my doubts on this head, as to whether it were a diſorder peculiar to this bird in certain cantons or at a particular ſeaſon; for I never met with the ſpecies but near Blettemberg or Lagoa Bay, and towards Poort."

108. Muſcicapa azuruſa, the blue-and-red fly-catcher: upper ſurface bright blue, under orange-red. This ſpecies inhabits the country of the Great Namaquois, on the trees near the Fiſh River. It is ſix lines ſhorter than the preceding. Almoſt the whole upper ſurface, namely, the face, head, back of the neck, mantle, rump, wings, and tail, is of the brighteſt azure-blue; the throat, front of the neck, and breaſt, orange-colour; and the belly, legs, and under tail-coverts, white. The bill, feet, and nails, are brown; eye bright orange. The female is ſmaller; her blue is not ſo bright; and her under ſurface is entirely white, with ſome very faint tinges of red; belly a dirty white. In Vaillant's coloured plate of this ſpecies, the colours intended for the male are laid on the female, and vice-verſa. (See his African Birds, Pl. 158.) The young male has orange only on the lower part of the throat, with a few traces of that colour on the breaſt. Vaillant was informed that theſe are birds of paſſage, arriving in that country during the heats, and migrating in the rainy ſeaſon. The call of the male very diſtinctly expreſſes the ſyllables *piet-piet, piereret-piereret.* Theſe birds are not very ſhy: they feed upon caterpillars and ſpiders only. They make their neſt in mimoſa-trees, fixing it ſtrongly in the fork of two or more branches; it conſiſts of twigs nicely interlaced, and is very deep, but no down of any kind, neither feathers, hair, nor even moſs, enters into its compoſition. The eggs, five or ſix in number, are olive-green dotted with red, eſpecially towards the larger end, where they are ſo numerous as to form a kind of chain-work. The male bird is repreſented on the Plate at fig. 2.

109. Muſcicapa albicapilla, the white-hooded fly-catcher: head and neck entirely encloſed in a hood of white, which falls down in a point upon the black of all the front of the body as far as the under tail-coverts, which again are fringed with white. The plumage at the top of the head is long, and forms a creſt inclining backwards, but which the bird erects when moved by anger or by love, emitting at the ſame time a plaintive note, which dies away in a ſingular manner. The hind part of the neck, mantle, back, wings, and tail, are jet black; but all the wing-quills are edged with white, which has a very pretty effect. The tail, which is a little rounded, is tipped with white. The bill is brown, the eyes red, the feet and nails black. The female is as large as the male; her hood is grey inſtead of white, and the creſt very ſcanty. The reſt of her plumage is black of a browniſh caſt, and the edging of the wings is grey. This ſpecies Vaillant met with only on the high mountains in the country of the Houzouanas, and among rocks. They are extremely ſhy, and our naturaliſt was never able to diſcover a neſt. In the ſtomachs of thoſe he ſhot he found the remains of inſects only. The male is repreſented at fig. 3.

110. Muſcicapa molenara, the miller fly-catcher. This ſpecies is called *moolenar,* miller, by the Dutch ſettlers and Hottentots, becauſe the male really makes a noiſe reſembling thoſe hand-mills which many of the inhabitants uſe for grinding their own corn. Theſe birds keep in the thickeſt buſhes, and would not be eaſily diſcovered but for the grating note of the males, *grerrrrar, grerrrrar,* which they repeat almoſt inceſſantly; yet they are not very ſhy, for, while making this delightful muſic, you may get near enough to knock them down with a ſtick.

The male is about the ſize of our titmouſe, Parus major. It is of a reddiſh brown tinged with olive on the head, neck, mantle, rump, and upper tail-coverts; the wings are black, and ſo is the tail, but the lateral feathers are bordered with white; the feathers of the wings alſo have an edging of reddiſh white; and near the middle of the wing appears a ſpot of red. A black ſpot begins at the noſtrils, and reaches acroſs the eye. The throat is black, which is divided from the black of the eye by a white ſtripe. There is a large black patch on the breaſt, leaving on the front of the neck another white ſpace dividing it from the black of the throat. The ſides are ruſt-colour; the reſt of the under part pure white. The bill and feet are brown; the eyes very bright orange. The female is rather ſmaller than the male. Her throat and breaſt are ferruginous red inſtead of black; belly the ſame. The male and female are commonly ſeen together; and chiefly in thickets or buſhes, not in woods, though woods abound in the canton through which runs the river Duywenhock, where Vaillant firſt met with them; and he continued to ſee them all the way as far as the country of the Auteniquois, where he never met with one. M. Vaillant was not however ſo fortunate as to find either neſt or eggs, the pairing-ſeaſon not being arrived when he was in that quarter. One of the natives informed him that they built in thickets, which is very probable; and that their eggs were white, and ſix in number. They feed on caterpillars and inſects.

111. Muſcicapa pririt, the pririt fly-catcher. The name is taken from the note or cry uttered by the male. This ſpecies is common to both the eaſt and weſt coaſts of Africa; on one ſide, about the great Fiſh River and throughout Caffraria; on the other, among the Great Namaquois, and eſpecially in the mimoſa-woods which ſkirt the Great River on both ſides, but more abundant on the eaſt. This bird is about the ſize of the preceding; and the male is alſo diſtinguiſhed by a large black breaſt-plate. The throat and front of the neck are entirely white, which reaches far back like a collar. All the under parts of the body, including the under tail-coverts, are alſo white, but with ſome black on thoſe parts of the ſides which are concealed by the wing. The top of the head is dark bluiſh-grey; along the forehead runs a white line, which goes over the eye like an eyebrow; from the corner of the mouth on each ſide runs a black ſpot, which, going acroſs the eyes, widens over the ears, and runs to the back of the neck, where the two are ſeparated by a white ſpot. The mantle is ſlate-colour, inclining to black on the ſcapulars, the wing-coverts, the back, and upper tail-coverts; ſome irregular black lines, like pencil-marks, appear on the rump. The tail, which is a little rounded, is black, the two lateral feathers edged with white, the others tipped with white; the wing-quills are black, edged with white, the white edging increaſing in breadth from the firſt quills to the laſt; a white feſtoon fringes the end of the great coverts, forming a white ſpot acroſs the wing. The bill, feet, and nails, are horn-colour; the eyes pale yellow.

The female is rather ſmaller than the male; the throat and breaſt are faint red, much lighter on the ſides of the throat and middle of the neck, ſo that the red of the breaſt and the ſpot on the throat are encloſed as it were in a yellowiſh frame. The front and top of the head are grey, as in the male; ſhe has alſo a black ſpot from the corner of the mouth acroſs the eyes; but it does not extend ſo far, and is terminated by the black line which encloſes the grey of the top of the head. She has alſo a kind of white eyebrow, like the male. The top of the mantle is light red ſhaded with brown, and the lower part of the ſame is black mixed with white. The rump is mottled white and black, but the white is prevalent. The under part of the body is white, in ſome parts inclining to grey; the tail is black, tipped with white; wings the ſame. The neſt Vaillant was not able to procure; he could only diſcover, therefore, that they feed on inſects, caterpillars, and ſpiders; that the male is generally accompanied by his female, the male emitting one uniform note, *pririt, pririt;* and, laſtly, that they are more ſhy than the preceding ſpecies, and more nimble alſo; ſo that to procure them was no eaſy matter, though they are very plentiful.

As a concluding remark upon this genus, Vaillant obſerves, that the birds of different genera in Africa, which feed entirely upon inſects, are extremely numerous indeed in compariſon with thoſe in Europe; witneſs the preſent genus of fly-catchers, the ſpecies of which are found from the entrance of the Cape of Good Hope quite to the tropic. He aſſerts that we have in Europe but twenty-ſix birds that live entirely upon inſects, among which he reckons four ſpecies of the Lanius or butcher-bird, two of the Muſcicapa or fly-catcher, one Sitta or nuthatch, four of the Tetrao or partridge kind, two of the Certhia or creeper, one Promerops or hoopoe, five of the Hirundo or ſwallow, one Caprimulgus or goatſucker, &c. But in Africa there are not only many more of each of theſe genera, (as perhaps of fly-catchers alone more than forty,) but alſo many others, which, though they feed entirely upon inſects, cannot, he ſays, be reduced to any of the genera we have. But, as this ingenious and diligent traveller is ſatisfied with plentifully abuſing our ſyſtems without ſubſtituting any of his own; ſince he "oppoſes every thing, and propoſes nothing;" all that we can do, conſiſtently with our own plan, is to place his new ſpecies in thoſe genera they ſeem moſt nearly allied to.

112. Muſcicapa drongo, the drongo. This bird is the firſt of a ſeries which Vaillant has collected into a new genus, which he calls *drongo*, from the name of this ſpecies at Madagaſcar. His general remarks upon this new genus (in which he ſays ſhould be included ſeveral ſpecies of the Lanius, Corvus, and Muſcicapa) are as follow: The drongos have more ſtrength in their jaws than moſt of the butcher-birds; they have ſtiff hairs at the gape like the fly-catchers; they have a notch in the upper mandible, but not ſo large as in the butcher-bird; the noſtrils are very large, and entirely covered with briſtly feathers, as in the Corvi; the legs are ſhort and ſtrong, nails large and hooked; the hind toe is the largeſt; it is broad and flat, as well as the baſe of the other three. Some of the ſpecies are very large; but all have the tail forked, at leaſt as long as the body, and conſiſting of ten quills. As theſe birds feed upon inſects, and chiefly upon bees, we have thought beſt, for reaſons before aſſigned, to place them here.

The preſent ſpecies, then, as Vaillant aſſerts, has been deſcribed and figured by Briſſon under the name of the Great creſted fly-catcher of Madagaſcar; but Buffon, he ſays, placed it at the end of the butcher-birds. It is common in Caffraria; frequenting the large foreſts, and aſſembling in ſmall companies. Its chief nouriſhment is bees, which it catches on the wing as the other fly-catchers do the common flies, &c. But it is chiefly in the evening after ſunſet, and in the morning before ſunriſe, that the drongo hunts theſe induſtrious inſects; ſmall companies of them range themſelves along the wood, perched on ſolitary trees either withered or having many leafleſs branches, the better to ſeize the moment when the bees depart from the wood, or return with their booty. Sometimes as many as thirty may be ſeen together in motion upon the ſame tree, ſome flying off, others returning, forming a very buſy ſcene, and by no means a quiet one; each inceſſantly repeats a cry which may be expreſſed by *pia-griach, griach.* From the cry of theſe birds, while thus employed after ſunſet, and their being of a black colour, the coloniſts at the Cape call them *duywels voogel*, devil-birds; and Vaillant ſays his Hottentots always conſidered them as birds of ill-omen, and entreated him not to ſhoot at them, and eſpecially when they were thus collected and performing their magic rites as they thought, leſt ſome misfortune ſhould befal the company. But Vaillant explained to them the nature of the employment of theſe birds, after he had made himſelf fully acquainted with it. When the night ſets in, the nocturnal birds of prey drive theſe bee-eaters to their retreats.

The drongo has a creſt ſtanding upright upon the forehead; the feathers are narrow and ſtiff, ſo as never to lie flat upon the head; but are inclined forward: the front feathers are but a few lines in length, but the hinder ones two inches. Size nearly of the thruſh; plumage entirely black, with a green tint in certain poſitions; the eyes are dark brown. The wings when extended are fifteen inches from tip to tip; yet when at reſt they reach but one third the length of the tail. The tail conſiſts of ten feathers, the lateral ones two inches longer than the intermediate ones, ſo that it is much forked. The female is rather ſmaller than the male, and her creſt about half the height; in other reſpects there is no difference. The young bird is of a brown black on the wings and tail; the reſt of the plumage black mixed with grey, but under the tail with white; the creſt is then but eight or ten lines high in the male, but in the female not yet viſible. Its habits and neſting are not abſolutely known, but are ſuppoſed to be the ſame with thoſe of the following, which Vaillant had the good fortune to meet with in the ſeaſon of incubation.

113. Muſcicapa drongo minor, the ſmall drongo. This ſpecies is ſmaller than the preceding, and has no tuft; the tail is leſs forked, the lateral quills being but eight or ten lines longer than the intermediate ones. In manners it reſembles the former. It is met with along the eaſtern coaſt of Africa, from the ſmiling banks of the river Dwywen-hock to the bay of Formoſa or Blettenberg; it occurs again by the Small and Great Fiſh Rivers at the entrance of Caffraria, and in the mimoſa-woods of the Gamtoos, the Swarte-kop, and the Sondag; but not in the interior, nor on the weſt coaſt.

This bird is of a black colour, browniſh at the ends of the great wing-quills, and bluiſh on the parts directly expoſed to the light; the eye dull brown. The female is rather leſs than the male. The young bird has ſome white on the lower belly, and on the under tail-coverts; and the plumage in general is gloſſed over with browniſh grey. In the love-ſeaſon, the male has a ſong morning and evening ſomewhat like our blackbird. The neſt is fabricated in the forked extremities of the lateral branches of the higheſt mimoſa-trees; it conſiſts of flexible twigs interwoven ſo looſely and diſtantly, that from the bottom of the tree you may ſee and count the eggs within, for there is no downy matter whatever to fill up the interſtices. The eggs are generally four in number, white with black ſpots. The male ſhares with the female the cares of incubation.

114. Muſcicapa drongo major, the whiſkered drongo. This is larger than the two preceding, being about the ſize of the common thruſh. The ſpecific character is, a bunch of ſtiff hairs riſing erect from each noſtril, and joined by ſimilar hairs from each ſide the lower mandible bending forward, and forming very evident whiſkers. This bird is more ſquat than the other drongos; its tail is not ſo deeply forked as that of the drongo, but more ſo than that of the ſmall drongo. The wings and tail are browniſh dirty black; the reſt of the plumage black with a greeniſh gloſs; the bill and feet black; the eye bright maroon-colour. The female is about one-fourth leſs than the male; her plumage differs only in ſome white ſpots on the lower belly and under tail-coverts; her whiſkers alſo are much leſs. Vaillant met with this ſpecies but once in a foreſt in Caffraria near an encampment which he called the Field of Death. He and his man ſhot five at that time, two males and three females; in their ſtomachs he found the remains only of bees and caterpillars. Their cry is *ghi-err-gret*, which thoſe that eſcaped uttered all at once when the gun went off.

115. Muſcicapa drongo griſea, the grey drongo. This ſpecies inhabits Ceylon, whence Vaillant received thirteen of them, all dried, but not diſbowelled; he found the internal parts, therefore, very perfect, and could eaſily diſtinguiſh the males from the females. The ſtomach contained nothing but the remains of bees and other inſects. This bird greatly reſembles the ſmall drongo; the tail is rather more forked, as in the drongo. The bill, feet, and legs, are lead-colour; the plumage in general of a ſhining ſilver grey; the colour of the eyes could not be diſcovered. The females were rather leſs than the males.

116. Muſcicapa albiventris, the white-bellied grey drongo. This ſo much reſembles the laſt, that it might be taken for a variety. The top of the head, neck, back, in ſhort all the upper ſurface, are of the ſame ſilvery grey; but the whole of the under ſurface, i. e. the throat, breaſt, belly, thighs, and under tail-coverts, beautiful white; the bill, feet, and nails, lead-colour. Many young birds have the under parts of the plumage entirely white; it therefore remains a doubt whether this may not be a young bird of the preceding ſpecies. Vaillant, who examined two ſent from Batavia, did not however ſee any reaſon to ſuppoſe them to have attained their firſt plumage only; they had every appearance of being full-grown birds. They might indeed be females of the preceding, as they differ from the male in colour till they are more than two years old.

117. Muſcicapa longicauda, the long-tailed drongo. This ſpecies is longer and thinner than the reſt of the drongos; the bill is very long, and weaker alſo in proportion; and the tail is longer than the whole body from the point of the bill to the vent; it is conſiderably tapered, the lateral quills being at leaſt two inches and a quarter longer than the intermediate ones, forming a deeper fork than any of the ſpecies we have called *drongos*. The plumage in general is black, with a bright blue gloſs; bill, feet, and nails, lead-colour.

118. Muſcicapa Malabarica, the racket drongo. This is a very large ſpecies. It has been very erroneouſly deſcribed by Sonnerat. The outer lateral tail-feathers extend in naked filaments for ſix or ſeven inches beyond the intermediate feather, but are furniſhed with barbs at their tips, which ſpread out broad like a racket or battledore; yet theſe barbs are confined to the outer ſide of the ſtem, the inner part being naked. This bird is entirely of a gloſſy black, with reflections of green in certain lights. Inhabits Batavia and Malabar. Some ſpecimens which wanted the two long feathers were ſaid to be females; they differed in no other reſpect. Sonnerat tells us nothing of the habits of this ſpecies; he deſcribes the tail as ſquare, inſtead of naked; the eyes, he ſays, are red. In another place, Vaillant affirms this to be the ſame with the Cuculus paradiſea of Linnæus, for which ſee vol. v. p. 440.

119. Muſcicapa ærea, the bronzed drongo. This ſpecies, whoſe plumage, though entirely black, is of a brilliant kind. Inhabits Bengal. It is preciſely of the ſhape and ſize of the ſmall drongo, and might be taken for a variety. All the upper ſurface, then, is of a gloſſy black, melting into blue or bronzed green, which gives it a wonderful brilliancy when expoſed to the rays of light. The under ſurface is dark grey without any gloſs; the under parts of the wing and tail-quills is abſolutely black; ſo are the bill and feet. *Vaillant's African Birds*, vol. iii. iv. *Birds of America and India*, vol. i. *Linn. Tranſ.* vol. iv. *Turton's Linn. Nat. Hiſt.* by the Editor, vol. vii. viii.

MUSCIP'ULA, *ſ.* in botany. See DIONÆA and SILENE.

MUS'CKA, a town of Luſatia, on the river Neiſſe: the chief place of a lordſhip, about thirty miles in circumference: twenty-four miles weſt of Sagan, and fifty-two north-eaſt of Dreſden. Lat. 51. 31. N. lon. 14. 46. E.

MUS'CLE, *ſ.* [muꞅcula, Sax.] In anatomy and phyſiology, is that ſoft and fibrous ſtructure, generally of a red colour, known in common language by the name of fleſh, and poſſeſſing the property of contraction, by which it becomes the inſtrument of almoſt all the motions in the living body. It conſiſts of threads or fibres joined together by cellular ſubſtance: theſe are rendered very conſpicuous in meat which has been boiled for a long time. They are arranged in different forms according to the purpoſes to which they are ſubſervient. Connected together in large maſſes, and united to tendons, which are fixed to the bones, they conſtitute the *voluntary* muſcles. Theſe compoſe nearly the whole bulk of the ſoft parts of the limbs, and a very conſiderable proportion of the trunk, and execute all the motions which take place in obedience to the commands of the will. They fix the body, and determine the attitudes of its various parts in ſtanding, ſitting, and lying; they move it forwards in walking, running, jumping, dancing, ſwimming, climbing, &c. and are the ſole agents in ſeizing, holding, thruſting, throwing, &c. By alternately enlarging and contracting the cheſt, their aſſiſtance is eſſential in reſpiration; and theſe motions, together with thoſe which they cauſe in the larynx and mouth, produce the voice and ſpeech. They direct the eyes towards ſurrounding objects, and elevate or depreſs the lids: they open or cloſe the mouth and noſe. They are the agents of ſucking, chewing, and ſwallowing; and are eſſentially concerned in copulation and parturition, in expelling the urine and fæces, &c.

Some motions are not executed by muſcles: the elaſticity of a *cartilage*, for inſtance, may reſtore it after it has been moved out of its natural ſtate. It is ſtill a controverted point whether the *arteries* are muſcular; and the *veins* certainly are not. Similar doubts exiſt concerning the iris. We can detect no muſcular fibres in the Fallopian tubes, nor in the excretory canals of the glands. The motions of exhalation, ſecretion, abſorption, and nutrition, are for the moſt part imperceptible to us; and the minuteneſs of the organs, in which they are performed, conceals them altogether from our reſearches: we have, therefore, no grounds for believing that they are executed by muſcles.

According to the preceding view, we may ſtate that the perceptible motions (excepting thoſe of the iris and the large abſorbing veſſels) are performed by that kind of ſtructure which we call muſcle; while the movements, which eſcape our obſervation, are executed in a manner, of which we may rather ſay we are ignorant, than that it is not effected by the medium of muſcular ſtructure. See the article Anatomy, vol. i. p. 527, 530, 561–579.

MUS'CLE, *ſ.* A bivalve ſhell-fiſh. See the article Mytilus.—It is the obſervation of Ariſtotle, that oyſters and *muſcles* grow fuller in the waxing of the moon. *Hakewill on Providence.*—*Muſcles,* where they can be collected in large quantities, may be made uſe of as an excellent manure, either alone or in the ſtate of compoſt with earthy ſubſtances. They were formerly much employed on the ſea-coaſts of Lancaſhire, but have lately been on the decline. *Chambers.*

MUSCLE BANK', a fiſhing bank on the eaſt coaſt of Newfoundland.

MUSCLE BA'Y, a bay on the north-eaſt coaſt of an iſland in the Straits of Magellan: eight miles weſt of Paſſage Point.

MUSCLE BA'Y, or Baha'i Formo'sa, a bay of the Indian Sea, on the coaſt of Africa. In it is a ſmall iſland or rock, and ſome brackiſh ſprings and rivers. It is the beſt of all the bays hereabouts, but not to be made uſe of except in caſe of neceſſity, becauſe the ſouth-eaſt and ſouth-weſt winds make a great ſea. Lat. 34. 10. S. lon. 22. 40. E.

MUSCLE BA'Y, or Messilo'nes, a bay on the coaſt of Peru. Lat. 21. 40. S.

MUSCLE CANAL', a ſtrait leading into Carter's Bay, on the north-weſt coaſt of America. *Carter's Bay* was ſo called by Capt. Vancouver, in memory of a ſeaman of that name who was poiſoned there by eating muſcles. Lat. 52. 48. N. lon. 231. 42. E.

MUSCLE SHO'ALS, ſhallow parts of the Tennaſſee River, 250 miles from its mouth. They extend twenty-five miles, and derive their name from the number of ſoft ſhells found there.

MUS'CLING, *ſ.* in painting, a proper expreſſing of the muſcles.—A good piece, the painters ſay, muſt have a good *muſcling*, as well as colouring. *Shafteſbury.*

MUS'CO, a town of South America, in the viceroyalty of New Grenada: ſeventy miles north of Santa Fé de Bogota. Lat. 5. 16. N. lon. 73. 30. W.

MUSCO-FUN'GUS, *ſ.* in botany. See Lichen and Tremella.

MUSCOI'DES. See Mnium and Jungermannia.

MUSCONETCUN'CK, a river of New Jerſey, which runs into the Delaware ſix miles ſouth of Philipſburgh in lat. 40. 34. N. lon. 75. 14. W.

MUSCONISI, or Miosconisi, two ſmall iſlands in the gulf of Adramytti, near the coaſt of Natolia: fifteen miles ſouth-ſouth-weſt of Adramytti. Lat. 39. 20. N. lon. 26. 44. E.

MUS'COSE, *adj.* [*muſcoſus*, Lat.] Moſſy.

MUSCO'SENESS, *ſ.* The ſtate of being moſſy.

MUSCOS'ITY, *ſ.* The ſtate of being overrun with moſs; moſſineſs.

MUS'COUS, *adj.* Moſſy.

MUSCOVA'DO, *ſ.* Sugar that has been cured in the Weſt Indies. It is the raw material from which the Britiſh ſugar-bakers chiefly make their loaf, or refined lump. See Sugar.

MUS'COVITE, *ſ.* A native of Muſcovy.

MUS'COVY. See Russia.

MUSCOVY GLASS', or Glim'mer. See the article Mica, vol. xv. p. 316.

MUS'CULAR, *adj.* Relating to the muſcles; performed by the muſcles.—By the *muſcular* motion and perpetual flux of the liquids, a great part of the liquids are thrown out of the body. *Arbuthnot.*

MUSCULAR'ITY, *ſ.* The ſtate of having muſcles.—The guts of a ſturgeon, taken out and cut to pieces, will ſtill move, which may depend upon their great thickneſs and *muſcularity*. *Grew.*

MUS'CULATED, *adj.* Having muſcles; conſiſting of muſcles.

MUS'CULOUS, *adj.* Full of muſcles; brawny.—They are *muſculous* and ſtrong, beyond what their ſize gives reaſon for expecting. *Johnſon's Journ. Weſt. Iſlands.*—Pertaining to a muſcle.—The uvea has a *muſculous* power, and can dilate and contract that round hole, called the pupil of the eye, for the better moderating the tranſmiſſion of light. *More.*

MUS'CULUS, *ſ.* A military machine, made uſe of by the Romans to cover and protect the ſoldiers while they approached and undermined the walls of beſieged places, or filled the ditches. It ſeems to have reſembled the teſtudo in form, but was ſmaller in ſize. See Artillery, vol. ii.

MUS'CULUS (Andrew), a German Lutheran divine and profeſſor in the ſixteenth century, was born at Schneberg in Miſnia, but in what year we are not told. He was appointed to fill the theological chair at Frankfort upon the Oder; made ſuperintendent-general of the churches in the March of Brandenburg; and died in the year 1580. He was the author of a great number of books, which diſplay learning, genius, and eloquence, but united with an abundant portion of confident and aſſuming pretenſions, paradoxical hypotheſes, and abſurd if not impious notions. He maintained the doctrine of the *ubiquity;* and affirmed, "that the aſcenſion of Chriſt into heaven was nothing more than the vaniſhing or diſappearing of the body of Chriſt in thoſe clouds where it yet remains to this day, though not in that viſible manner and form, nor with the ſort of converſation which he uſed with his diſciples before his death and aſcenſion;" and afterwards he ſaid, "that this aſcenſion was not performed by any phyſical motion, or change of place," &c. He publiſhed a book to prove, that it is by no means neceſſary that the glorious body of Jeſus Chriſt ſhould phyſically fill up any ſpace. In one of his ſermons he declared, that they who taught that Jeſus Chriſt died only as to his human nature, belonged to the devil, both body and ſoul; and that the orthodox doctrine is, that he died both as to his human and divine nature. He perſuaded himſelf that ſome predictions in the ſcriptures indicated great revolutions which ſhould ſpeedily take place in Germany, and that the end of the world was near at hand; and he wrote upon theſe ſubjects with the aſſurance of one who pretended to have a key to all the prophecies of the Old and New Teſtament. *Bayle.*

MUS'CULUS (Wolfgang), one of the moſt celebrated German Lutheran divines, was born at Dieuze in Lorrain, in the year 1479. His father, who was a cooper by trade, finding that at a very early age he diſcovered a predominant inclination for learning, was deſirous of gratifying his wiſhes; but, being in humble circumſtances, he could afford very little towards his ſon's maintenance at ſchool, and left him, therefore, to provide his own ſubſiſtence by ſinging from door to door, according to the cuſtom of poor ſcholars in thoſe times. With the aid of what he obtained by this practice he was enabled to ſupport himſelf at different ſchools till he was fifteen years of age. He then ſet out towards his native place, with the deſign of viſiting his parents; but, happening one evening to enter a convent of Benedictines in the country of Lutzelſtein at the time of veſpers, he particularly ſtruck the ſuperior by the excellence of his ſinging, and the comelineſs of his perſon. After ſervice, therefore, he ſent for our young ſcholar; and, being equally pleaſed with his behaviour, he made him an offer of an admiſſion into the convent, free from all expenſe, which was an unprecedented favour; and promiſed, alſo, that he would furniſh him from his own purſe with clothes and all other neceſſaries. This offer, with the conſent of his parents, Muſculus gratefully accepted; and, after he had taken the monaſtic habit, ſpent thirty-three years of his life diligently employed in ſtudy, and a ſhining example to the community of regularity, temperance, and obedience to the preſcribed duties of the cloiſter. Claſſical learning, poetry, and muſic, were favourite ſubjects of his application; and he had made conſiderable progreſs in them before he arrived at the age of twenty. He then devoted himſelf aſſiduouſly to the ſtudy of divinity, ſacred criticiſm, and particularly the Scriptures themſelves. When well furniſhed with erudition and biblical knowledge, he was called to the ſervice of the pulpit; and, as he excelled in eloquence, became an admirable and very popular preacher. For ſome time his ſervices were confined to three or four churches in the vicinity and under the juriſdiction of the convent; but afterwards they were extended to ſeveral diſtant churches.

About the year 1518, being furniſhed by a friend with Luther's Theſes, which were juſt publiſhed, and attracted univerſal attention in Germany, he read them with the greateſt avidity, and, after mature enquiry, became an entire convert to the doctrines which they contained. From this time, he zealouſly defended that reformer and his opinions, not only in diſputations within the walls of the convent, but in the different churches in which he officiated as preacher. Hence he became commonly known by the name of the *Lutheran monk.* The freedom and ability with which Muſculus maintained the ſentiments of Luther, created ſuch an impreſſion on the minds of his brother-monks, that afterwards the greater part of the Benedictines of this convent quitted the habit, and entered into the world. In the mean time the conduct of Muſculus excited againſt him the enmity of ſome of the older monks, who did him all the ill-offices in their power; and it would have drawn down on his head the vengeance of the biſhops of Metz and Straſburg, had he not been protected againſt their rage by Reinhard à Rottenburg, governor of the caſtle of Lutzelſtein, and patron of the convent, who was a perſon of great weight and authority in the palatinate.

In the year 1527, Muſculus, finding that he was expoſed to no little danger from plots that were laid againſt his life, came to a reſolution of withdrawing from the convent to ſome place where he might profeſs and propagate his religious principles with ſafety. Before, however, he could carry this deſign into execution, the prior of the convent died, and Muſculus was elected his ſucceſſor, by the ſuffrages of a great majority of the monks. But this dignity he ſteadily rejected, recommending a friend who was choſen in his room. Towards the end of the year, having fixed upon the time of bidding adieu to the cloiſter, he left the convent at midnight, that he might avoid the notice of his enemies, and eſcaped to Straſburg; where he ſoon afterwards publicly married Margaret Barth, a relation of his friend the prior, to whom he had been contracted while at the monaſtery. The little property which they had being ſoon exhauſted, he found it neceſſary to learn ſome manual art in order to procure ſubſiſtence; and, having placed his wife as a ſervant in a miniſter's family, made an agreement with a weaver, who was an anabaptiſt, to be taught his buſineſs; but in about two months his maſter diſmiſſed him, on account of his frequently engaging in diſputation with an anabaptiſt miniſter who lodged at the weaver's houſe. He had now no other proſpect of gaining his livelihood than by joining the labourers who were employed in repairing the fortifications of Straſburg, and was promiſed to be received into their number by the ſuperintendent of the works; but, on the evening before he was to commence this drudgery, he received a meſſage to meet Martin Bucer, who, after ſome converſation with him, intimated that the magiſtrates of the city deſigned that he ſhould preach every Sunday at the village of Dorliſheim. With this appointment he was well pleaſed, and diſcharged its duties with great diligence and ſucceſs, repairing to the village every Saturday, and returning to Straſburg on the following Monday. At this time he had an apartment in Bucer's houſe, who gave him his board in return for the ſervice which he had rendered him by tranſcribing his manuſcripts for the preſs: for Bucer's hand-writing was ſo bad, that the printers could not read it, and he was often puzzled to make it out himſelf. Some months afterwards it was judged expedient that he ſhould reſide at Dorliſheim; to which place he accordingly removed with his wife, who was far advanced in pregnancy. Here he continued during twelve months, zealouſly employed in the duties of his miniſterial function, and ſuſtaining the rigours of extreme poverty with admirable conſtancy. He had no houſehold furniture but a little bed brought by him from his convent, which was occupied by his wife during her lying-in, while he contented himſelf with a little ſtraw on the bare ground, and a few neceſſary utenſils which the humanity of his pariſhioners ſupplied him with. He was alſo reduced to great diſtreſs, owing to the oppreſſion of the abbot of Hohenforſt, who collected the tythes and revenues of his church, but would not pay his penſion; and he muſt have periſhed through want, had not the magiſtrates of Straſburg ordered him a ſum of money out of their public treaſury. At the end of the year, they recalled him from this ſituation, to become deacon-miniſter of the principal church in Straſburg; where he officiated for about two years, with the moſt commendable diligence and increaſing reputation.

In 1531, Muſculus removed to Augſburg, where he at firſt officiated as miniſter in the church of the Holy Croſs, and afterwards in that of the Holy Virgin. He was for ſome years involved in continual diſputes either with the papiſts or anabaptiſts; but he conſtantly and ſucceſsfully reſiſted the cruel deſign of putting the latter to death; and was the inſtrument of reclaiming, by the forcible weapons of reaſon and argument, ſeveral of the deluded followers of Muncer. He retained his ſituation at Augſburg till the year 1547; and during this period he made himſelf maſter of the Greek and Hebrew languages, to which he had been before a ſtranger. He gave evidence of his ſkill in theſe languages by the publication of various well-executed tranſlations, particularly of the Commentaries of Chryſoſtom on the Epiſtles of St. Paul; ſome of the works of Baſil, Athanaſius, St. Cyril, Euſebius, Socrates, Theodoret, and others. In the years 1540 and 1541, he was deputed by the ſenate to attend the conferences held between the proteſtant and catholic divines during the diets of Worms and Ratiſbon; and in the conference during the latter diet, between Melancthon and Eckius, he was appointed one of the ſecretaries, and drew up the acts of it.

When Charles V. came to Augſburg, in 1547, to hold a diet, after the defeat of the league of Smalkalde, Muſculus was deprived of his church; but he ſtill continued to preach the tenets of the reformed religion, though it was often at the hazard of his life. He afterwards preached decidedly againſt the Interim, (which ſee, vol. xi.) but, as the magiſtrates of Augſburg choſe to ſubmit to it, he thought it prudent to withdraw to Swiſſerland, and occaſionally officiated as preacher at Conſtance, St. Gall, and Zurich. While he was at the laſt-named place, he was invited to England by archbiſhop Cranmer; but the ill health of his wife, and the largeneſs of his family, conſiſting of eight children, led him to decline the prelate's offer. In 1549, he became profeſſor of divinity in the univerſity of Berne, the duties of which office he diſcharged with great reputation for more than fourteen years. In 1552, when Augſburg had recovered its liberty, he was recalled; and about the ſame time he had invitations from Straſburg, the electors palatine Otho-Henry and Frederic, and the landgrave of Heſſe, to poſts of honour and emolument; but his gratitude to Berne was ſo great, for affording him an aſylum in the hour of his diſtreſs, that he refuſed, without heſitation, the advantageous propoſals made to him. He died in 1563, at about the age of ſixty-ſix, reſpected and beloved by men of all parties for his moderation and candour, and the amiable qualities of his heart.

That Muſculus was a perſon of great application, and very conſiderable learning, his numerous works ſufficiently teſtify. Beſides thoſe which we have already enumerated, he publiſhed, in Latin, A Commentary on the Pſalms, 1550; Upon the Goſpel of St. John, 1553; Upon the Book of Geneſis, 1554; Upon the Epiſtle of St. Paul to the Romans, 1555; Upon the Epiſtle to the Corinthians, 1559; Upon the Epiſtles to the Galatians and Epheſians, 1561, folio. In 1560 he publiſhed his Loci Communes, in folio, which had employed him for ten years; and after his death his heirs publiſhed his Commentaries upon the Goſpel of St. Matthew, and upon the Epiſtles to the Philippians, Coloſſians, Theſſalonians, and upon the firſt chapter of the Firſt Epiſtle to Timothy. To this liſt might be added a multitude of pieces in the German language, &c. His writings deſervedly gave him a high character with the proteſtants of his day; and, though the reading of them has been in ſome meaſure ſuperſeded by more modern and leſs voluminous works, they will carry his name down with honour to diſtant poſterity. *Gen. Biog.*

MUSDERE'E, a town of Hindooſtan, in Bahar: fixteen miles ſouth-weſt of Rotaſgur.

To MUSE, *v. n.* [*muſer*, Fr. *muyſen*, Dut. *muſſo*, Lat.] To ponder; to think cloſe; to ſtudy in ſilence.—If he ſpake courteouſly, he angled the people's hearts; if he were ſilent, he *muſed* upon ſome dangerous plot. *Sidney.*—St. Auguſtine, ſpeaking of devout men, noteth, how they daily frequented the church, how attentive ear they give unto the chapters read, how careful they were to remember the ſame, and to *muſe* thereupon by themſelves. *Hooker.*—My mouth ſhall ſpeak of wiſdom; and my heart *muſe* of underſtanding. *Pſalm* xlix. 3.—All men *muſed* in their hearts of John, whether he were the Chriſt or not. *St. Luke* iii. 15.

Cæſar's father oft,
When he hath *mus'd* of taking kingdoms in,
Beſtow'd his lips on that unworthy place,
As it rain'd kiſſes. *Shakeſpeare.*

To be abſent of mind; to be attentive to ſomething not preſent; to be in a brown ſtudy:

You ſuddenly aroſe and walk'd about,
Muſing and ſighing, with your arms acroſs. *Shakeſpeare.*

The ſad king
Feels ſudden terror and cold ſhivering,
Liſts not to eat, ſtill *muſes*, ſleeps unſound. *Daniel.*

To wonder; to be amazed:

Muſe not that I thus ſuddenly proceed;
For what I will, I will. *Shakeſpeare.*

Do not *muſe* at me, my moſt worthy friends;
I have a ſtrange infirmity. *Shakeſpeare's Macbeth.*

To MUSE, *v. a.* To meditate; to think on.—Come then, expreſſive Silence! *muſe* his praiſe. *Thomſon.*

Man ſuperiour walks
Amid the glad creation, *muſing* praiſe. *Thomſon.*

MUSE, *ſ.* Deep thought; cloſe attention; abſence of mind; brown ſtudy:

The tidings ſtrange did him abaſhed make,
That ſtill he ſat long time aſtoniſhed
As in great *muſe*, ne word to creature ſpake. *Spenſer.*

He was fill'd
With admiration and deep *muſe*, to hear
Of things ſo high and ſtrange. *Milton's P. L.*

The power of poetry.—Begin, my *muſe*. *Cowley.*

Lodona's fate, in long oblivion caſt,
The *muſe* ſhall ſing, and what ſhe ſings ſhall laſt. *Pope.*

MUSE, [from the Lat. *muſa*, a ſong.] In heathen mythology, one of the nine ſiſter-goddeſſes who preſided over poetry, muſic, dancing, and all the liberal arts.

The word, according to Phornutus, is derived from the Greek, μωσθαι, which ſignifies the ſame with ζητειν, to ſearch; others derive it from ομοιȣσιος, ſimilar, or alike; all the arts being bound and united together. Euſebius derives it from μυεω, to initiate, or inſtruct; Plato and Scaliger from μαιωσθαι, to bring forth; becauſe to them is attributed the invention of arts; and by them arts were produced. Diodorus derives the name from *miſin*, which ſignifies to teach things ſublime. Huetius deduces it from *Moſes*. Laſtly, Heinſius and Voſſius derive it from the Hebrew מושר, *muſchar*, ſcience, inſtruction.

The Muſes are called by various names: Camænæ, Heliconiades, Parnaſſides, Aonides, Citheriades, Pegaſides, Aganippides, Theſpiades, Libethrides, Caſtalides, and Pierides.

They were called *Camænæ*, from *cano*, as their principal employment was to celebrate the actions of the gods and heroes; *Heliconiades* from Helicon, a mountain in Bœotia; *Parnaſſides* from Mount Parnaſſus, in Phocis, which they much frequented; *Aonides* from the Aonian Mountain in Bœotia; *Citheriades* from Mount Citheron; *Pegaſides* and *Hippocrenæ*, from the fountain which Pergaſus cauſed to ſpring out of the earth with a blow of his foot; and from the ſame fountain they were called *Aganippides*; *Theſpiades*, from a town in Bœotia called Theſpia; *Libethrides*, from Libethra, the city where Orpheus was born; *Caſtalides*, from a fountain of Parnaſſus; *Pierides*, from Mount Pierus, or from that part of Macedonia called Pieria, or becauſe they were ſuppoſed by ſome to be the daughters of Pierus, a king of Macedonia, who ſettled in Bœotia. But, as the daughters of one Pierus, who challenged the Muſes to a trial in muſic, were conquered, and changed into magpies; it may perhaps be ſuppoſed, that the victorious Muſes aſſumed the name of the conquered daughters of Pierus, and ordered themſelves to be called Pierides, in the ſame manner as Minerva was called Pallas becauſe ſhe had killed the giant Pallas.

The ancients admitted nine Muſes, and made them the daughters of Jupiter and Mnemoſyne, or Memory. At firſt, indeed, their number was but three; viz. *Melete*, *Mneme*, and *Acede*; Greek words ſignifying Meditation, Memory, and Singing; but a certain ſculptor of Sicyon, according to Varro, having orders to make three ſtatues of the three Muſes for the temple of Apollo, and miſtaking his inſtructions, made three ſeveral ſtatues of each Muſe: theſe, however, were found ſo beautiful, that they were all ſet up in the temple; and from that time they began to reckon nine Muſes; to whom Heſiod afterward gave names; viz. Calliope, Clio, Erato, Thalia, Melpomene, Terpſichore, Euterpe, Polyhymnia, and Urania. Each of theſe was ſuppoſed to preſide over her reſpective art: Calliope over heroic poetry; Clio over hiſtory; Melpomene over tragedy; Thalia over comedy; Euterpe over wind-muſic; Urania over aſtronomy; Terpſichore over the harp; Erato, the lute; Polyhymnia, the dance. As to the particular meaning of their names, **Erato** ſignifies the amiable; Urania, the celeſtial; Calliope, elegance of language; Euterpe, ſhe who pleaſeth; Thalia, lively joy, eſpecially the feſtivity of banquets; Melpomene, ſhe who delighteth in ſinging; Polymnia, multiplicity of ſongs; Terpſichore, ſhe who delighteth in the dance; Clio, glory. An epigram of Callimachus gives the attributes of the Muſes in as many lines:

Calliope the deeds of heroes ſings;
Great *Clio* ſweeps to hiſtory the ſtrings;
Euterpe teaches mimes their ſilent ſhow;
Melpomene preſides o'er ſcenes of woe;
Terpſichore the flute's ſoft pow'r diſplays;
And *Erato* gives hymns the gods to praiſe;
Polymnia to the dance her care apply'd;
Urania wiſe, the ſtarry courſe deſcry'd;
And gay *Thalia's* glaſs was life and manners' guide.

This epigram does not, however, exactly correſpond with the ideas of other poets, or of the ancient painters, in characterizing the attributes of the muſes; and indeed of the epigram itſelf there are very different readings and tranſlations. The ancients had numberleſs ingenious and fanciful ideas concerning the Muſes, which we have not room to recite. "It ſeems (ſays the abbé Barthelemi) as if the firſt poets, enchanted with the beauties of Nature, occaſionally were led to invoke the nymphs of the woods, hills, and fountains; and that, yielding to the prevailing taſte for allegory, they gave them names relative to the influence they might be ſuppoſed to have over the productions of the mind." Trav. of Anacharſis, vol. iii.

The palm-tree, the laurel, and all the fountains of Pindus, Helicon, Parnaſſus, &c. were ſacred to the Muſes. They were generally repreſented as young, beautiful, and modeſt, virgins. They were food of ſolitude, and commonly appeared in different attire according to the arts and ſciences over which they preſided. Sometimes they were repreſented as dancing in a chorus, to intimate the near and indiſſoluble connexion which exiſts between the liberal arts and ſciences. Sometimes they appear with wings, becauſe by the aſſiſtance of wings they freed themſelves from the violence of Pyrenæus. The worſhip of the Muſes was univerſally eſtabliſhed, particularly in the enlightened parts of Greece, Theſſaly, and Italy. No ſacrifices were offered to them, though no poet ever began a poem without a ſolemn invocation to the goddeſſes who preſided over verſe. There were feſtivals inſtituted in their honour in ſeveral parts of Greece, eſpecially among the Theſpians, every fifth year. The Macedonians obſerved alſo a feſtival in honour of Jupiter and the Muſes. It had been inſtituted by king Archelaus, and it was celebrated with ſtage-plays, games, and different exhibitions, which continued nine days, according to the number of the Muſes.

It muſt not, however, be imagined, that the deities, thus invoked, are conſidered, even by the ancients poets themſelves, as divine perſons, from whom they expect any real help. Under the name of Muſe they pray for the genius of poetry, and all the talents and circumſtances neceſſary for a happy execution of their undertaking. Their addreſſes to the Muſes are mere allegories, and manners of expreſſing themſelves poetically; as when they make gods of ſleep, of flame, of revenge, and other natural and moral things. Accordingly, the Muſes are of all ages, countries, and even of all religions: there are Chriſtian as well as Heathen Muſes; Latin, Greek, Engliſh, and French, Muſes. There are alſo *new* Muſes, who appear every day in favour of thoſe, who, diſdaining things too trite and common, chooſe to ſtrike out of the road. Thus, when Virgil wrote his Eclogues, he invoked the Sicilian Muſes, becauſe he imitated Theocritus; and, the Sicilian poet having ſucceeded, the Roman begged for a genius as happy as that of this iſlander. The Muſes of the poet Lucretius had never inſpired any perſon before him. It is plain, from the doctrine of his book, what kind of divinity it was he invoked. He addreſſes himſelf to Venus; but, at the ſame time, tells us, that none of the deities trouble themſelves with human affairs. His Muſes, therefore, muſt of neceſſity be mere allegories.

MU'SE-INSPIRED, *adj.* Gifted with the power of verſe:

The *muſe-inſpired* train
Triumph, and raiſe their drooping heads again. *Waller.*

MU'SE-RID, *adj.* Poſſeſt by the muſe.—Pale, meagre, *muſe-rid* wight! *Shenſtone.*

MU'SEFUL, *adj.* Deep thinking; ſilently thoughtful.

Full of *muſeful* mopings, which preſage
The loſs of reaſon, and conclude in rage. *Dryden.*

MU'SELESS, *adj.* Regardleſs of the power of poetry.—*Muſeleſs* and unbookiſh they were, minding nothing but the feats of war. *Milton's Areopagitica.*

MU'SER, *ſ.* One who muſes; one apt to be abſent of mind.

MUSES'TRE, a town of Italy, in the Treviſan: eight miles eaſt-north-eaſt of Trevigio.

MU'SET, *ſ.* [in hunting.] The place through which the hare goes to relief. *Dr. Johnſon from Bailey.*—*Muſet* is a gap in a hedge. *Cotgrave.*

The purblind hare,
How he outruns the wind! and with what care
He cranks and croſſes, with a thouſand doubles!
The many *muſits* through the which he goes,
Are like a labyrinth to amaze his foes. *Shakeſpeare.*

MUSE'UM, *ſ.* [Greek.] A repoſitory of learned curioſities.—Our ſcioliſts will often write *muſæum* for *muſeum*; as Mr. Thoreſby, in the account he has given us of his collection of rarities, and others; but the Greek word is *μεσεῖον*, i. e. *muſeum* in Engliſh. *Pegge's Anonym.*

Museum was a name originally given to a palace, or vaſt range of building, in Alexandria, and which indeed took up one-fourth of the city. This quarter was called the *Muſeum*, on account of its being ſet apart for the muſes and the ſtudy of the ſciences. Here were lodged and entertained the men of learning; who were divided into many companies or colleges, according to the ſciences of which they were the profeſſors; and to each of theſe houſes or colleges was allotted a handſome revenue. The foundation of this eſtabliſhment is attributed to Ptolomy Philadelphus, who here placed his library. Hence the word *muſeum* is now applied to any place ſet apart as a repoſitory for things that have an immediate relation to the arts.

The firſt perſon whom we read of having formed a cabinet of natural and artificial curioſities in England was ſir John Tradeſcant, who lived in the reign of Charles I. This gentleman poſſeſſed large phyſic-gardens in Lambeth; and travelled over a conſiderable portion of the globe with the diſtinct view of improving himſelf in natural ſcience, and procuring ſpecimens of whatever appeared rare and curious. The ſon, having imbibed the ſpirit of his father, followed his example; and by their joint exertions a very valuable collection was framed, which afterwards became the property of Mr. Elias Aſhmole, and was compriſed in his noble donation to the univerſity of Oxford. The muſeum thus formed at Oxford, called the *Aſhmolean Muſeum*, is a noble pile, erected at the expenſe of the univerſity. It was begun in 1679, and finiſhed in 1683, at which time the valuable collection of curioſities preſented to the univerſity by Aſhmole was there repoſited, and afterwards digeſted and put in order by Dr. Plott, who was conſtituted firſt keeper of the muſeum. Divers conſiderable acceſſions have been ſince made to the muſeum; as of hieroglyphics, and other Egyptian antiquities, by Dr. Huntingdon; and of an entire mummy, by Mr. Goodyear; of a cabinet of natural curioſities, by Dr. Liſter; alſo of divers Roman antiquities, altars, medals, lamps, &c. Among the more remarkable of the venerable remains of Tradeſcant's original cabinet, ſtill preſerved in the Aſhmolean Muſeum, is the head of the bird called a dodo, (ſee Didus,) the only one in Europe, and moſt probably in the world, the ſpecies being ſuppoſed to be entirely extinct.

The next collection, after that of the Tradeſcants, appears to have been Dr. Woodward's, which ſubſequently came to be included in the ſuperb and ſplendid one of ſir Hans Sloane, and, of courſe, now conſtitutes a part of the *Britiſh Muſeum.* We have nothing to add to our account of that national collection given under the article London, vol. xiii. p. 582–5. except to notice the introduction of what are now called the Elgin Marbles, which were purchaſed by the parliament laſt year (1816) for the ſum of 35,000l.

The noble collection which formed the Muſeum of the ducheſs of Portland, was collected at an incredible expenſe by herſelf, and increaſed by ſome valuable preſents from her friends; to which were added various curioſities inherited from her family. It compriſed every thing rich and rare in the vegetable, animal, and foſſil, kingdoms; and the articles claſſed under the head of Conchology were ſo numerous and ſcarce, that even the celebrated Linnæus had not ſeen very many of them. Moſt unfortunately this ſplendid collection was ſcattered upon her grace's deceaſe, whoſe acting executrix ordered it to the fatal hammer of the active diſtributor of the goods of inheritors, Mr. Alderman Skinner, who was thirty-ſeven days employed in the ſale at the ducheſs's houſe in Privy Garden, commencing his labours on the 24th of April, 1786.

Mr. Richardſon having noted the prices of ſome of the richeſt articles on a Catalogue, we ſhall give a ſelection from them.

Hollar's Works, 13 vols. folio, 385l. This was a collection of the beſt impreſſions, proofs, and variations, extant.

A portrait of Louis XIV. finely enamelled by Pettitot. 31l. 10s.

A miniature of Shakeſpeare by Humphreys. 27l. 16s. 6d.

A very fine miniature of the infant Jeſus, ſleeping, painted upon lapis lazuli, an octagon of four and a half by three and a half inches, ſuppoſed to be painted by one of the ſchool of Guido. The child lies on a carpet and cuſhion of gold, with a baſket behind the head, containing the inſtruments of Crucifixion. 24l. 3s.

Two miniatures in a locket, gold enamelled, of the great ſir Walter Raleigh, and his ſon captain Walter Raleigh, finely executed. The father dreſſed in black and gold armour with a red ſaſh, in the ſixty-fifth year of his age. The ſon in white and gold armour with a white ſaſh; he wears a gold ear-ring, and the ruff and whiſkers of the time; his age about twenty-four. 44l. 2s.

Portrait of the ducheſs de la Valiere, when in the height of her beauty, enamelled by Pettitot, extremely fine, in an ebony frame. 84l.

Portrait of William Herbert, earl of Pembroke, by Iſaac Oliver, 1616; very fine, and highly finiſhed. 11l. 5s.

Portrait of lady Frances Cecil, counteſs of Cumberland, by John Hoſkins. 10l.

Two miniatures of Milton and his mother, in the dreſs of the times; undoubted originals, admirably painted, in a tortoiſe-ſhell caſe. 33l. 12s. 6d.

A remarkably fine miniature head of our Saviour, by Iſaac Oliver, ſet in gold. Nothing can exceed the gracefulneſs, benevolence, and meekneſs, expreſſed in this picture. 21l.

Queen Elizabeth's Prayer-book, which contains ſix prayers compoſed by her majeſty, and written by her own hand, in the neateſt and moſt beautiful manner, upon vellum. Two of the prayers are in Engliſh, one in Latin, one in Greek, one in Italian, and one in French. On the inſide of the covers are the pictures of the duke d'Alençon and the queen, by Hilliard: the binding, black ſhagreen, with enamelled claſps, and in the centre of each is a ruby. 106l. 1s.

A very fine illuminated Miſſal, which was preſented by the ducheſs of Bedford (ſiſter to the duke of Burgundy, and wife of John duke of Bedford, regent of France) to king Henry VI. in the year 1430. Upon the back of the leaf (on which are the original portraits of the duke and ducheſs of Burgundy) is her deed of gift to the king. The ſize of the book is eleven inches long, ſeven and a half wide, and two and three-quarters thick; bound in crimſon velvet, with gold claſps, on which are engraved the Harley, Cavendiſh, and Holles, arms, quartered. 203 guineas.

A moſt beautiful Miſſal, illuminated in a ſuperior degree of elegance by the famous Don Julio Clovio, which, in richneſs and harmony of colouring, as well as the taſte and judgment of the deſigns and ornaments, is perhaps ſuperior to any thing of the kind. The book is in the higheſt ſtate of preſervation, and the colours retain their original brilliancy. It is inſcribed to the duke d'Alençon, by Clovio, anno 1537; and from him came into the poſſeſſion of the earl of Arundel and Surrey, from whoſe collection it was purchaſed by Edward lord Harley, earl of Oxford and Mortimer. The ſize, five inches three-eighths long, four inches wide, and two and a half thick; bound in black leather, ornamented with gold plates, covers, and claſps. 161l.

An ivory tankard, on which is finely carved, in alto-relievo, a bacchanalian proceſſion, with a ſilver-gilt bottom, the edge engraved, with a border of leaves, enriched with various precious ſtones, ſuch as rubies, topazes, ſapphires, jacynths, emeralds, &c. the handle and lid are ſilver-gilt, and decorated with jewels; and on the top is a boy ſculptured in ivory. The height is ſix inches and a half, the width at bottom five inches, and the top three and a quarter. The inſide of the lid is enamelled, with a garnet in the centre. 19l. 8s. 6d.

A very curious gold enamelled antique cup, of extraordinary workmanſhip and elegant form; weight twenty-three ounces, two penny-weights, and twenty-one grains. 85l.

A very curious roſary, by Benvenuto Cellini, ſaid to be the roſary of Henrietta Maria, queen of king Charles I. who in her neceſſities pawned it to the duke of Orleans. It conſiſts of ſix plum and fifty cherry ſtones; the firſt moſt curiouſly carved with parts of hiſtory, the latter with heads of emperors; and on the reverſes emblems and mottos. 46l. 4s.—Another, remarkably fine, ſaid to have been the property of pope Clement VII. conſiſting of thirty-two plum-ſtones of exquiſite workmanſhip of ſculptures on both ſides, in relievo; and between each ſtone is a pearl, thirty-two in number, with a larger one on the top of the taſſel. 81l. 18s.

A piece of carving in wood, repreſenting landſcapes, with views, in which is introduced water with veſſels ſailing, and on land various repreſentations of hunting, with boar, ſtag, dogs, and men on horſeback: the whole executed in a manner that is beyond deſcription, and in the higheſt preſervation. 15l. 15s.

A gold box, with an exceeding curious moſaic top and bottom. 7l. 7s.

A ſmall Chimera of fine antique moſaic, ſet in gold as a ring, and turns upon a ſwivel. The figure has the wings and feet of a bird, with a human face, and ſeems to be an hieroglyphic. 13l. 2s. 6d.

A precious fragment of an antique intaglio, in an exceeding fine cornelian, ſet in gold for a ring. It repreſents Hercules as low as the waiſt, ſitting in a ſkiff, with a lion's ſkin for a ſail, one of the paws is faſtened by a ſtring, which hangs over the head of Hercules, whoſe ſtrength in neck and back is wonderfully expreſſed in ſo ſmall a compaſs. 47l. 5s.

A cameo of the head of Auguſtus Cæſar, upon a remarkably fine onyx; the head white, upon a jacynth ground; the workmanſhip of ſuperlative excellence. It was found at Malta. 237l. 5s.

The head of Jupiter Serapis, cut out of a green baſaltes, a moſt inimitable piece of ſculpture, of Egyptian workmanſhip, from the Barberini cabinet, the ſize about four inches. The countenance is highly expreſſive of ſublimity, and dignity, tempered with ſweetneſs and grace. 174l. 5s.

The moſt celebrated antique vaſe, or ſepulchral urn, from the Barberini cabinet, at Rome. It is the identical urn which contained the aſhes of the Roman emperor Alexander Severus and his mother Mammea, which was depoſited in the earth about the year 235 after Chriſt, and was dug up by order of pope Barberini, named Urban VIII. between the years 1623 and 1644. This was ſold for 1029l. but is now in the Britiſh Muſeum. See vol. xiii. p. 584. and for a very particular account (with an engraving) of this curious piece of antiquity collected from Montfaucon and others, ſee the Gentleman's Magazine for 1786. p. 97. See alſo *Letters of Granger, edited by Malcolm*, 1805.

About forty years ago, ſir Aſhton Lever, opened his moſt magnificent cabinet to the public, in Leiceſter-ſquare, which had coſt him upwards of thirty thouſand pounds in collecting. This Muſeum for ſome time was one of the moſt faſhionable places of reſort in London; and, when diſpoſed of by lottery, became the property of Mr. Parkinſon, who erected a building on the Surrey ſide of the river Thames, near Blackfriars-bridge. The ſituation, however, was injudiciouſly choſen, being at too great a diſtance from the reſidence of that claſs of people moſt likely to afford ſupport to ſuch an inſtitution; and in conſequence, the proprietor, not meeting with the encouragement he expected, was induced to diſpoſe of the whole by auction, in ſeveral thouſand lots, in the ſpring of 1806. This collection, ſays Mr. Montagu, (Suppl. to Ornithological Dict.) was once as much an honour to the country as its recent diſperſion is a diſgrace. When we reflect on the various detections of peculation to a vaſt amount by public characters; when public bodies can, by application to parliament, procure loans to any amount, and private individuals be rewarded from the public fund; how extraordinary does it appear, that in neither of the houſes of parliament an advocate or a champion ſhould be found ready to ſtand forth and reſcue ſcience in ſo enlightened a country. It will ſcarcely be credited in after-ages, when our children's children ſhall be told of the poliſh and refinement of the preſent day, that the trifling ſum of thirty, or perhaps twenty, thouſand pounds, would have added that vaſt aſſemblage of nature and art to the Britiſh Muſeum; yet it was ſuffered to be diſperſed. Had the Leverian Muſeum been connected with the Britiſh, theſe collectively would have formed a moſt magnificent national collection that might have been envied by ſurrounding potentates, but unrivalled even by that of France, (to which the fate of war had given the means of plundering from the public and private muſeums of nearly the whole of Europe:) but alas! that unfortunate collection has been diſſolved, "and, like the baſeleſs fabric of a viſion, has not left a wreck behind." At its diſſolution the Auſtrian cabinet was enriched by means of a ſpecial ſcientific meſſenger expreſsly ſent by its auguſt ſovereign; and ſome of the choiceſt and moſt valuable articles were probably, at the capture of Vienna (1809), transferred to the Pariſian Muſeum. Thus far Mr. Montagu. It certainly cannot be denied that countries, of which the financial reſources are very inferior to our own, have made the moſt liberal exertions for the promotion and diffuſion of natural ſcience; but we may now be permitted to indulge the reaſonable hope that a government, which can allot thirty-five thouſand pounds for the mutilated productions of ancient art, will not in future withhold its ſubſtantial patronage from the exiſting or modern collectors of the rare productions of nature.

Many rare articles which ornamented the Leverian Muſeum, we now recogniſe in that ſcientific and ſyſtematic collection called *Bullock's Muſeum.* This has alſo been deſcribed under the article LONDON, vol. xiii. p. 573, 4. This collection is continually receiving a freſh acceſſion of curioſities, both permanent and temporary. Among the latter we may mention, that the public were gratified laſt winter with the ſight of Bonaparte's very-commodious travelling-chariot, which he was forced to abandon after the fatal battle of Waterloo: the coachman and horſes were alſo in attendance. And at this preſent moment, a curious carriage is exhibiting, which goes without horſes.

The *National Muſeum*, at Paris, afterwards ſo greatly enriched and called the *Imperial Muſeum*, now ſo greatly impoveriſhed and chriſtened anew the *Royal Muſeum*, opened in July 1817, with 1133 pictures. To the eye of a perſon not a connoiſſeur, it is as magnificent as ever. There are 253 pictures of the French ſchool alone; amongſt which figure the chef d'œuvres of ſome modern painters, viz. Reſtaut, Robert, Chardin, Chavaune, and Greuze. David is a republican: his pictures are therefore ſuppoſed to have no merit, and are accordingly excluded.

MUS'GRAVE (William, M. D.), a learned phyſician, was born at Charlton-Muſgrave, in Somerſetſhire, in 1657. He was educated at Wincheſter, and afterwards at Oxford, where he was made probationer-fellow of New College in 1675. His firſt intentions were to ſtudy the law; but he afterwards adopted the profeſſion of medicine, and was elected a fellow of the Royal Society, of which body he was appointed ſecretary in 1684. In this capacity he edited the Philoſophical Tranſactions, from N° 167 to N° 178 incluſive: he likewiſe communicated ſeveral papers on anatomical and phyſiological ſubjects to the ſociety. In 1689, he took the degree of doctor of phyſic, and became a fellow of the College of Phyſicians. Ultimately, however, he quitted London, and ſettled at Exeter, where he practiſed his profeſſion, with conſiderable reputation and ſucceſs, for nearly thirty years, and died in 1721. Beyond the circle of his practice, he made himſelf known principally by his two treatiſes on gout: the one, De Arthritide Symptomatica, Exon. 1703; the other De Arthritide Anomala ſive Interna, ibid. 1707; both of which were ſeveral times reprinted. They contain numerous caſes of the diſeaſe, under all its forms and irregularities; but the author not unfrequently aſcribes to gout, ſymptoms which probably were not connected with that malady. Nevertheleſs, theſe are valuable practical works.

Dr. Muſgrave was alſo a diſtinguiſhed antiquary, and publiſhed ſeveral learned tracts upon the ſubject of his reſearches in this way; eſpecially one, entitled "Belgium Britannicum," 1719, 8vo. which treats of the topography, hiſtory, and antiquities, of Hampſhire, Wiltſhire, and Somerſetſhire, which were anciently in the poſſeſſion of a tribe of Belgæ. He likewiſe publiſhed, 4. Julii Vitalis Epitaphium cum Commentario, 1711. 5. De Legionibus Epiſtola. 6. De Aquilis Romanis Epiſtola, 1713. 7. Inſcriptio Tarraconenſis, cum Commentario. 8. Geta Britannicus, &c. 1715. 9. Diſſertatio de Dea Salute, 1716. *Gen. Biog.*

MUSH'AKEN, a town of Perſia, in the province of Irak: thirty-five miles north-north-weſt of Iſpahan.

MUSHA'NON CREE'K, a river of Pennſylvania, which runs into the weſt branch of the Suſquehannah in lat. 41. 7. N. lon. 70. 30. W.

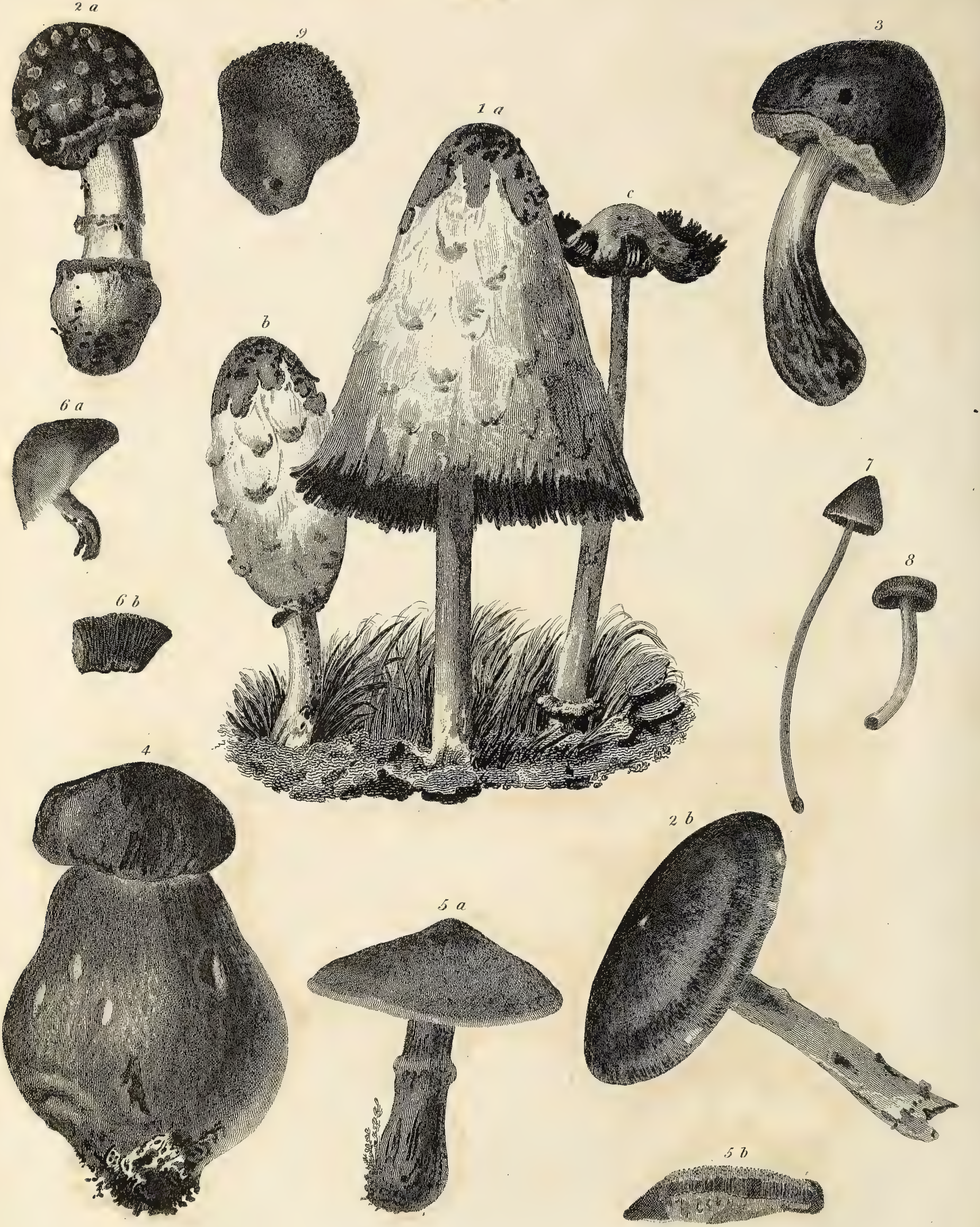
MU'SHI, [Heb. one that withdraws.] A man's name.

MUSHIEDAU', a town of the kingdom of Candahar: ſixty miles weſt of Ghizni.

MU'SHITE, *ſ.* A deſcendant of Muſhi.

MUSH'ROOM, *ſ.* [*muſcheron*, Fr.] See AGARICUS.—*Muſhrooms* are by curious naturaliſts eſteemed perfect plants, though their flowers and ſeeds have not as yet been diſcovered: the true champignon, or *muſhroom*, appears at firſt of a roundiſh form like a button, the upper part of which, as alſo the ſtalk, is very white, but, being opened, the under part is of a livid fleſh-colour, but the fleſhy part, when broken, is very white; when they are ſuffered to remain undiſturbed, they will grow to a large ſize, and explicate themſelves almoſt to a flatneſs, and the

MUSHROOMS.



J. Chapman Sculp

Poisonous Mushrooms.

Engraved for the Encyclopaedia Londinensis 1817.

red part underneath will change to a dark colour. In order to cultivate them, open the ground about the roots of the *muſhrooms*, where you will find the earth very often full of hard white knobs, which are the offſets or young *muſhrooms*; theſe ſhould be carefully gathered, preſerving them in lumps with the earth about them, and planted in hot-beds. *Miller.*—An upſtart; a wretch riſen from the dunghill.—Muſhrooms come up in a night, and yet they are unſown; and therefore ſuch as are upſtarts in ſtate, they call in reproach *muſhrooms*. *Bacon's Nat. Hiſt.*

Tully, the humble *muſhroom* ſcarcely known,
The lowly native of a country town. *Dryden.*

MUSHROOM may be derived from the French *mouſſeron*, which is from *mouſſe*, moſs. But it is very remarkable, that what the French call *mouſſeron* is the ſmall white ſort which we call *champignon*; and what they call *champignon* is really our common muſhroom, Agaricus campeſtris: as if it had been done for the cruel purpoſe of puzzling the reſpective foreigners in the two neighbouring kingdoms.

Conſidering the truth of Bernardin St. Pierre's obſervation, that "Botany, ſurrounded by her ſyſtems, offers us, like Aſtronomy, nothing more than a dull and cold nomenclature, and diviſions ſplit into ſubdiviſions, without meaning and without end;" we have availed ourſelves of a ſpontaneous communication from a friend, who has endeavoured to enliven the ſubject; and we preſent it to our readers as an addition to the article AGARICUS, where all that relates to the botanical hiſtory of the muſhroom may be found. See alſo the article BOTANY, vol. iii. p. 288.

The hiſtory of many curious productions of the earth is ſtill enveloped in ſuch impenetrable clouds of uncertainty and doubt, that whatever may drop from the deſcriptive pen of a minute obſerver of the admirable ways of Nature, cannot but prove highly intereſting, not only to the profeſſed botaniſt, in order to enliven the dulneſs of his purſuits, but even to thoſe who never made the ſecrets of phyſical cauſes and reſults their particular ſtudy. With the torch of inveſtigation in his hand, the genius of diſcovery has often attempted to lift up the veil, and draw aſide the ſacred curtain which ſeems to have ſecured againſt mortal curioſity the generative myſteries of the muſhroom. Surmiſes have been gradually excited, traces of procreative powder carefully followed, and even means of reproducing the individual plant ultimately obtained: yet, as if the intereſting fable of Pſyche had been invented to bear alluſion to theſe unfruitful efforts, the moment the light approaches, the deſired object vaniſhes ſo rapidly, that it leaves inveſtigation without reward, experiment without ſucceſs, and curioſity without hope. However, that innate *ardour* which the human ſoul generally feels when on the road of inquiry into the marvellous works of the Creator; (a ſentiment which, as an excluſive prerogative, ſeems to warrant the boon of immortality after this evaneſcent life, and with it an univerſal knowledge to ſucceed our ignorance; and an eternal light to compenſate the diſtreſſing obſcurity of our days, *Quantâ ſub nocte jaceret noſtra dies*, Lucan;) this *ardour* ought not to relax at the ſight of difficulties, or to pine in the gloom of reiterated diſappointment. Obſtinacy and reſiſtance are often the means of ſtimulating ſupineneſs and ſloth into activity and enthuſiaſm; and ſome minds have received ſuch a peculiar caſt of perſevering undauntedneſs, that the more recondite and abſtruſe the object of their ſpeculation, the deeper the abyſs they want to fathom, or the higher the flight they ought to take to apprehend the ſupreme deſideratum of their purſuit, the more effectual alſo are their indefatigable endeavours. Had the pale ſpectre of diſappointment appalled a Newton, a Locke, a Linnæus, in their firſt attempt at ſeeking the origin of light, of ideas, of vegetable progeneration, how many bold and admirable efforts would have remained among mere poſſibilities, how many important diſcoveries would grovel ſtill in the idle boſom, in the barren womb of ignorance! To ſit down, with clowniſh content, before a beautiful plant, without enquiring into the myſteries of its organization, would give a death-blow to all progreſs in natural ſcience, and level the active mind of man with the paſſive inſtinct of the brute; and indeed, were we to be ſatisfied with mere definitions as we find them, we ſhould take the moſt injurious prejudices againſt ſteadineſs in enquiry, and improvement in knowledge. Dr. Johnſon, for inſtance, tells us, at once, and as if *ex cathedrâ*, at the word VEGETABLE, that it is, "any thing that has growth without ſenſation, as plants." How can any man aſſert, with conviction and certainty, that plants have no feeling! Although the mind recoils from the diſtreſſing idea, that the roſe and the cabbage feel under the nail of the girl that plucks the one, or the knife of the gardener that cuts the other; yet, do we not ſee the wound inflicted on the plant ſenſibly bleed, if we may call blood the liquid which iſſues out of it? Do we not ſee the parts afflicted, writhe, curl up, and ſhrink, as if in exquiſite pain; and the mother-tree languiſh and die, if the wound, reaching the vital ſyſtem, prove mortal? Has the mimoſa no feeling, and the myrtle no ſenſations? the one whoſe virgin-leaf gently droops at the ſlighteſt touch; the other who clings to the glaſs windows of the cottage to ſip the air, to face the ſun, to enjoy the light of the day? Such ideas are mere coverings for idleneſs and indifference in natural inveſtigation, and ought not to be encouraged. Let us go forward with eagerneſs to acquire, boldneſs to ſubdue, and carefulneſs to retain, whatever we may gather in a field which Providence has laid at our feet; in order that, from the ſmalleſt and apparently moſt inſignificant of his works, we may raiſe our humble and grateful regard towards HIM, who gave life to all in his magnificence and for his own glory, the only object that the Omnipotent could have in view, when performing (for reaſons unknown to us in this world) the aſtoniſhingly beautiful work of the creation. It is not always in the immenſe regions of the ſpheres that we are to ſearch for the moſt brilliant proofs of the wiſdom and goodneſs of God; the moſt deſpicable beings, in appearance, the doom of which is to be trod upon and trampled under foot, whoſe ſudden birth, ephemerous life, and frailty of conſtitution, ſeem to expect from man no other treatment than ſcorn, neglect, and contempt; theſe beings, if properly ſtudied and well underſtood, will become a ſerious ſource of meditation upon the infinite power of the Creator, and upon our inſignificance among the innumerable tribes of his creatures. Theſe preliminary obſervations will lead us to conſider,

1. *The Reproduction of the Muſhroom.*—This plant differs from all others in many and eſſential points. The manner in which it is reproduced has been hitherto concealed from the intelligence of man; hence the denomination of *Cryptogamous*, given to the whole order. Reaſoning, founded upon analogy, will naturally ſhow that muſhrooms muſt ariſe from the diſtention of ſome ſort of ſeed; but this ſeed, which, as it may be ſuppoſed, is contained in, or identically united with, the very fine duſt exhaled by ſome tribes of *fungi*, when ripe and preſſed externally, this ſeed is ſo evaneſcent, ſo imperceptible, that it baffles the moſt ſtrenuous microſcopical efforts; and yet from it will often be produced a plant, the weight of which is ſometimes more than two pounds. This duſt, which contains within itſelf the incomprehenſible property of reproducing a being ſimilar to that out of which it flew into the air; this teeming powder, entruſted by Providence with the uninterrupted propagation of the *fungus*, through the ſucceſſion of ages, to the very laſt day of ſublunary exiſtence, muſt be diffuſed in the whole atmoſphere, and, carried on the wings of the winds, circulate with them; till, falling ultimately on a ſpot *fit to give it increaſe*, it adheres to the ſoil, ſucks inſtinctively the analogous elements excluſively adapted to its ſubſiſtence, and in a few

hours grows to a form and bulk that cannot fail to excite aſtoniſhment.

We muſt of courſe eſtabliſh as a principle, that this fungiferous duſt is at times more or leſs conſiderable in quantity, more or leſs diſpoſed to production, and that all grounds, all ſorts of ſoil, are not ſuitable to it. Millions of elementary parts of this duſt fall inceſſantly; but none with efficacy, except when alighting upon the deſtined ſpot; that is, upon the place which poſſeſſes the qualities requiſite for the welfare of the ſtranger; and yet it is ſurpriſing that we never find the young fungus cloſely attached, by any ſort of roots, to the ground. A ſlight reſiſtance indeed, an apparent reluctance from leaving the turf upon which it grows, is offered generally by the fungus, when the hand carefully ſtrives to wreſt it, unbroken, from its native ſocket in the ſoil. Not that it holds to the mother-earth by any viſible roots, prongs, or claws; no chain fixes the plant to the ground; the ties are of mere affection; and the reſiſtance is ſimply occaſioned by a ſort of circular protuberance or knob at the lower end of the ſtem. It is around that knob, which muſt have been the firſt embryo of the muſhroom, that are placed the curious apparatus for nutrition; the ſelf-moving and double engines, that aſpire and force up the neceſſary juices for the development of the internal mould, for the ſwelling of the capillary ſyſtem, and filling up the prepared and invariable ſtamina of the infant vegetable. Admirable mechaniſm! as much above the more delicate and ingenious works of man, as man is below the ſupreme and all-powerful Intelligence to whom he owes his life. And theſe innumerous ſuckers, theſe imperceptible mouths, theſe *antliæ ac vitales aditus*, through which the inceſſant ſtream of a nutritious fluid ruſhes into organized life, are ſo curiouſly adapted to their aſſigned places in Nature; they fit them ſo well, and yet ſo excluſively; that, once wrenched from the alimenting ſoil, no ſubſtitute can be found; though placed in water as a plucked flower, or tranſplanted as any ſprout, the *fungulus*, far from thriving and expanding itſelf, ſulkily droops, withers, and dies; as if indignant at having been diſturbed from the ſtate of ſilent, ſecret, and peaceful, obſcurity, in which it had pleaſed the wiſdom of Providence to place it; and as if conſcious, that an humble and unknown ſituation is much leſs expoſed to dangers from ambition and envy, than an exalted one.

As it is generally in the ſilence and obſcurity of night that the muſhroom makes its appearance, the ſolemnity and awfulneſs of the time appointed for its birth has been taken hold of by the buſy mind of ſuperſtition; and thouſands of tales have been invented, repeated, and conſequently believed, in all ages, and in all countries, relative to the origin and habits of this myſterious child of moiſture and darkneſs. Theſe two qualities ſeem really requiſite for the production of the fungus. The damp ſteps of a cellar, left unpeopled in the evening by the valet or houſemaid, when they return from drawing the ſupper allowance of ale or wine, will, ſometimes the next morning, be found covered with hordes of muſhrooms, as if flung into ſubitaneous exiſtence by ſome miſchievous imps, or playful fairies in their frolics; and ſuch was the vulgar belief in Shakeſpeare's time, for this great poet makes Proſpero ſay in his addreſs to the Elves:

> And you, whoſe paſtime
> Is to make midnight muſhrooms. *Tempeſt*, act v.

This appearance is ſo very ſudden, that the growth of the plant muſt be uncommonly rapid; ſo much ſo, that it might nearly be perceptible to the eye. A muſhroom two inches in height and an inch in breadth on the diſk or cap, may, I am bold to ſay, be produced in leſs than three hours. The progreſs of the aſcent muſt be therefore in the ſame proportion as the hour-hand of a clock, or at the rate of about ſix feet in the ſpace of four-and-twenty hours. Hence, the birth of the fungus was looked upon not only as myſterious, but as miraculous, or ſupernatural. Other conſiderations have alſo contributed to that belief.

We ſeldom find muſhrooms in their nonage; they appear, for the moſt part, adult all at once; and, like Adam, ſeem created at the age of maturity. However, the near obſerver of Nature will perceive that, in ſeveral ſpecimens which are taken for two ſpecies, there is actually but one individual. Can any plant differ more from another than this infant fungus does from the mature one, and this from the decrepid individual, all repreſented on the annexed Plate, at fig. 1. *a*, *b*, *c*? or at fig. 2 and 3? where the different ages aſſume forms ſo diſcrepant from each other? And in this we muſt admire the inexhauſtible character of pleaſing variety that Nature has ſtamped upon her works, without, however, deviating from that wonderful ſimplicity of agency which pervades the whole creation. For, although the vegetable, which is the ſubject of this eſſay, may be ſet aſide as a claſs, order, and genus, by itſelf, with, in its humble retirement, all the majeſty of ſingleneſs, like the Thibetian Lama, to whom it bears no ſlight analogy in its peculiarities; yet it ſhows, in its development and progreſs, the ſame invariable conformity to the laws of Nature as obſervable in other plants. May we not, however, ſubmit here a ſingular diſtinction, purporting that the fungus is born a fruit, not a flower; and that, androgynally conſtituted, in a more powerful and ſimpler manner than the other plants, it does not undergo the long proceſs of effloreſcence and fructification as the univerſal tribes of vegetables are doomed to do? Its prompt acceſſion to adultneſs confirms our ſurmiſe; and the ſimilarity of taſte in the young ones, among thoſe that are eatable, with the more mature individuals, ſeems to prove irreſiſtibly the truth of the hypotheſis. No fruit, proceeding from a flower, is ripe till it arrives to a certain point; but the muſhroom is mature at its birth, or, at any rate, as ſoon as it burſts from the native bed. An ulterior development of the parts ſeems, conſequently, deſtined leſs to the greater perfection of the ſeed, than to the diſperſion of it. The muſcular parts are perfect, but not developed.

Of the exiſtence of this ſeed, although it is imperceptible, we can have no doubt. There is no effect without a cauſe; and the ſyſtem which Nature has adopted in the reproduction of individuals, is ſo conſtantly and invariably the ſame, from man to the ſmalleſt animal, from the cedar of Lebanon to the humble hyſſop, that we are led to ſuppoſe the ſame proceſs of generation in muſhrooms as in any other living creature. The diſperſion of the pollen, or duſt, is proved in the daily cuſtom of rearing them, on prepared beds, merely by ſprinkling the water in which the ripe ones have been waſhed. But the queſtion ſtill remains to know whether this impalpable duſt is a ſort of pollen, or the real ſeed. If merely a prolific duſt, the ovarium muſt be ſomewhere; if a fecundated ſeed, we aſk where and how the impregnation took place? There is here an inextricable knot. That the pollen, diffuſed in the air, might meet the prepared ovarium and give it life, is according to the proceſs remarked in fiſhes and ſome amphibious animals, who do not fecundate the eggs till after they are dropped by the female; and then, we muſt allow that this ovarium, or cluſter of expectant ſeeds, has already been exhaled from the plant. Among all theſe hypotheſes, the ſimpleſt ſyſtem is always the beſt, in elucidating the myſteries of Nature; and conſequently, many botaniſts ſeem inclined to think, that the connubial rites are performed with the utmoſt ſecrecy, within the laciniate, multi-coloured, and fringed, curtains, and under the ſtately and golden canopy of the fungus; whilſt, thumping their hazel-nut tambourines, the elves and fairies ſing the *Epithalamium*, and dance their fantaſtic reels around the magic ring, in the dark and midnight ſolitudes of ſequeſtered valleys, or in any other nook where dampneſs, lonelineſs, and obſcurity, contribute to ſecure the effects of their performances. No wonder, indeed, if the country-people, whoſe romantic minds thirſt credulouſly after every thing that borders upon prodigy and ſupernaturality, have conſtantly, and in all countries, connected the birth of the muſhroom with the fables of the fairies.

Without the ornamental pomp of leaves and the faſtenings of roots, the fungus is a little being by itſelf, and widely different from all other plants. It has a ſhield, an umbrella, a cap, a hood of various forms, according to the tribe to which it belongs. Its livery, alſo, may be looked upon as a fair mark of diſtinction; and, when the approach of winter has deſpoiled the trees of their luxuriant boughs, and withered the tranſitory honours of Flora, the muſhroom then, with its variety of dyes and whimſicality of ſhapes, burſts from the ground to adorn the widowed green of the meadows, or the bare ſides of the brown hills.

2. *Claſſes and Families.*—We ſhall not enter here into the nomenclatural diviſion of the ſeveral ſpecies of muſhrooms. This has been ſufficiently explained under the articles before quoted. We ſhall, therefore, in this place, confine ourſelves merely to a few obſervations relative to the ſhape and diſpoſition of the plant, in as far as it may be underſtood, without the help of technical words by the learned, and felt with pleaſure by all claſſes of readers. To conſider a natural object with its relation to others, in order to find the baſes of a ſyſtem in the works of Nature, or to deſcribe the ſubject according to its obvious appearance, habits, and ſhape, conſtitutes a difference ſimilar to that which exiſts between anatomy and phyſiognomy. Individuals are known by the ſpecific diſtinction of their countenances and features, not by their pedigrees; and this is the reaſon why Tournefort made, perhaps, more proſelytes to the intereſting ſtudy of botany than Linnæus. The firſt deſcribes the plants as to their common ſhapes; the cruci-formed, the bell-ſhaped, &c. are more obvious to the paſſing eye of the herbaliſt, than the hardly-perceptible and not-invariable number of antheræ and piſtilla. The ſimpleſt way of deſcribing any object in Nature, is to pourtray the general appearance, if we intend merely to give a familiar and ſufficient idea of it, leaving to the deeper reſearches of the learned the more explicit taſk of entering into its elements and phyſiological conſtitution.

The moſt common muſhrooms may be divided into four claſſes; the muſhroom properly ſo called, the morel, the toad-ſtool, or puff, and the truffle. Neither of theſe has been decorated with the interſection and fantaſtic entwinings of boughs and branches; no verdant leaves, no ſcented or variegated bloſſoms, adorn the myſterious plant. Like man, and other animals, it is born naked, weak, and nearly ephemerous. Its habits of ſolitude, however, do not prevent a certain tendency to ſocial intercourſe; for moſt of them are gregarious, and ſometimes ſo cloſely united, that they ſeem to hold to each other by the lower part of their ſtems. How admirable alſo is that curious union of individuals of the ſame family? Do they ſeek for ſecurity in combining themſelves into an union ſo intimate, that their congregated heads repreſent the well-known *teſtudo* of the united bucklers? Do they feel more happy in this diſpoſition, or are the drops of rain from above, and of dew from beneath, better received or glanced off by this curious contrivance? Seldom do we meet with a ſingle and ſolitary fungus in any part of the field. If not cloſely arranged, they are ſcattered at ſmall diſtances from each other; and the families keep in diſtinct hordes, ſeldom intermixing with individuals of others; as if the hand of Nature, dipping in ſeveral baſkets of various ſeeds, had dropt here and there a ſmall portion of each.

Pliny was of opinion that they owed their origin to trees—*fungorum origo ex pituita arborum*, B. xxii. c. 23. They ſeek ſo conſtantly the neighbourhood of trees, that one might fancy they hold ſtill ſome connection with the fair Hamadryads of the old mythology. They thrive beſt under the extenſive ſhade of their boughs, they enjoy the *frigus amabile*, a ſuitable coolneſs, under their foliage; and grateful to the laſt, when theſe ſturdy ſons of the earth have yielded to the axe and the ſaw of the woodman, the muſhroom-family gather themſelves, in mourning groups, upon the half-buried root, and ſeem to deplore the loſs of their friends at the very place where once they obtained protection and ſhelter. It is really affecting to ſee the number of them, crowding by each other, in golden array, of all ſizes, till, darkening in colour, they themſelves fade, and mix at laſt their brown and decayed remains with thoſe of the cheſnut or the oak, under whoſe green canopy they enjoyed the fleeting comforts of their ſhort exiſtence. Oh! that man, who is but an ephemerous muſhroom himſelf, would learn gratitude from the apparent thankfulneſs of this humble plant, and not forget ſo ſoon thoſe to whom he is indebted for the comforts of his life!

The fungus marked on the Plate, fig. 6. *a.* is a repreſentation of that ſpecies; and the fruſt, fig. 6. *b.* exhibits part of the pulp and of the *laciniæ*. The top or cap is of a bright orange-colour, decreaſing to very pale yellow on the circumference; the pulp is of a faint yellow, and the gills of an olive tint. The ſtalk is brittle; and the whole rank poiſon. Why ſhould venomous qualities attach to ſo pleaſing an emblem of gratitude? Muſt the allegory extend farther, and bring the ſad reflection that too often ingratitude is a burthen, which poiſons and deadens the merit of beneficence?

The muſhroom proper may be divided alſo into two claſſes: the laciniated, or thoſe with gills; and the honey-combed. That theſe honey-combs and gills are organs of reproduction, many have aſſerted, but none has been able to prove; although we find the words "ſeeds in the gills" commonly added to the deſcription of ſeveral agarics. We ſhould ſuppoſe them rather organs of reſpiration, ſince they repreſent ſo cloſely thoſe organs in fiſhes. Yet the young ones ſeem deprived of this apparatus, ſince it is not till after a certain progreſs of youth that they diſplay it. Is there, as in the animal embryo, a circulation of vital fluids uſeleſs till a certain period? Here the obſcurity thickens, and the curioſity of man ſtarts again at diſappointment. It muſt be carefully remarked however, that, before the muſhroom has acquired a certain development of parts, the cap or buckler remains attached to the ſtem by a ſort of pellicle, which, breaking at once the ſkirts of the circumference, ſets the head at liberty. Fig. 1. *a.* and fig. 2. *a.* will give a perfect idea of this mechaniſm, if compared with the ſpecimens at fig. 1. *c.* and fig. 5. *a.* the relics of the binding pellicle are viſible at the ſtalk of the laſt-mentioned figure.

Explanation of the Plate.—Fig. 1. *a, b, c.* Here we have one of the fineſt ſpecimens of the *fungus infundibuliformis*, that elves or fairies ever produced; and we may trace it in the different ſtages of its life: *a* repreſents the young plant with its head ſtill enveloped in the cap like a ſort of *placenta*, and adhering to the ſtem by the pellicle above mentioned. Indeed it looks as if it had been carefully tied up by the handmaids of Nature's nurſery. Before it appears above the ground, an epidermis of a light hazel-colour covers the top of the cap, and remains, till the attainment of full maturity, only on the apex; for in the lower parts, it ſhrinks up in ſmall knots at the end of the feather-like ſecond ſtratum of the ſkin. Nothing can be more ſilky than this ſheep-bell-ſhaped cap. The colours and varied lines of the opal and mother-of-pearl adorn it down to the edges which divide in fringes of a purpliſh tender ſhade. The ſtalk is white and downy, and the gills at firſt white; (ſee fig. 1. *b.*) But, when age, that is, the ſpace of two or three days, has withered this ſtately ornament of the green turf, then the laciniæ acquire a deeper caſt, till they become entirely black; and, as if wanting to inſpire the vital air with more eaſe in this decrepid ſtate, the fungus curls them up, and preſents the ſhape exactly drawn *ad vivum* at *c.* This family congregate on the ſame ſpot of ground at a very ſmall diſtance from each other, and ſeem to enjoy the green carpet of an extenſive lawn, where they are ſeen gently oſcillating their ſnow-white bells to and fro, as the morning zephyr or the evening breeze chooſes to move them. Their milky brightneſs harmonizes wonderfully with the verdant ſurface, above which they raiſe their ſmart and elegant heads to the height of eight or nine inches. In this, and ſeveral other kinds, the proceſs of diſengaging the head or cap from the ſtem is probably occaſioned, not only by the increaſe of the ſubſtance in the ſuperior regions of the cap, but particularly by the dilatation of the air which nature has placed there for the purpoſe. Thus the ſmall particle of that element, contained in an egg, and ſecluded from the reſt by a thin pellicle at the round end of it, does by ſwelling and expanding, through the heat produced by incubation, and by preſſing upon the albumen, ſet the admirable mechaniſm into motion, and force to a ſlow diſplay the ſpark of life ſo curiouſly treaſured within the ſhell.

In the ſpecimen drawn at fig. 2. *a*, we may remark a young fungus of a moſt pleaſing kind. The cap, or head, is exactly of the colour and texture of ſmooth red-morocco, and catches the eye from a great diſtance by the contraſt of its brightneſs with the green turf out of which it ſtrives to emerge. The cap ſeems to be attached to the ſtem by a double ligament; as the remains of one is ſtill to be ſeen nearer to the bulb or root, if we may be allowed to call it ſo; whilſt the ſecond aſcends with the ſtalk, to confine the buckler. This infant fungus exhibits a phallique ſhape, which it loſes when arrived at the ſtate of maturity. But the moſt curious peculiarity of this cryptogamic plant is, that ſome individuals are ſprinkled with a ſort of yellow duſt, which at firſt has the appearance of warts. This we are inclined to take for the generative pollen, or perhaps ſeed; for, though it is more frequent upon the young ones, it is ſtill to be traced on the adults, and upon thoſe that have arrived to a maturer age. We have contrived to follow the diſplay of this duſt in our engraving; but, as the fungus conſtantly refuſes to grow when ſeparated from its native mould, our obſervations were not concluſive. We have however diſcovered, that there is a ſmall hole under each of theſe ſcattered heaps of duſt, through which a communication is opened with the pulp and *laciniæ* or gills, under the umbelliform buckler. This buckler often ſpreads ſo wide as to meaſure ſix or eight inches in diameter, preſerving the ſame brightneſs of colour, with a gentle mixture of yellow on the edges: ſee fig. 2. *b*. Elevated from the ground about five or ſix inches, the form approaches that of an elegant foot-ſtool covered with crimſon leather on a yellowiſh ſtand. This family is alſo gregarious, but the individuals ſeldom, if ever, ſtand very cloſe to each other. They ſhine like ſo many focuſſes of cinnabar-light on the ſurrounding green, and are no ſmall ornament in the ſolitary walks of the woods about the middle of October. They attract the eye to look at, the hand to pluck, them, the mind to admire their beauty; but woe to him who eats them! They are pernicious, and confirm the melancholy axiom, that fair appearances are too often deceitful.

Fig. 3. Some great characters have been known who were without any ſort of taſte for the charms of painting, and the harmonies of muſic. Dr. Johnſon, according to the repeated ſtatements of his perhaps too-accurate biographer, Boſwell, had no eyes for painting; and Mr. Fox, if we believe his eulogiſt, Mr. J. B. Trotter, derived no pleaſure from muſic. Theſe are lamentable anomalies in the catalogue of ſenſible individuals; and we can hardly believe, that thoſe who were ſo keenly alive to the harmony of languages and the imagery of nature, could have been deprived of that *ſenſus intimus*, that inward faculty, which produces delight, when vibrating in uniſon with the ſevenfold and kindred harmonies of colours and ſounds. The conſonances of *Nature*, however, will find conſtant admirers, even in thoſe for whom *Art* ſeems to have had inadequate charms. They will not fail to compare the analogies exiſting between the works of the creation, and be delighted by the reſult, moſt peculiarly in the following delineation.

The muſhroom, at fig. 3, preſents to the eye a ſimilitude with variety, a family uniting kindred with difference of character, and individuals diſtinguiſhed from others, only by ſome internal diſpoſition which, in her wonderful power of multiplying external forms, Nature ſeems to have ſtamped with curious marks of contradiſtinction. It ranges with the honey-combed tribe; and is drawn after nature in form and ſize. The pellicle which binds the cap to the ſtalk is not in this ſo perceptible as in the two above-deſcribed ſpecies; but the contexture of the organs (as we ſtill believe) of reſpiration, call for particular obſervation. They are compoſed of an immenſe number of ſmall tubes, ſet cloſe againſt each other, like the infant ſeed on the eatable part or bottom of an artichoke: but, ſince theſe pipes do not leave the muſhroom in its old age, we do not think they have any ſhare in the great work of reproduction. Their ſituation is depicted in the fruſt on the ſame Plate, fig. 5. *b*. where, in the ſection, the pulp and the lungs are moſt correctly imitated; with this only difference, that, in the latter, the tubes are yellow, whereas they are of a whitiſh colour in the former. A general remark, which we have been able conſtantly to make, is, that the buckler of the mature muſhroom of this ſort, that is the honey-combed one, is moſtly diſtinguiſhable by the pointed umbo of its ſhield, which is ſeldom perceptible in the laciniated individual. The ſpecimen at fig. 3. is an infant fungus: when at its full growth, it ſometimes meaſures between five and ſix inches in diameter; and, except in colour, reſembles much the ſubject drawn at fig. 2. *b*, with the exception of the umbo, which is not entirely flattened. This ſpecies ſeldom, in its ſtate of decrepitude, turns up its lungs more eaſily to breathe, as the laciniated ones generally do; the nature of the reſpirative apparatus requiring not this ſort of convulſion, on account of its being vertically placed towards the earth. The ſtalk, in this, is ſlender, with a ſort of knob at the lower extremity.

Fig. 4. The difference which is moſt obvious between this plant and the foregoing at the ſame ſtage of life, is the obeſity of the ſtalk. Nature ſeems to collect at firſt within this filamentous and porous ſubſtance, all that is neceſſary for the ultimate expanſion of the fungus, and particularly for its cap, which, when the whole is ripened, becomes ſo bulky and ſo diſtended, as to meaſure ſometimes nine or twelve inches in diameter, and to weigh two or three pounds. It ranks with the honey-combed families; and, when old, turns black, and diſſolves in an unſeemly, ſhapeleſs, and diſguſting, maſs, but which probably manures and fattens the ground where it is allowed to rot in dark and moiſt deformity. The engraving repreſents the ſubject in the proportion of about a-third part of its natural ſize, and aims at expreſſing the ſilky appearance of the cap and of the paunch-like body. A few filaments play about the lower end of this hydropic puffed-up ſtalk, but do not bear the appearance of roots. The ſuckers at the bottom of the ſtalk do all the work.

Fig. 5. Proud of reſembling in colour and ſhape a ſection of the Heſperian fruit, the ſubject under this number riſes from the emerald field with a bold and gawdy appearance. The pole of a large orange oppoſite the ſtalk, is faithfully repreſented by the buckler of this fungus. The umbo is like the nipple of the golden fruit, and the inequalities on the ſurface complete the reſemblance. But there is a viſcidity on the cap which the ſkin of the orange has not; and this liquid exudation will ſtain any paper or linen with nearly-indelible yellow ſpots. The lungs are of a greeniſh tinge, and wax darker in time; but what we call here time, muſt be underſtood as the ſpace of a day or two in fair weather. The ſpecimen is drawn of the natural ſize. This ſort will often be ſeen alone, or with one, or at moſt two, companions, generally of a younger age, in the middle of a lawn, where the fine turf does not riſe much above ground; and will attract the eye by its golden diſk, beaming with great brightneſs in the ſunſhine of a fair October morning. Near the ſpecimen here faithfully exhibited, at the moment we culled it, a warbling red-breaſt, balanced upon

the twig of a crimſon-fruited mountain-aſh tree, appeared as if celebrating the birth of this elegant production of the night; whilſt Puck and his friends might have been fancied dancing around the new-born thing, and revolving, in their fantaſtically magic circles, like the planets around the golden ſhield of the ſun. The ſcene was worth the pencil of a Fuſeli, a Stothard, or a Smirke, and of the highly deſcriptive pen of the author of "A Midſummer Night's Dream."

Fig. 6. *a.* has been ſufficiently explained above, as well as the ſection at fig. 6. *b.* to be eaſily known; and we have nothing to add, except that this muſhroom is one of the laſt that diſappear from the meadow, a ſort of loiterer after the autumnal ſeaſon is cloſed. When old, the bright yellow of the ſhield turns firſt to a dark brown, and then nearly black, mixing its duſt with the maternal ground upon which it roſe to the fleeting ſpan of a ſhort life.

Fig. 7. This is a very elegant little production of nature; a ſmall cap, bell-ſhaped, of a drab colour decreaſing into white; the gills browniſh, but fine, and the ſtalk ſlender and comparatively long. The engraving repreſents it of its natural ſize. It is not before October that it makes its appearance, when it raiſes its head, covered with a Phrygian ſort of ſmall mitre, above the ſurrounding blades of graſs, as did Paris of old, amidſt the briſtling ſpears of the Trojan phalanx. The ſhape of this cap is not unlike that of the Lepas, or Chineſe cap, a curious univalve marine production often found upon rocks.

The ſubject at fig. 8, though coetaneous and neighbour to the preceding one, is not of the ſame family. The form of the head differs conſiderably in ſhape, and the ſtalk is much ſhorter proportionally; but the inſide is alſo laciniated, and the colour of the whole approximates much that at fig. 7.

Having expatiated at ſome length upon the means of reproduction conceded by Providence to the fungus in general, we have added here a ſmall ſpecimen of the *puff;* ſee fig. 9. The whole is a purſe; but the bottom, that is, the part adhering to the ground, has the appearance of the mouth of the bag, as if purſed up with inviſible ſtrings. This fungus is at firſt of a whitiſh colour, and ſoon turns to a dingy brown; when ripe, it burſts; and the duſt, impalpable as it is, flies into, and mixes with, the air. This undoubtedly is not an impregnating pollen, but real ſeed; and, if every elemental particle of this cloud of powder has the property of producing, we may ſuppoſe that, were all ſpots of ground ſuitable to the ſubject, the earth would ſoon be covered with this ſort of fungus. But, diſperſed in the atmoſphere, as we have explained before, it is always a great chance, if the place, upon which the life-carrying particle alights, contains the requiſites for its nutrition. This ſingular powder is ſo fine, that, when diſengaging itſelf from its curious priſon, it appears more like ſmoke than a collected duſt. No peculiar ſmell attaches to this myſterious cloud, which ſometimes catches at a flame, and emits a ſort of gentle detonation, moſt probably produced by the fixed air contained in every ſeed; for fixed air produces a moſt eſſential part in the admirable mechaniſm, in virtue of which all vegetables as well as animal ſeed frees itſelf from the place where Nature had wiſely confined it till the period of complete maturity. The genial heat contained in the atmoſphere or in the ſoil, dilating the air concentrated in the fruit or kernel, forces it out of its cell, and brings it to individual life. Thus we may trace the ſteady and conſtant march of Nature through the whole creation.

The names given to this plant in all languages are expreſſive of the gentle report it makes when emitting its propagating duſt; σφογγος in Greek, *puff*, &c. in Engliſh; but to its figure and ſquatted ſituation in the turf, the ignominious name of *toad-ſtool* is owing; Spenſer has the two following curious lines:

The griſly toad-ſtool grown there mought I ſee,
And loathing paddocks lording on the ſame.

The inſide of the bag, which contains the evaneſcent duſt, is lined with a ſort of fine bur or nap, compoſed of an infinite number of almoſt-imperceptible filaments, in which the brown elements of the fruit or ſeed were lodged before the diſruption of the bag. If the experiment were tried upon different ſpots of turf, and chiefly where the puffs ſeem to thrive ſpontaneouſly, we might find that ſhaking the purſe upon the ground would, by cauſing reproduction, confirm the hypotheſis we have endeavoured to maintain in this article. Several little knobs, which have been carefully deſigned and preſerved in the engraving, appear to us to be the organs of fructification, though they are ſo infinitely ſmall that their conſtruction baffles the prying curioſity of the eye, even when helped by the moſt powerful microſcope. But, as this hypotheſis ſeems to be conſentaneous with our obſervations upon fig. 2. *a;* we feel inclined to adopt it, in order to elucidate as much as poſſible the myſtery of muſhroom-reproduction. One ſingle ſtep in advance towards the ſecrets of nature, leads always to an important acquiſition in unravelling the obſcurity in which they ſtill are enveloped.

So far has the muſhroom been conſidered in an abſtractive point of view, and deſcribed without recurring to the pompous *etalage* of ſcientific denominations. The intention of the author of this curſory ſketch concerning ſo curious a plant, has been to raiſe our minds towards the Creator of all things, by the diſplay of his power in ſo apparently-deſpicable a production as the fungus; and to depreſs as much as poſſible the pedantic pride of man, by convincing him that the ſimpleſt objects of Nature are beyond the ſuppoſed extenſive limits of his intelligence.

The Laplanders have a way of uſing funguſes, or common toad-ſtools, as we call them, as the Chineſe and Japaneſe do the moxa, to cure pains. They collect the large funguſes which they find on the bark of beech and other large trees, and dry them for uſe. Whenever they have pains in their limbs, they bruiſe ſome of this dried matter, and, pulling it to pieces with their fingers, they lay a ſmall heap of it on the part neareſt to where the pain is ſituated, and ſet it on fire. In burning away, it bliſters up the part; and the water diſcharged by this means generally carries off the pain. It is a coarſe and rough method, but generally a very ſucceſsful one; eſpecially when the patient has prudence enough to apply it in time, and reſolution enough to bear the burning to a neceſſary degree.

Matthiolus mentions muſhrooms which weighed thirty pounds each, and were as yellow as gold; Fer. Imperatus tells us, he ſaw ſome which weighed above a hundred pounds a-piece; and, to add no more, the Journal des Sçavans furniſhes us with an account of ſome growing on the frontiers of Hungary, which made a full cart-load.

Some very wonderful, almoſt incredible, accounts have been lately given of the extraordinary ſtrength of growth in the muſhroom. The following was communicated to the Monthly Magazine, and ſigned *Joſeph Jefferſon, Baſingſtoke*: "A few weeks ago, one of the large flagſtones, in the new pavement of the town of Baſingſtoke, was obſerved to have riſen about an inch and a half above its proper ſituation: on taking up the ſtone, a large muſhroom, of ſix or ſeven inches diameter, was found growing beneath it; which ſome perſons, ſtrangely enough, imagined muſt have been the cauſe of raiſing up the ſtone in that manner. The ſtone-maſon, who has the contract of the work, rather vexed that any ſhould think a feeble muſhroom had diſplaced his ſtrong pavement, had the ſtone replaced in a ſecure manner; obſerving, that it ſhould be ſafe enough for the future. About a month afterwards, (a few days ago,) the adjoining ſtone was obſerved to be diſplaced in the ſame manner as the former: on taking up the ſecond ſtone, to the ſurpriſe of many witneſſes of the fact, two muſhrooms, not quite ſo large as the former, were found growing beneath it. The ſtones are nearly of the ſame ſize, each about 24 inches by 21, two inches in thickneſs; the latter, having been weighed, is 83 pounds. However ſurpriſing and incredible this account may appear, the matter of fact is moſt certain: the ſtone-maſon, his workmen, and many others, can atteſt its truth. The writer of this article has ſeen one of the muſhrooms, and one of the ſtones continues in its diſplaced ſtate." And in the following month another correſpondent, ſigning his name, writes as follows: "In confirmation of the wonderful power of the growing muſhroom, mentioned in your laſt, I beg leave to ſtate that, three years ago, muſhrooms forced themſelves through a very hard gravel-walk in my garden, which any one would have thought quite impervious to any ſoft ſubſtance. The gravel, indeed, was at that time ſo hard, that a pick-axe, or ſome ſuch inſtrument, would have been neceſſary to make an impreſſion upon it; and yet the muſhrooms raiſed it, and looſened the ſtones and pebbles around it, as if it had been done by ſome mechanical force. The muſhrooms appeared every day for a week or two; they were not of a large ſize, but fit for uſe; and furniſhed a good addition to the ſummer-evening repaſt." This laſt inſtance may be perhaps accounted for with leſs difficulty; but the former, which appears to be well authenticated, certainly deſerves the conſideration of philoſophers and naturaliſts. *Monthly Mag.* Sept. and Oct. 1817.

The ancients took great pains to diſtinguiſh the ſeveral kinds of muſhrooms, that the world might know the hurtful from the ſafe. The *boletus* mentioned by Juvenal, on account of the death of the emperor Claudius, is ſufficiently deſcribed by Pliny. Cluſius, among the moderns, has deſcribed a vaſt number of different ſpecies, everywhere diſtinguiſhing the eſculent and wholeſome from the poiſonous or pernicious kinds. The ſeveral authors who have treated of them ſince the time of Cluſius, have all mentioned the effects of ſome or other of the poiſonous kinds; and there are numerous inſtances of the miſchief done by them at one time or other. Some have been willing to aſcribe this miſchief to animalcules inhabiting the plant; but this ſeems erroneous, and particularly from the following inſtance: We have one kind of muſhroom growing in England, called the white acrid fungus: this is ſo extremely ſharp, that it ſtimulates the tongue, as if it had been touched with ſpirit of nitre; and Tournefort obſerves, that, if rubbed on blue paper, it turns it red in the ſame manner as that liquor or any other of the violent acid ſpirits would: this cauſtic quality remains in the plant even after drying; and it is very evident, that we need look no farther than this for the origin of the poiſonous quality in this ſpecies. There is another kind which is obſerved to kill the very flies as they ſettle upon it. It is not probable that ſuch plants as theſe ſhould be inhabited by any kind of animalcules, nor is it neceſſary to have recourſe to ſuch cauſes of the miſchief which enſues from the eating them, when their own juices ſeem ſo very able to have occaſioned it. *Phil. Tranſ.* N° 473.

Mr. Miller ſays, that the true eatable muſhroom is diſtinguiſhed from the poiſonous and unpleaſant kinds by theſe marks. When young, it appears of a roundiſh form, like a button, the ſtalk as well as the button being white, and the fleſhy part very white, when broken, the gills within being livid. As they grow larger, they expand their heads by degrees into a flat form, and the gills underneath are at firſt of a pale aſh-colour; but, as they ſtand long, become blackiſh.

A farmer's wife and two children were poiſoned, in a village in France, (Mangienne, in the diſtrict of Montmedi,) in the month of Auguſt laſt, (1817.) by eating poiſonous fungi.

The following teſt, whereby to try the quality of muſhrooms, is given in the Encyclopædia Britannica:—Take an onion, ſtrip the outer ſkin, and boil it with your muſhrooms: if the onion become blue or black, there are certainly dangerous ones amongſt them; if it remain white, they are good.

In the Annales de Chimie for 1812, we read, that the name of *fungin* has been given by Monſ. Braconnet to the fleſhy part of muſhrooms, which he conceives to be a peculiar vegetable principle; and which, according to him, poſſeſſes the following properties: It may be obtained pure by boiling it in a weak alkaline ſolution. In that ſtate it is whitiſh, ſoft, inſipid, poſſeſſes little elaſticity, and readily yields to the teeth. It would appear that *fungin thus purified may be uſed as an article of food, from what muſhroom ſoever it has been obtained.* The poiſonous qualities of muſhrooms, it would ſeem, reſide in the juices, not in the fungin. This ſubſtance, when dried, burns with conſiderable ſplendour, emitting an odour ſimilar to that of burning bread, and leaving behind it a white aſh.

Dried fungin, when diſtilled in a retort, yields about half its weight of a liquid product, conſiſting partly of a brown oil, and partly of water, holding a good deal of ammonia in ſolution. It yields no acid, which diſtinguiſhes it very much from wood. The charcoal remaining in the retort amounts to rather more than one-fourth of the dry fungin ſubjected to diſtillation. This charcoal exhibited traces of ſulphureted hydrogen, and contained ſand, phoſphat of lime, and traces of carbonat of lime, phoſphat of lime, and of alumina. Fungin does not diſſolve in alkaline ſolutions, in which reſpect it differs eſſentially from lignin, which is readily diſſolved by a weak alkali; but, if fungin be boiled in a very ſtrong alkaline lye, it is partly diſſolved, and a ſaponaceous product obtained. Ammonia diſſolves a ſmall portion of fungin, and lets it fall again in white flocks when expoſed to the air. Weak ſulphuric acid has no action on fungin; but, when concentrated, this acid chars it, and at the ſame time ſulphureous acid and vinegar are formed. Muriatic acid diſſolves it very ſlowly, and converts it into a gelatinous matter. It is thrown down in flocks by the addition of potaſh to the acid. Chlorine, paſſed over dry fungin ſuſpended in water, converts it into a yellow matter, having at firſt an acrid taſte, which it gradually loſes by expoſure to the air. When digeſted in diluted nitric acrid, azotic gas is diſengaged. Heated with concentrated nitric acid, it ſwells, and efferveſces at firſt violently, but the action ſoon ſubſides. When the acid is driven off, there remains a liquor, containing oxalate of lime, ſome pruſſic acid, and two fatty matters, the moſt abundant ſimilar to tallow, the other to wax. By evaporating the liquid, a conſiderable quantity of oxalic acid in cryſtals was obtained. The mother-water ſtill contained oxalic acid, and a portion of the bitter principle from indigo. When fungin is ſteeped in an infuſion of nutgalls, it imbibes a conſiderable portion of the tannin, and acquires a fawn-colour. When left to purify ſpontaneouſly in water, it emitted at firſt the odour of putrefying gluten, then that of putrid meat. Neither acid nor ammonia was found in the water; but it contained a portion of mucilage, which gave it viſcoſity, and the property of precipitating with acetat of lead. The fungin itſelf aſſumed the aſpect of gluten, without however poſſeſſing its properties.

MUSHROOM-STONE, *ſ.* A kind of foſſil.—Fifteen *muſhroom-ſtones* of the ſame ſhape. *Woodward.*

MU'SIC, *ſ.* [*muſique*, Fr. from *μυσικη*, Gr.] The ſcience of harmonical ſounds:

The man that hath no *muſic* in himſelf,
Nor is not mov'd with concord of ſweet ſounds,
Is fit for treaſons. *Shakeſpeare's Merchant of Venice.*

Inſtrumental or vocal harmony:

When ſhe ſpake,
Sweet words, like dropping honey, ſhe did ſhed;
And 'twixt the pearls and rubies ſoftly brake
A ſilver ſound, that heavenly *muſick* ſeem'd to make. *Spenſ.*

Such *muſick*, as 'tis ſaid,
Before was never made,
But when of old the ſons of morning ſung. *Milton.*

By *muſick* minds an equal temper know,
Nor ſwell too high, nor ſink too low;
Warriours ſhe fires with animated ſounds,
Pours balm into the bleeding lover's wounds. *Pope.*

Entertainments of inſtrumental harmony.—What *muſick*, and dancing, and diverſions, are to many in the world, that prayers, and devotions, and pſalms, are to you. *Law.*

HISTORY

HISTORY OF MUSIC,

THEORETICAL AND PRACTICAL.

INTRODUCTION.

Music is defined by Rouſſeau, "the art of combining ſounds in a manner agreeable to the ear." This combination may be either ſimultaneous or ſucceſſive: in the firſt caſe, it conſtitutes *harmony;* in the laſt, *melody.* But though the ſame ſounds, or intervals of ſound, which give pleaſure when heard in ſucceſſion, will not always produce the ſame effect in harmony; yet the principles which conſtitute the ſimpler and more perfect kinds of harmony, are almoſt, if not entirely, the ſame with thoſe of melody. By *perfect harmony,* we do not here mean that plenitude, thoſe complex modifications of harmonic ſound, which are admired in practice; but that harmony which is called *perfect* by theoricians and artiſts; that harmony which reſults from the coaleſcence of ſimultaneous ſounds produced by vibrations in the proportions of thirds, fifths, and octaves, or their duplicates.

But this art becomes a *ſcience,* which is not only extenſive but profound, when geometry is called in to aſcertain the principles from whence theſe happy modifications of ſound reſult, and by which they are determined; the ratio of theſe ſenſations, whether mental or corporeal, with which they affect us. The ancient definitions of muſic are not proportioned in their extent to our preſent ideas of that art; but M. Rouſſeau betrays a temerity highly inconſiſtent with the philoſophical character when from thence he infers, that their ideas were vague and undetermined. Every ſoul ſuſceptible of refinement and delicacy in taſte or ſentiment, muſt be conſcious that there is a muſic in action as well as in ſound; and that the ideas of beauty and decorum, of harmony and ſymmetry, are, if we may uſe the expreſſion, equally conſtituent of viſible as of audible muſic. Thoſe illuſtrious minds, whoſe comprehenſive proſpects in every ſcience where taſte and propriety prevail took in nature at a ſingle glance, would behold with contempt and ridicule the narrow and microſcopic views of which alone their ſucceſſors in philoſophy have diſcovered themſelves capable. With theſe definitions, however, we are leſs concerned, as they bear no proportion to the ideas which are now entertained of muſic. Nor can we follow Rouſſeau, from whatever venerable ſources his authority may be derived, in adopting his Egyptian etymology for the word *muſic.* The eſtabliſhed derivation from *Muſa* could only be queſtioned by a paradoxical genius. That muſic had been practiſed in Egypt before it was known as an art in Greece, is indeed a fact which cannot be queſtioned; but it does not thence follow that the Greeks had borrowed the name as well as the art from Egypt. If the art of muſic be ſo natural to man, that vocal melody is practiſed wherever articulate ſounds are uſed, there can be little reaſon for deducing the idea of muſic from the whiſtling of winds through the reeds that grew on the river Nile. And indeed, when we reflect with how eaſy a tranſition we may paſs from the accents of ſpeaking to diatonic ſounds; when we obſerve how early children adapt the language of their amuſements to meaſure and melody, however rude; when we conſider how early and univerſally theſe practices take place, there is no avoiding the concluſion, that the idea of muſic is connatural to man, and implied in the original principles of his conſtitution. We have already ſaid, that the principles on which it is founded, and the rules by which it is conducted, conſtitute a ſcience. The ſame maxims, when applied to practice, form an art; hence its firſt and moſt capital diviſion is into *ſpeculative* and *practical* muſic.

Speculative muſic is, if we may be permitted to uſe the expreſſion, the knowledge of the nature and uſe of thoſe materials which compoſe it; or, in other words, of all the different relations between the high and low, between the harſh and the ſweet, between the ſwift and the ſlow, between the ſtrong and the weak, of which ſounds are ſuſceptible; relations which, comprehending all the poſſible combinations of muſic and ſound, ſeem likewiſe to comprehend all the cauſes of the impreſſions which their ſucceſſion can make upon the ear and upon the ſoul.

Practical muſic is the art of applying and reducing to practice, thoſe principles which reſult from the theory of agreeable ſounds, whether ſimultaneous or ſucceſſive; or, in other words, to conduct and arrange ſounds according to the proportions reſulting from conſonance, from duration and ſucceſſion, in ſuch a manner as to produce upon the ear the effect which the compoſer intends. This is the art which we call *compoſition.* With reſpect to the actual production of ſounds by voices or inſtruments, which is called *execution,* this department is merely mechanical and operative; which, only preſuppoſing the powers of ſounding the intervals true, of exactly proportioning their degrees of duration, of elevating or depreſſing ſounds according to thoſe gradations which are preſcribed by the tone, and to the value required by the time, demands no other knowledge but a familiar acquaintance with the characters uſed in muſic, and a habit of expreſſing them with promptitude and facility.

Muſic is at preſent divided more ſimply into *melody* and *harmony;* for, ſince the introduction of harmony, the proportion between the length and ſhortneſs of ſounds, or even that between the diſtance of returning cadences, are of leſs conſequence amongſt us. For it often happens in modern languages, that the verſes aſſume their meaſures from the muſical air, and almoſt entirely loſe the ſmall ſhare of proportion and quantity which in themſelves they poſſeſs.

By *melody,* the ſucceſſions of ſound are regulated in ſuch a manner as to produce pleaſing airs. *Harmony* conſiſts in uniting to each of the ſounds, in a regular ſucceſſion, two or more different ſounds, which ſimultaneouſly ſtriking the ear ſoothe it by their concurrence.

It would ſeem that muſic was one of thoſe arts which were firſt diſcovered; and that vocal was prior to inſtrumental muſic, if in the earlieſt ages there was any muſic which could be ſaid to be purely inſtrumental. For it is more than probable, that muſic was originally formed to be the vehicle of poetry; and of conſequence, though the voice might be ſupported and accompanied by inſtruments, yet muſic was never intended for inſtruments alone. See Bard, vol. ii. p. 717.

We are told by ancient authors, that all the laws, whether human or divine, exhortations to virtue, the knowledge of the characters and actions of gods and heroes, the lives and achievements of illuſtrious men, were written in verſe, and ſung publicly by a choir to the ſound of inſtruments; and it appears from the Scriptures, that ſuch from the earlieſt times was the cuſtom among the Iſraelites. Nor was it poſſible to find means more efficacious for impreſſing on the mind of man the principles of morals, and inſpiring the love of virtue. Perhaps, however, this was not the reſult of a premeditated plan; but inſpired by ſublime ſentiments and elevation of thought, which, in accents that were ſuited and proportioned to their celeſtial nature, endeavoured to find a language worthy of themſelves, and expreſſive of their grandeur.

It merits attention, that the ancients were duly ſenſible of the value and importance of this divine art, not only as a ſymbol of that univerſal order and ſymmetry which prevails through the whole frame of material and intelligent nature, but as productive of the moſt momentous effects both in moral and political life. "Pythagoras, Archytas, Plato, and all ancient philoſophers, held as indubitable, that the ſtars, and the revolutions of the heavens, could not have been made and ſubſiſt without accord and harmony." Plutarch de Muſicâ, cap. 68.

And thus our old Engliſh poet Heywood:

The ſpheres chime muſic to their Maker's praiſe,
In the world's firſt creation it begun,
From the word, *Fiat*, ſpoke, and it was done,
Was ſound and ſweetneſs, voice and ſymphony,
Concord, conſent, and heavenly harmony.
The three great orders of the hierarchy,
Servants unto the eternal majeſty,
In their degree of ternions hourly ſing,
Loud hallelujahs to the Almighty King.
The ſeraphims, the cherubims, and thrones,
Potentates, virtues, dominations,
The principates, archangels, angels, all
Reſound his praiſe in accents muſical.
Hierarchy of the Bleſſed Angels.

Plato and Ariſtotle, who diſagreed almoſt in every other maxim of politics, are unanimous in their approbation of muſic, as an efficacious inſtrument in the formation of the public character and in conducting the ſtate; and it was the general opinion, that, whilſt the gymnaſtic exerciſes rendered the conſtitution robuſt and hardy, muſic humaniſed the character, and ſoftened thoſe habits of roughneſs and ferocity by which men might otherwiſe have degenerated into ſavages.

Since it cannot be denied that, with all its apparent anomalies and diſſonances, the whole of the creation is founded upon the ſimpleſt and yet moſt admirable ſyſtem of harmony; and that man, according to our preſent knowledge of things, is moſt favourably gifted by Providence, with regard to the *acumen* of ſenſes, becauſe theſe ſenſes bring ſeverally their reſults to reaſon, which is not the caſe with brutes, although they may boaſt more exquiſite organs in themſelves and ſeparately; we ought to conclude that Music muſt be congenial to him, and that the enjoyment of it, in its natural or artificial ſtate, is one of the fineſt endowments he has received from the Almighty in the curious and hardly-explicable conſtruction of the organ of hearing. Centre of all ſounds, either pleaſing or diſagreeable, ſhrill or deep, quick or ſlow, ſimple or harmonized with others, from the loud peals of thunder down to the ſlight note of the paſſing gnat; from the harſh gratings of the ſaw to the mellow vibrations of the Eolian lyre; from the modulated accent and heart-felt melody of the human voice, to the rougheſt roarings of the brute; the ear proves a miracle of compoſition to the keeneſt obſerver, the ableſt anatomiſt, and the moſt impartial philoſopher; and conſtitutes the firſt link in the ever-bleſſed chain of ſocial enjoyments. It was under the vermeil canopy of the ear, in her diſcrete and tremulous cells, that the firſt warblings of infant love, the half-expreſſed murmurs of affection, the timid ſighs of awakening paſſion, created the firſt and beſt harmony in the world. It was to the ear that the firſt words uttered between man and woman conveyed the firſt muſical as well as rapturouſly-intellectual ſounds. They vibrated upon the new-born fibres of the ambient air, whilſt the inſtinctive choirs of birds in the woods, harmonizing with the ſoft gurglings of the neighbouring brook and the ruſtlings of the foreſt-leaves, ſang the epithalamium, the connubial hymn of our firſt parents; and then, O then, Muſic was born!

Muſic! O thou ſweet ſoother of all woes!
The tongue of pleaſure too—the ſigh of love,
When, infant ſtill, he whiſpers in the grove;
Or, bolder, walks as his bright taper glows
On beauty's form—and eloquent beſpeaks
The time, the place, where, though reluctant, yet
She yields, forgives, nor wiſhes to forget.—
Daughter of heaven! whence with thy ſiſter, Mirth,
To bleſs mankind thou viſited'ſt the earth!
Thy pow'r unknown; that deeply-felt controul
Of ſlend'reſt tunes upon the ſtrongeſt ſoul
Of heroes—when they drown the groans, the ſhrieks,
Of falling nations, rend the doleful air
With bold triumphant pæans—or ſo blithe
Call to the tripping dance the village fair,
Unmindful then of Time's all-mowing ſcythe.—
Muſic! oh! what art thou?—

As long as Innocence continued her abode among the inhabitants of the earth, Muſic was their delight, and brought raptures to the heart from whoſe tranquil receſſes it had ſprung. No contentions diſturbed the peaceful harmony of ſociety, and friendſhip with love united to perpetuate happineſs. Under this point of view, we muſt imagine that the golden age of mythology, if it ever exiſted, muſt have been the age of melody and ſong. But, even when corruption had degraded man below the level of the brute, it was ſtill the province of muſic to recal him to his original ſtate and priſtine dignity. Then, under the pleaſing garb of allegory, we are told that Orpheus bade the moſt ferocious beaſts of the *earth* to crouch at his feet, and confeſs themſelves ſubdued by the power of muſic in the influence of the vocal lyre. The *air* ſaw with aſtoniſhment huge ſtones and maſſy pillars obey the harmonious voice of Amphion at the foundation of Thebes. Liſtening with rapture to the lovely ſtrains of Arion's lute, the dumb inhabitants of the *waters* danced around him, and ſaved his life; whilſt the myſtery of *fire*, in the beams of the riſing ſun, blazed upon the brazen ſtatue of the Egyptian Memnon all the charms of harmony. Thus Mythology, in her inſtructive fables, has repreſented muſic-pervading nature through the incomprehenſible miniſtry of the elements, and animating the whole of the univerſe. The ſubterraneous regions themſelves, and the grim inhabitants of Tartarus, were not inſenſible to the delights of melody; and, touched by the deſolate huſband of Eurydice, the lyre ſuſpended for a few inſtants the torments of hell, and Pluto's implacable heart was ſoftened to mercy. Thus benefited by the aſſiſtance of that daughter of heaven, for Harmony was ſuppoſed one of the firſt offſprings of Cœlus, (Heſiod's Theog.) man liſtened to more diſtant conſonances, to higher melodies; and fancied he had caught, with Scipio in his dream, the ſounds of celeſtial muſic in the ſpheres. (Cicero's Somnium Scipionis.)

Though imaginary, theſe powerful allegories plainly demonſtrate what an idea the ancients muſt have entertained of muſic. We find it praiſed every-where in their works. Wonders are mentioned; and, were we to believe what they traditionally received, and have related, not as fables, but facts, the mind and heart of man were but toys toſſed up and down at pleaſure by the almighty power of this heavenly art. Mirth or melancholy, cowardice or courage, love or hatred, jealouſy or fear, hope or deſpair, fluttered about the tremulous wires of the lyre, iſſued from the harmonical apertures of the flute, ready to fly, to bleſs or diſtreſs, to wound or comfort, to wake or lull to ſleep, the deſignated objects; and, according to the various modulations of the inſtrument, ſmiles or tears appeared inſtantaneouſly on the reſponſive features of the human face.

What a cauſe of regret for the lover of the art, that no veſtiges can be traced of what ancient muſic really was; and that, in the rapid flood of ages, all records fit to beam a light on ſo intereſting a ſubject have been entirely ſwept away. We have indeed treatiſes and works of the Greeks upon ancient muſic, but they are of no uſe; for the moſt learned profeſſors of modern harmony cannot underſtand them. The tedious niceties of everlaſting windings through the labyrinth of a diſſected diapaſon; the peculiar characters of their tetrachords, and the heavy cloud that ſits upon the knowledge of their notation; may be ſet down as real cauſes of diſtreſs to the feelings of the muſician, as well as to the curioſity of the antiquary.

In his introduction to the hiſtory of this heavenly art among the ancients, the learned and celebrated Dr. Burney ſays, with no leſs ingenuity than truth, "What the ancient muſic really was, it is not now eaſy to determine; but of this we are certain, that it was ſomething with which mankind was extremely delighted. For not only the poets, but the hiſtorians and philoſophers, of the beſt ages of Greece and Rome, are as diffuſe in its praiſes as of thoſe arts concerning which ſufficient remains are come down to us to evince the truth of their panegyrics. And ſo great was the ſenſibility of the ancient Greeks, and ſo ſoft and refined their language, that they ſeem to have been to the reſt of the world what the modern Italians are at preſent. For of the laſt, the language itſelf is muſic; and their ears are ſo refined, and ſo accuſtomed to ſweet ſounds, that they are rendered faſtidious judges of muſic both by habit and *education*." The doctor might perhaps have added, by *nature*; for the harmonious glow of the delightful climate of Italy ſeems to have impreſſed upon the delicate nerves and corporeal frame of the inhabitants ſuch an exquiſite ſenſibility, that one might ſuppoſe that, tranſported young, or even born of Italian parents under the rougher climates of the north, the child would warble his infant tones with more ſweetneſs and variety than the people among whom he might be accidentally placed. The doctor adds with great frankneſs, "The ſubject itſelf of ancient muſic is ſo dark, and writers upon it ſo diſcordant in their opinions, that I ſhould have been glad to have waved all diſcuſſion about it; for, to ſay the truth, the ſtudy of ancient muſic is now become the buſineſs of an antiquary more than of a muſician." (Hiſt. of Muſic. Lond. 1776. vol. i. p. 3.)

We entirely agree with this author in what we have quoted above. For, indeed, how can any one ſuppoſe that writers of taſte and delicate feelings, like Ariſtotle, Pliny, Plutarch, &c. &c. who had a ſoul to ſeize upon, and attach itſelf to, whatever was good in the fine arts, could have been miſtaken as to muſical performances, and to its nearly ſupernatural influence upon the paſſions and affections of mankind? "Ariſtoxenus poſitively ſays, that, if muſic was introduced in banquets and feſtivities, it was principally becauſe, wine being apt to excite agitation and tumult in the body and heart of thoſe who drink it too freely, muſic poſſeſſes the power of bringing both to a calmer ſtate by the arrangement and ſymmetry of its ſounds." (Plut. de Muſicâ, chap. 67.) Doubts have been raiſed as to the propriety and juſtneſs of the praiſes beſtowed by Pliny and others upon the ſkill of the Greeks under Alexander, in the art of painting. The talents of an Apelles, a Zeuxis, a Parrhaſius, have been brought into queſtion, and their performances compared, by modern barbarians, to thoſe of our beſt ſign-painters. But what has been the victorious anſwer to theſe doubts: ſee the remains of their inimitable works in ſculpture in general, and ſtatuary in particular! See their Apollo, their Laocoon, their Venus de Medicis, and thouſands of others! Can any man of ſenſe ſuppoſe that the writers who had taſte enough to feel, and genius to deſcribe, theſe miracles of ſculpture, could have been miſtaken as to the ſiſter art, painting? Pliny had ſeen the Laocoon, and the works of Apelles: he admires them all, and deſcribes them with the ſame enthuſiaſm. The concluſion is obvious. Both ſculpture and painting deſerved the ſame encomiums. Let us now apply this argument to muſic, and we muſt reſt convinced that, as Burney ſays, muſic, among the ancients was "ſomething with which mankind was extremely delighted."

But ſome one may aſk, what might be the tranſports of admiration, or the ſneer of diſguſt, the chill of deep impreſſion, or the death-like apathy, of a Pericles or a Roſcius, at hearing the overture of the Clemenza di Tito by Mozart, or of the Anacreon by Cherubini, as they are performed by the beſt orcheſtras in Europe, and their aſtoniſhing ſelf-playing repreſentative, that grand organ the Apollonicon? It is impoſſible to anſwer the queſtion: we have no remaining data. Were the common and ſudden jolts of the human voice in full declamation written down and called muſic? or the uniform *tenor* of the theatrical flute, as well as the oaten reed in the meadows of Enna, where Theocritus's goat-herds uſed to lull their brooks and their flocks to ſleep, by the lengthened monotony of their pipes—were theſe confined notes the acmè of melody in thoſe times?—who can tell? Deaf to the ſounds of antiquity, ignorant even of the pronunciation of ancient languages, but keen of hearing reſpecting modern muſic, we are not eaſily convinced that Greek and Roman harmoniſts were comparatively equal in taſte and ſkill to our own. Yet, that never-failing ſtandard, thoſe delightful ſpecimens of tuneful organs which nature has bountifully placed on every tree, in every buſh, when the feathered choriſters of ſpring, ſummer, and autumn, celebrate in full bands the riſing of the ſun, the type of their Creator; the notes of the nightingale, of the blackbird, of the red-breaſt, and of the thruſh, are ſtill the ſame, the unchanging patterns of genuine melody; and, if the cotemporaries of Tyrteus, endowed with the keeneſt ſenſations of harmony, did, as we do, admire and praiſe the warblings of the grove, how could they liſten to a ſyſtem of muſic much inferior to our's? We muſt therefore conclude that, though an impenetrable veil has been dropped by the hand of time between ancient muſic and our ears, the greateſt part of what we read concerning it in contemporary writers, does not deviate much from reality and truth.

Beſides, had not this art attained a great degree of perfection, as well as painting and ſtatuary, what could have induced the hiſtorians to be ſo careful, ſo reſpectfully minute, in preſerving the names of thoſe who had either invented or performed in the different muſical modes. In his amuſing treatiſe on muſic, Plutarch alone mentions about ſeventy worthies of this kind, who were, moſtly, both poets and muſicians; for poetry and muſic were ſeldom ſeparated, and theſe two ſiſter muſes uſed to go hand in hand to the banquetting-hall, or walk at the head of conflicting armies.

The moſt barbarous tribes of ſavages had at all times their muſical entertainments; and does not the ſullen negro ſolace his ſlaviſh hours by what to him is muſic, although to us it appears but a ſad and conſtant iteration of the ſame doleful ſounds? The "rans des vaches," whoſe modulation, ſimple, and nearly uniform like nature, expreſſes in a few bars the trickling down of ſmall ſtreams of water among the ſtupendous rocks and delightful valleys of Swiſſerland, united to the quicker movement of a paſtoral dance in the boſom of the Alps; this ancient ſpecimen of rude melody, as old perhaps as the nation of the Allobroges, (who long preſerved their freedom, and kept aloof the claws of the Roman eagle,) has been handed down to us by tradition; and every one knows that theſe genuine and national ſounds have the magic power of calling forth tears of regretful memory from the eyes of the Swiſs peaſant, when he hears them in any country ever ſo diſtant from the rugged rocks and ſnowy ridges where he was born. So much for the power of muſic, even in its uncultivated ſtate, upon the feelings of man.

It has been ingeniouſly fabled, that Apollo was the god of muſic, becauſe he had invented it: this allegory alighted pleaſantly upon the mind of thoſe who firſt diſcovered a ſingular, but yet inexplicable, ſimilarity between the heptachord lyre and the ſeven planets ſuppoſed to "keep their choral duties around the ſun." The diſtances between the notes in the diapaſon and the ſituation of the planets reſpectively to the ſun were eagerly calculated, and celeſtial harmony was placed upon the ſame level with terreſtrial melody. In more modern times, the three principal colours of the ſun-beam with their four accidental and priſmatic intermediate tints, were alſo found to bear analogy to the heptachord; and again the melody of ſounds was thought connected with the harmony of the univerſal creation. But, as the ſun is equally the author of colours, ſince no colours exiſt without light, and as the ſun was ſuppoſed to be the key-note of aſtronomical harmony, we muſt draw this natural concluſion, that it was not without ſome allowable ground that Apollo laid claim to the authorſhip of harmony.

Another god alſo preſents himſelf as a candidate for the honour of having invented the vocal ſhell. Whether the ſounding body of his inſtrument was the ſkull of a bull, or the convex ſhelter of the land-tortoiſe, we leave to antiquaries to decide; but ancient monuments repreſent him with a lyre compoſed of either. The queſtion with us at preſent might be, why the cunning youth, who, by the charms of his performance upon the eloquent wires, lulled aſleep the hundred-eyed keeper of the beloved of Jove, the Egyptian Io, is pronounced the firſt muſical inſtrument maker in mythological lore. The reaſon being obvious, the anſwer is eaſy: Ought not the meſſenger of the gods to have been ſupernaturally endowed with the moſt perſuaſive eloquence? and was not muſic ſuppoſed to have been the moſt powerful engine to ſoften the mind, and captivate the heart? Montaigne, in his far-renowned but ſeldom-read Eſſays, mentions, that his father, anxious to harmonize his mind, and calm the natural irritability of infancy, ordered that he never ſhould be awakened from his morning ſlumbers but by the ſofteſt melody of muſical inſtruments. Ancient and even modern facts, unſupported by the beautiful imagery of Greek and Roman fancy, coincide to prove the great credit in which muſic was at all times held. And to conclude with a tranſcendent proof: whenever man, in a grateful ſenſe towards the Divinity, or under the impreſſion of fear, wanted to addreſs his Creator, he had recourſe to muſic. Hence the hymns of Orpheus, of Homer, and of thouſands of poets before them; hence the conſtant attendance of ſkilful muſicians at the altars of Delphi, of Epheſus, and of the Capitol; hence the introduction of muſic in Chriſtian churches from the earlieſt period to this very day; ſo that our prayers to the Deity ſeem as it were to obtain a paſſport to heaven from the inſinuating melody of this celeſtial art.

PROGRESSIVE HISTORY OF MUSIC.

THE antiquity of muſic as a ſcience, is ſo well known, that it diſdains the aid of formal proof. Among the ancients, the prieſt, the prophet, the poet, and the muſician, were frequently united in the ſame perſon, and from the earlieſt ages muſic had admiſſion in the religious ceremonies, public feſtivals, military eſtabliſhments, funeral rites, and private amuſements, of mankind.

It appears both by ſacred and profane hiſtory, that muſic was one of the firſt arts known to mankind. Muſical inſtruments were in uſe before the flood; for Jubal is ſaid to be *the father of all ſuch as handle the harp and organ.* Gen. iv. 21. We have the authority of Moſes, and the teſtimony of the moſt ancient and reſpectable hiſtorians, to prove that Egypt was one of the firſt countries in the known world which cultivated the arts and ſciences. The wonderful remains of the pyramids of Egypt ſhow, that architecture was known to the Egyptians, and brought by them to the higheſt degree of magnificence. They recorded all new inventions upon columns or pillars; and upon ſome of their moſt ancient obeliſks muſical inſtruments are repreſented. In the Campus Martius at Rome, there is at this time an obeliſk, ſuppoſed to have been erected at ancient Thebes, by Seſoſtris, near four hundred years before the Trojan war; among other hieroglyphics, is repreſented a muſical inſtrument conſtructed to take two ſtrings, with a neck to it. Of this curious inſtrument we ſhall give a figure, with a more particular deſcription, under the head MUSICAL INSTRUMENTS.

To endeavour to trace the ſcience of muſic to a more remote ſource than the hiſtory of Egypt, would be without effect. The Greeks unanimouſly acknowledge, that moſt of the ancient muſical inſtruments were of their inventing. Muſic was in ſuch great eſtimation among the people of this country, that through this medium their children were taught letters; the ſongs were ſettled by law, and a certain ſpecies of muſic was eſtabliſhed by government, excluſive of all others. They divided the inhabitants of their country into caſts or tribes, confining each profeſſion to one family; and, as muſic was for many ages confined to the prieſthood, the Hebrews, who adopted many of their cuſtoms, made the offices of prieſts, levites, and muſicians, hereditary in the tribe of Levi. The Lacedemonians likewiſe agreed with the Egyptians, and confined the profeſſion of muſic to one family; and their prieſts, like thoſe of Egypt, were taught medicine and muſic, and initiated into religious myſteries. After the Egyptians became ſubject to the Perſians, the arts and ſciences lay dormant for a long time; but under the Ptolomies, particulary the ſeventh king of that name, muſic, together with the other arts of Greece, was received in Egypt, and greatly encouraged at the court of Alexandria, and continued to be cultivated till the final diſſolution of the empire.

As to vocal muſic, it being the voice of nature, there is no doubt but it is coeval with mankind. Who gave the birds that power of ſong, with which the woods reſound? Who taught the nightingale the various notes of ſong? Nature! that miſtreſs of muſic, who taught from the beginning all who have the power of melodious ſounds.

If we peruſe the Holy Bible, we ſhall be convinced from the higheſt authority, that muſic from the earlieſt ages was in general uſe. But, though Jubal is mentioned ſo ſoon in the Pentateuch, yet he could have lived but a ſhort time before the deluge, A. M. 1656; conſequently the world muſt have been peopled many centuries before the invention took place. And with reſpect to the inſtrument called an *organ* in the Engliſh verſion of this paſſage, it muſt not be imagined that ſuch a noble and complicated machine is there implied as the preſent inſtrument of that name. In the Hebrew it is called *huggah*, which, ſay the commentators, was a kind of ſyrinx, or fiſtula. The Septuagint, inſtead of *harp and organ*, has pſaltery and cithara. Hence it appears that the tranſlators, ancient and modern, of all parts of the world, not knowing what were the real forms and properties of the Hebrew inſtruments, have given to them the names of ſuch as were of the moſt common uſe in their own countries.

No mention, however, is made in the ſcriptures of the practice of muſic, till more than ſix hundred years after the deluge. But in Geneſis xxxi. the 26th and 27th verſes, about 1739 years before Chriſt, according to the Hebrew chronology, both vocal and inſtrumental muſic are ſpoken of as things in common uſe. "And Laban ſaid to Jacob, What haſt thou done, that thou haſt ſtolen away unawares to me, and carried away my daughters, as captives taken with the ſword? Wherefore didſt thou flee away ſecretly, and ſteal away from me? and didſt not tell me, *that I might have ſent thee away with mirth and with ſongs, with tabret and with harp?*" Laban was a

Syrian, and brother to Rebecca, Iſaac's wife; ſo that the tabret and the harp ſhould be ranked among Aſſyrian inſtruments.

After this time the ſacred text furniſhes no muſical incident till the year 1491 before Chriſt, when we have the firſt hymn, or pſalm, to the Supreme Being, upon record. It contains the pious effuſions of Moſes, after the paſſage of the Red Sea, at the head of the whole people of Iſrael, juſt eſcaped from bondage. *Then ſang Moſes and the children of Iſrael this ſong unto the Lord, and ſpake, ſaying, I will ſing unto the Lord, for he hath triumphed gloriouſly*, &c. Exod. xv. Moſes is ſeconded on this occaſion by Miriam, the propheteſs, and ſiſter of Aaron, who *took a timbrel in her hand*, ver. 20; *and all the women went out after her with timbrels and with dances. And Miriam anſwered them, Sing ye to the Lord*, &c.

Here is an early inſtance of women being permitted to bear a part in the performance of religious rites; as well as of vocal muſic being accompanied by inſtrumental, and by dancing.

On ſome occaſions, one of the choirs ſung a ſingle verſe of a hymn, which was anſwered by the other by a verſe in ſome reſpect correſpondent to the firſt. The 135th Pſalm is obviouſly adapted to *three* choirs; the high prieſt with the houſe of Aaron conſtituting the *firſt;* the Levites, the *ſecond;* and the congregation, the *third;* each having its diſtinct part, and all at ſtated intervals uniting in full chorus. From an analyſis of this pſalm it might eaſily be ſhown, that the Hebrew hymn is a compoſition not leſs regular than the Grecian ode. One cannot but obſerve too, that it was from the Jewiſh that the Chriſtian church derived the cuſtom of ſinging in alternate chorus. Pliny (lib. x. epiſt. 97.) obſerves of the primitive Chriſtians, that "they repeat alternate verſes to Chriſt, as to a god." And the remains of this ancient cuſtom are yet evident in the alternate or reſponſive parts of the liturgy of the eſtabliſhed church. See Bingham's Antiq. xiv. 1.

St. Stephen tells us, (Acts vii. 21, 22.) that Moſes, having been educated by Pharoah's daughter "as her own ſon, was learned in all the wiſdom of the Egyptians." And Clemens Alexandrinus particularizes his acquirements, by affirming that "he was inſtructed in his maturer age by the Egyptians in all liberal ſciences, as arithmetic, geometry, rhythm, harmony, but, above all, medicine and muſic." However, in the infancy of ſtates, a nation has but little leiſure for cultivating muſic any otherwiſe than as it is connected with religious rites and the military art. Accordingly we find no other muſical inſtrument mentioned during the adminiſtration of the great Hebrew legiſlator, than trumpets, except the timbrel uſed by Miriam. Moſes (Num. x. 2.) is ordered, by divine command, to *make two trumpets of ſilver, of a whole piece, for aſſembling together the people, and for journeying the camps.* And in the eight following verſes all the ſignals to be ſounded by one and by two trumpets are regulated. But theſe inſtruments ſeem to differ from that of the jubilee in nothing but the materials of which they were made; as the Hebrew text, and the ſeveral verſions, agree in calling all by one name.

The *feaſt of trumpets* inſtituted by Moſes, Numb. xxix. 1. in the month of September, is imagined to have been the celebration of the harveſt-home. *In the ſeventh month, on the firſt day of the month, ye ſhall have a holy convocation; ye ſhall do no ſervile work; it is a day of blowing of trumpets unto you.* The rigid obſervance of the ſabbath upon every ſeventh day, rendered ſeven a ſacred number among the Hebrews. Hence, not only the ſeventh day, but the ſeventh week, the ſeventh month, the ſeventh year, and the ſeven times ſeventh year, were kept holy: *And on the fiftieth year thou ſhalt cauſe the trumpet of the jubilee to ſound throughout the land.* Lev. xxv. 9.

No further mention is made of muſic, till the ſong of Deborah and Barak, (Judges v.) which ſeems to have been ſung in dialogue, and wholly without inſtruments. It was about fifty years after this period, 1143 years before Chriſt, that the unfortunate daughter of Jephtha, upon hearing of her father's victory over the Ammonites, went out to meet him *with timbrels and with dances.* Judges xi. 34. From this time till Saul was choſen king, B. C. 1095. the ſacred text is wholly ſilent about every ſpecies of muſic, except that of the trumpet in military expeditions.

But here an incident occurs, which ſeems to merit particular attention. It appears from many paſſages in ſcripture, that muſic was as nearly allied to prophecy as to poetry. When Samuel, after ſecretly anointing Saul king, inſtructs the new monarch in the meaſures he is to purſue for eſtabliſhing himſelf on the throne, he ſays, *And it ſhall come to paſs, when thou art come to the city,* (*Bethel,*) *that thou ſhalt meet a company of prophets coming down from the high place, with a pſaltery and tabret, and a pipe, and a harp before them; and they ſhall propheſy. And the ſpirit of the Lord will come upon thee, and thou ſhalt propheſy with them.* 1 Sam. x. 5, 6.

The examples in ſcripture of this union of muſic and prophecy are numerous. "Moreover David, and the captains of the hoſt, ſeparated to the ſervice of the ſons of Aſaph, and of Heman, and of Jeduthun, who ſhould *propheſy* with harps, with pſalters, and with cymbals. Of the ſons of Aſaph, four, who *propheſied* according to the order of the king. Of Jeduthun, ſix, who *propheſied* with a harp, to give thanks, and to praiſe the Lord. And of the ſons of Heman, the king's ſeer, in the word of God, fourteen, to lift up the horn."

Theſe *propheſyings* are now, however, underſtood to mean, not the foretelling of future events, but merely celebrating the praiſes of God with muſic and ſong, under the influence of divine inſpiration: but we cannot permit ourſelves to doubt that events were ſometimes foretold during theſe inſpired ſongs. The moſt ſtriking example of the cuſtom practiſed by the prophets, of tranquillizing their minds, and exciting in themſelves divine inſpiration, by means of muſic, is in the Second Book of Kings. The three ſovereigns of Iſrael, Judah, and Edom, marching with their armies through a wilderneſs, were all upon the point of being deſtroyed by thirſt, as there was no water to be found in their paſſage, either for man or beaſt: "And the king of Iſrael ſaid, Alas! that the Lord hath called theſe three kings together, to deliver them into the hand of Moab. But Jehoſhaphat ſaid, Is there not here a prophet of the Lord, that we may enquire of the Lord by him? And one of the king of Iſrael's ſervants anſwered and ſaid, Here is Eliſha, the ſon of Shaphat. So the king of Iſrael and Jehoſhaphat, and the king of Edom, went down to him. And Eliſha ſaid, *Bring me a minſtrel.* And it came to paſs, *when the minſtrel played*, that *the hand of the Lord came upon him*, and he ſaid, Thus ſaith the Lord, Make this valley full of ditches," &c. 2 Kings iii. 11—15.

The royal pſalmiſt, who was poſſeſſed of the ſpirit of propheſy, cultivated muſic early in life, and his pſalms give ample teſtimony of his poetical abilities. He uſed to conſole himſelf with his harp or lyre, when his ſoul was in heavineſs, and to ſing the praiſes of the Lord. He was firſt ſent for by Saul, who had heard of his ſkill in muſic, to adminiſter relief to him by the power of his harp, when he was afflicted with an evil ſpirit: *And it came to paſs, when the evil ſpirit from God was upon Saul, that David took a harp and played; ſo Saul was refreſhed, and was well, and the evil ſpirit departed from him.* 1 Sam. xvi. 23. When David became king, we find him giving the greateſt encouragement to this ſacred art; his uniform attachment to the ſtudy and practice of it, and the great number of performers he kept for the purpoſe of attending religious ceremonies, extended its influence, and was the means of its being held in the higheſt eſtimation. In the ſervice of the ark, he appointed four thouſand of the Levites to praiſe the Lord with inſtruments. 1 *Chron.* xxiii. When he removed the ark from the houſe of

Obed-edom, he gathered all Iſrael together, to bring up the ark of the Lord unto the place which he had prepared for it: "And he ſpake to the chief of the Levites to appoint their brethren to be the ſingers with inſtruments of muſic, pſalteries and harps and cymbals, ſounding by lifting up the voice with joy. And the prieſts did blow with the trumpets before the ark of God. And David was clothed with a robe of fine linen; and all the Levites that bare the ark, and the ſingers, and Chenaniah the maſter of the ſong, gave thanks unto the Lord." 1 Chron. xv. xvi.

If we believe Joſephus, "Solomon cauſed two hundred thouſand trumpets to be made for the ſervice of the dedication of the temple, beſides four hundred thouſand muſical inſtruments, as harps, pſalteries, and the like, which were made of a mixed metal, between gold and ſilver, to accompany the voices." *Joſephus*, book viii. ch. 1. As the above numbers appear to ſurpaſs every idea of meaſure and of calculation, Mr. Eaſtcott (from whoſe Sketches much of this ſection is extracted) adds the following remarks in his Supplement. Firſt, we ſhould recollect, that God bleſſed Solomon not only with wiſdom, but riches alſo, ſurpaſſing every monarch before or after him. The influx of gold into his dominions was ſo great, (2 Chron. ix. 13.) that ſilver was reckoned of no value during his reign. (1 Kings x. 21.) And, as every eſtimable object receives its value according to its plenty or ſcarcity, in a reign like Solomon's, articles which at other times are univerſally eſteemed are then regarded as nought. To gratify the wiſh and intoxicate the eye, were the principles which pervaded his ſyſtem: his treaſures, magazines, &c. were objects more for public exhibition than utility; and were conſtantly increaſing by the grand tributes daily preſented to him by the admiring princes of the Eaſt, who, with the queen of Sheba, came to hear his wiſdom, and view the magnificence of the temple, and his palaces, and the profuſion, but beautiful order, of his houſehold, treaſury, and magazines; among which the magazine which contained his muſical inſtruments we have reaſon to think made a very conſiderable figure. It ſhould be obſerved alſo, that the Levites, who were all muſicians, were in number 38,000; and that ſcholars, very numerous, muſt have been always in training to ſucceed them when (at fifty years of age) they were diſmiſſed. And it is preſumed, moreover, that a reſerve of inſtruments, in perfect order, was always ready at hand, for the particular uſe of the ſabbath and holidays; and, although ſtringed inſtruments are always liable to be out of order, yet they were not permitted to be repaired, or even a ſtring put on or mended, on thoſe days, as all manual labour is then ſtrictly forbidden by law.

Joſephus remarks that theſe inſtruments "were made of a compoſition between gold and ſilver." But he was too well acquainted with ſcripture to have inſerted ſuch a miſtake. I ſhould rather ſuppoſe (ſays Mr. Eaſtcott) an overſight in tranſcribing our author, which we may eaſily correct, by ſuppoſing he wrote, that "the ſtrings or wires of theſe inſtruments, were made of a compoſition between gold and ſilver," which, when compounded and rendered elaſtic, produced ſounds the moſt melodious for accompanying the voice; or probably theſe inſtruments were inlaid or ornamented with a metal of this kind.

The reign of Solomon, ſo long, ſo pacific, and ſo glorious to the Hebrews, may be regarded as the Auguſtan age of that people; whoſe proſperity, during this period, not only enabled them to cultivate arts and ſciences among themſelves, but ſtimulated foreigners to viſit and aſſiſt them. And, as we find that the Romans, during the time of Auguſtus and his ſucceſſors, were indebted to the Greeks for a great part of their knowledge in the polite arts, ſo the Hebrews, under Solomon's government, had aſſiſtance from Egypt and from Tyre. Riches and renown never fail to attract talents into a country from neighbouring kingdoms. As to muſic and poetry, which were put upon ſo reſpectable a footing in the former reign, they ſeem to have had their ſhare of attention in this, particularly in the ſervice of the temple.

It is the opinion of many expounders and commentators of the ſacred writings, that Solomon was author of ſome of the Pſalms that are attributed to David. Of this we are certain, that he was no leſs fond of poetry than his father. In the firſt of Kings, iv. and xxv. we are told that *he ſpake three thouſand proverbs; and his ſongs were a thouſand and five.* But whether, like the royal pſalmiſt, he was a practical muſician, does not appear in the records of his reign. However, in Eccleſiaſtes, ii. 8. we find muſic mentioned by this voluptuous prince among the vain luxuries and vexations of ſpirit, with which he found himſelf ſatiated: "*I gat me men-ſingers and women-ſingers, and the delights of the ſons of men, as muſical inſtruments, and that of all ſorts:*" which is all that can be gathered on the ſubject of muſic during this ſplendid reign.

A century paſſed from the dedication of the temple, without the mention of any thing remarkable in Scripture concerning the muſic of the Hebrews, except the paſſage already cited, where Eliſha calls for a minſtrel to awaken inſpiration, previous to his propheſying.

In the year 896 B. C. the ſingers are ſaid to have contributed greatly towards obtaining a ſingular advantage in favour of Jehoſhaphat, over the Ammonites and Moabites. The muſicians, following the camp in the ſame order as they ſerved in the temple, marched as a vanguard in the field with their inſtruments: "And the Levites of the children of the Kohathites, and the children of the Korahites, ſtood up to praiſe the Lord God of Iſrael with a loud voice on high. And, when Jehoſhaphat had conſulted with the people, *he appointed ſingers unto the Lord*, and that ſhould praiſe the beauty of holineſs as they went out before the army, and to ſay, Praiſe the Lord, for his mercy endureth for ever. And, *when they began to ſing, and to praiſe*, the Lord ſet ambuſhments againſt the children of Ammon, Moab, and Mount Seir, which were come againſt Judah, and they were ſmitten." 2 Chron xx. 19–22.

The Hebrews frequently attributed their ſucceſs in battle to the animation given the troops by the trumpets, which were always blown by prieſts and levites, whom the people highly reverenced, and regarded as inſpired perſons. It was, in like manner, the part of the ancient Gallic, German, and Britiſh, druids, who were not only prieſts, but muſicians, to animate their countrymen to the fight.

Thus far we have only had to ſpeak of the cultivation and improvement of muſic among the Hebrews; we have little more to add, except what will indicate its neglect and decline. But few memorials remain concerning it, from the victory obtained by Abijah, till the captivity and deſtruction of Jeruſalem and the temple, by the Babylonians, in the reign of Jehoiakim. Before this period, muſic, and other ſacred rites, had been frequently much corrupted, during the wars, and by intercourſe with foreign nations; and, at every attempt to reſtore them to their former purity and ſplendour, we find the number of thoſe employed in the ſervice of the temple diminiſhed, and their efforts more feeble and ineffectual. At the reſtoration of the royal family, after the crown had been uſurped by Athaliah, we are told that "*the princes and the trumpets ſtood by the king; and all the people of the land rejoiced, and ſounded with trumpets; alſo the ſingers with inſtruments of muſic, and ſuch as taught to ſing praiſe.* And Jehoiada, during the minority of Joaſh, *appointed the offices with rejoicing, as it was ordained by David.* B.C. 878. And in this reign we find that *the ſingers, the ſons of Aſaph*, were reſtored to their places. 2 *Chron.* xxiii. 13–18.

Theſe continued, however, but a ſhort time in the miniſtry, before they were driven out, and the king and people became proſelytes to another form of worſhip. (2 Chron. xxiv. 18.) But, after various revolutions both in religion and government, a powerful attempt was made, during the reign of Hezekiah, about 726 years B. C. to reſtore the temple to all its ancient ſplendour. *And he ſet the Levites in the houſe of the Lord with cymbals, with pſalteries, and with harps, according to the commandment of David. And the Levites ſtood with the inſtruments of David, and the prieſts with the trumpets. But the prieſts were too few* to perform all the ceremonies formerly ſolemnized in the temple. However, *there was now great joy in Jeruſalem; for ſince the time of Solomon there was not the like in Jeruſalem.* 2 Chron. xxix. xxx.

But this happy period was of ſhort continuance; new ſchiſms and new misfortunes ſoon put an end to it. And in the year 606 B. C. the Hebrew nation was ſubdued; the temple plundered and deſtroyed; and, ſoon after, both king and people were, by Nebuchadnezzar, ſent captives to Babylon. During the ſeventy years captivity, it is natural to ſuppoſe that the Hebrews were denied the celebration of their religious rites; nor could they have much time or inclination for domeſtic amuſements or feſtivity; ſo that muſic, the child of leiſure and happineſs, and the parent of innocent pleaſure, muſt have been neglected, and ſhut out of their houſes, as an unwelcome gueſt. The idea of every thing that awakened recollection of former felicity, muſt have been painful in a ſtate of ſlavery. *By the waters of Babylon we ſat down and wept, when we remembered thee, O Sion. As for our harps, we hanged them up upon the trees that are therein. For they that led us away captives required of us then a ſong, and melody in our heavineſs: Sing us one of the ſongs of Sion. How ſhall we ſing the Lord's ſong in a ſtrange land? If I forget thee, O Jeruſalem, let my right hand forget her cunning.* Pſalm cxxxvii. Theſe are the natural ſentiments and feelings of a people, but lately fallen from a ſtate of proſperity and happineſs into that of bondage and miſery.

All that has been hitherto collected relative to the muſic of the Hebrews, only ſhows that it was in general uſe among them, from the time of their quitting Egypt, till they ceaſed to be a nation; but what kind of muſic it was with which they were ſo much delighted, no means are now left to determine. That they had their firſt muſic and inſtruments, whatever they were, from the Egyptians, appears to admit of no doubt; but theſe ſeemed to have remained in a very rude ſtate till the reigns of David and Solomon; and even then, perhaps, they were more improved in quantity than quality; for the great number of Levites, of ſinging-men and ſinging-women, as well as of trumpets, ſhawms, cornets, ſacbuts, cymbals, and timbrels, could only augment the noiſy cry of joy, or the clamour of petition.

However, we have no authentic account of any nation, except the Egyptians, where muſic had been cultivated ſo early as the days of David and Solomon, the brighteſt period of the Jewiſh hiſtory, the Greeks at that time having hardly invented their rudeſt inſtruments: for Homer and Heſiod, the refiners, if not the inventors, of Greek poetry; and Orpheus, Muſæus, and Linus, to whom they attribute the invention of their muſic and inſtruments; all flouriſhed, according to ſir Iſaac Newton, after theſe Hebrew monarchs.

With reſpect to the modern Jewiſh muſic, (ſays Dr. Burney,) we have been informed by a Hebrew high-prieſt, that all inſtrumental and even vocal performances have been baniſhed the ſynagogue ever ſince the deſtruction of Jeruſalem; that the little ſinging now uſed there is an innovation, and a modern licenſe; for the Jews, from a paſſage in one of the prophets, think it unlawful, or at leaſt unfit, to ſing or rejoice before the coming of the Meſſiah, till when they are bound to mourn and repent in ſilence. But the only Jews now on the globe, who have a regular muſical eſtabliſhment in their ſynagogues, are the Germans, who ſing in parts; and theſe preſerve ſome old melodies, or ſpecies of chants, which are thought to be very ancient. And Padre Martini has inſerted, from the Eſtro-Poetico-Armonico of Marcello, 1724, and from an inedited manuſcript by the cavaglier Ercole Bottrigari, called Il Trimerone de Fondamenti Armonici, 1599, a great number of ſuch Hebrew chants as were ſung in the ſynagogues of different parts of Europe, at the time when theſe works were compoſed. But, as no two Jewiſh congregations ſing theſe chants alike, if tradition has been faithful in handing them down from the ancient Hebrews to any one ſynagogue, who ſhall determine to which ſuch permanence can be attributed?

Among the GREEKS, the paſſion for arts and ſciences was greater than that of moſt other nations, for moſt of their divinities were regarded as inventors of muſic. Almoſt all the ancient philoſophers wrote treatiſes on muſic, eſpecially the diſciples of Pythagoras, Plato, and Ariſtotle. The firſt poets and muſicians of Greece, ſung their works in great cities, and in the palaces of princes, and were looked upon as inſpired perſons; they gained the wonder and poſſeſſed the affections of the people, till by degrees they became numerous; and, the art being conſidered of eaſy acquiſition, their reputation ſunk in the public opinion. Scarcely any kind of work was performed by the people of this country without muſic, and every profeſſion had in uſe its peculiar ſongs.

As for Pythagoras, poſterity has been very liberal to him, in beſtowing upon him all ſuch inventions as others had neglected to claim, particularly in muſic; for there is ſcarcely any part of it, as a ſcience, with which he has not been inveſted by his generous followers. Thus, muſical ratios have been aſſigned to him, with the method of determining the gravity or acuteneſs of ſounds by the greater or leſs degree of velocity in the vibrations of ſtrings; the addition of an eighth ſtring to the lyre, (Pliny, lib. ii. cap. 2.) the harmony of the ſpheres, (Plato;) and the Greek muſical notation, (Boethius.) His right, indeed, to ſome of theſe diſcoveries, has been diſputed by ſeveral authors, who have given them to others with as little reaſon, perhaps, as they had been before beſtowed upon him. But there is one diſcovery, relative to muſic, that has, at all times, been unanimouſly aſſigned to him, which, however, appears to us extremely doubtful, not only whether it was made by him, but whether, in the manner it is related, it was ever made by any one. We are told by Nicomachus, Gaudentius, Jamblichus, Macrobius, and all their commentators, "that Pythagoras, one day meditating on the want of ſome rule to guide the ear, analogous to what had been uſed to help the other ſenſes, chanced to paſs by a blackſmith's ſhop; and, obſerving that the hammers, which were four in number, ſounded very harmoniouſly, he had them weighed, and found them to be in the proportion of 6, 8, 9, and 12. Upon this he ſuſpended four ſtrings, of equal length and thickneſs, &c. faſtened weights, in the above-mentioned proportions, to each of them reſpectively, and found that they gave the ſame ſounds that the hammers had done; viz. the fourth, fifth, and octave, to the graveſt tone; which laſt interval did not make part of the muſical ſyſtem before; for the Greeks had gone no farther than the heptachord, or ſeven ſtrings, till that time." This is the ſubſtance of the account, as it has been abridged by Mr. Stillingfleet, who points out many incredible circumſtances with reſpect to the ſtory in general, and denies that the weights 6, 8, 9, 12, would give the intervals pretended; but ſeems not to have ſeen the leaſt difficulty in the fact, relative to different hammers producing different ſounds upon the ſame anvil. The frontiſpiece to M. Marpurg's Hiſtory of Muſic, repreſents the Samian ſage in the act of weighing the hammers.

But, though both hammers and anvil have been ſwallowed by ancients and moderns, and have paſſed through them from one to another, with an oſtrich-like digeſtion, upon examination and experiment it appears, that hammers of different ſize and weight will no more produce different tones upon the ſame anvil, than bows or clappers of different ſizes will from the ſame ſtring or bell. Indeed, both the hammers and anvils of antiquity muſt have been of a conſtruction very different from thoſe of our degenerate days, if they produced *any tones* that were ſtrictly muſical. Of the millions of well-organized mortals who have paſſed by blackſmiths' ſhops ſince the time of Pythagoras, we believe no one was ever detained by a *ſingle note*, much leſs by an harmonious *concord*, from thoſe Vulcanian inſtruments. A different kind of noiſe, indeed, will be produced by hammers of different weights and ſizes; but it ſeems not to be in the power of the moſt ſubtle ear to diſcover the leaſt imaginable difference with reſpect to gravity or acuteneſs. But, though *different noiſes* may be produced from different bodies, in proportion to their ſize and ſolidity, and every room, chair, and table, in a houſe, has a particular tone, yet theſe noiſes can never be aſcertained like muſical notes, which depend upon reiterated and regular *vibrations of the aliquot parts of a ſtring*, or other elaſtic body; and, in wind-inſtruments, upon the undulation of the air conveyed into a tube.

The long belief of this ſtory proves that philoſophers themſelves have ſometimes taken facts upon truſt, without verifying them by experiment; and, as the tone of the hammers was aſſerted without proof, ſo was the effect of their different weights faſtened to ſtrings. This Galileo diſcovered. The numbers 6, 8, 9, 12, applied to different lengths of ſtrings, would, indeed, give the intervals mentioned: but it is proved, that, to produce thoſe intervals by the *tenſion* of different weights, the weights muſt be the ſquares of thoſe numbers; that is, 36, 64, 81, 144. It is aſtoniſhing how the blunder had been echoed from author to author, without experiment, till the time of Galileo. And Bontempi, in trying the power of weights upon ſtrings in the Pythagoric proportions of 6, 8, 9, 12, found, that inſtead of giving the 4th, 5th, and 8th, of the graveſt tone, they produced only the minor 3d, major 3d, and tritonus; ſo that the whole account falls to the ground. But, though modern incredulity and experiment have robbed Pythagoras of the glory of diſcovering muſical ratios by *accident*, he has been allowed the ſuperior merit of arriving at them by meditation and deſign. At leaſt the invention of the harmonical canon, or monochord, has been aſcribed to him both by ancient and modern writers.

The muſical ſpeculators of Greece arranged themſelves into a great number of ſects, the chief of whom were the Pythagoreans and the Ariſtoxenians.

Pythagoras ſuppoſed the air to be the *vehicle* of ſound, and the agitation of that element, occaſioned by a ſimilar agitation in the parts of the ſounding body, to be the *cauſe* of it. The vibrations of a ſtring or other ſonorous body, being communicated to the air, affected the auditory nerves with the ſenſation of ſound; and this ſound, he argued, was acute or grave in proportion as the vibrations were quick or ſlow. He diſcovered by experiment, that, of two ſtrings equal in every thing but length, the ſhorter made the quicker vibrations, and emitted the acuter ſound: in other words, that the number of vibrations made in the ſame time, by two ſtrings of different lengths, was inverſely as thoſe lengths; that is, the greater the length, the ſmaller the number of vibrations in any given time. Thus ſound, conſidered in the vibrations that cauſe it, and the dimenſions of the vibrating body, came to be reduced to quantity, and as ſuch was the ſubject of calculation, and expreſſible by numbers. For inſtance, the two ſounds that form an octave could be expreſſed by the numbers 1 and 2, which would repreſent either the number of vibrations in a given time, or the length of the ſtrings; and would mean, that the acuter ſound vibrates twice while the graver vibrates once, or that the ſtring producing the lower ſound is twice the length of that which gives the higher. If the vibrations were conſidered, the higher ſound was as 2, the lower as 1; the reverſe, if the length was alluded to. In the ſame manner, in the ſame ſenſe, the 5th would be expreſſed by the ratio of 2 to 3, and the 4th by that of 3 to 4.

Ariſtoxenus, in oppoſition to the calculations of Pythagoras, held the ear to be the ſole ſtandard of muſical proportions. That ſenſe he accounted ſufficiently accurate for muſical, though not for mathematical, purpoſes; and it was in his opinion abſurd to aim at an artificial accuracy in gratifying the ear beyond its own power of diſtinction. He, therefore, rejected the velocities, vibrations, and proportions, of Pythagoras, as foreign to the ſubject, in ſo far as they ſubſtituted abſtract cauſes in the room of experience, and made muſic the object of intellect rather than of ſenſe.

Theſe conflicting and oppoſite opinions continued to divide the muſical and philoſophical world for more than two thouſand years; for it was not till about the beginning of the laſt century that the ſyſtem of Pythagoras was confirmed by abſolute mathematical demonſtration; ſo that, now, the following propoſitions, in relation to muſical ſound, have paſſed from conjecture to certainty.

1. Sound is generated by the vibrations of elaſtic bodies, which communicate the like vibrations to the air, and theſe again the like to our organs of hearing. This is evident, becauſe ſounding bodies communicate tremors to other bodies at a diſtance from them. The vibrating motion, for inſtance, of a muſical ſtring, excites motion in others, whoſe tenſion and quantity of matter diſpoſe their vibrations to keep time with the undulations of air propagated from the ſtring firſt ſet in motion.

2. If the vibrations be iſochronous, and the ſound muſical, continuing at the ſame pitch, it is ſaid to be acuter, ſharper, or higher, than any other ſound whoſe vibrations are ſlower; and graver, flatter, or lower, than any other whoſe vibrations are quicker. For, while a muſical ſtring vibrates, its vibrations become quicker by increaſing its tenſion or diminiſhing its length; its ſound at the ſame time will be more acute: and, on the contrary, by diminiſhing its tenſion or increaſing its length, the vibrations will become ſlower and the ſound graver. The like alteration of the pitch of the ſound will follow, by applying, by means of a weight, an equal degree of tenſion to a thicker or heavier and to a ſmaller or lighter ſtring, both of the ſame length, as in the ſmaller ſtring the maſs of matter to be moved by the ſame force is leſs.

3. If ſeveral ſtrings, however different in length, denſity, and tenſion, vibrate altogether in equal times, their ſounds will have all one and the ſame pitch, however they may differ in loudneſs or other qualities. They are called *uniſons*. The vibrations of uniſons are iſochronous.

4. The vibrations of a muſical ſtring, whether wider or narrower, are nearly iſochronous. Otherwiſe, while the vibrations decreaſe in breadth till they ceaſe, the pitch of the ſound could not continue the ſame (which we perceive by experience it does), unleſs where the firſt vibrations are made very violently; in which caſe, the ſound is a little acuter at the beginning than afterwards.

Laſtly. The word *vibration* is underſtood to mean the time which paſſes between the departure of the vibrating body from any aſſigned place and its return to the ſame. See Phil. Tranſ. for 1714. and Dr. Brook Taylor's Methodus Incrementorum directa et inverſa.

After muſical ratios were diſcovered and reduced to numbers, they were made by Pythagoras and his followers the type of order and juſt proportion in all things: hence virtue, friendſhip, good government, celeſtial motion, the human ſoul, and God himſelf, were harmony. This diſcovery gave birth to various ſpecies of muſic, far more ſtrange and inconceivable than chromatic and enharmonic: ſuch as divine muſic, mundane muſic, elementary muſic, and many other diviſions and ſubdiviſions, upon which Zarlino, Kircher, and almoſt all the old writers, never fail to expatiate with wonderful complacence. It is, perhaps, equally to the credit and advantage of muſic and philoſophy, that they have long deſcended from theſe heights, and taken their proper and ſeparate ſtations upon earth; ſo that we no longer admit of muſic that cannot be *heard*, or of philoſophy that cannot be *underſtood*.

Ariſtides Quintilianus aſſures us, that muſic comprehends arithmetic, geometry, phyſics, and metaphyſics, and teaches every thing, from *ſolfaing* the ſcale, to the nature and conſtruction of the ſoul of man and the ſoul of the univerſe. To confirm this, he quotes, as a divine ſaying, a moſt curious account of the end and buſineſs of muſic, from one Panacmus, which informs us, that the province of muſic is not only to arrange muſical ſounds, and to regulate the voice, but to unite and harmonize every thing in nature. This writer, in ſolving the queſtion, Whence it is that the ſoul is ſo eaſily affected by inſtrumental muſic? acquaints us, in the Pythagorean way, how the ſoul, friſking about, and playing all kinds of tricks in the purer regions of ſpace, approaches by degrees to our groſs atmoſphere; gets a taſte for matter and ſolidity, and at length acquires a warm and comfortable body to cover her nakedneſs. Here ſhe picks up nerves and arteries; there membranes; here ſpirit or breath; and all in a moſt extraordinary manner; eſpecially the arteries and nerves: for what ſhould they be made of, but the circles and lines of the ſpheres, in which the ſoul gets entangled in her paſſage, like a fly in a ſpider's web! Thus, continues he, the body becomes ſimilar in its texture to inſtruments of the wind and ſtringed kind. The nerves and arteries are ſtrings, and at the ſame time they are pipes filled with wind. "What wonder, then," ſays Ariſtides Quintilianus, "if the ſoul, being thus intimately connected with a body ſimilar in conſtruction to thoſe inſtruments, ſhould ſympathize with their motions."

Pythagoras is ſaid, by the writers of his life, to have regarded muſic as ſomething celeſtial and divine, and to have had ſuch an opinion of its power over the human affections, that, according to the Egyptian ſyſtem, he ordered his diſciples to be waked every morning, and lulled to ſleep every night, by ſweet ſounds. He likewiſe conſidered it as greatly conducive to health, and made uſe of it in diſorders of the body, as well as in thoſe of the mind. His biographers and ſecretaries even pretend to tell us what kind of muſic he applied upon theſe occaſions. Grave and ſolemn, we may be certain; and vocal, ſay they, was preferred to inſtrumental; and the lyre to the flute, not only for its decency and gravity, but becauſe inſtruction could be conveyed to the mind, by means of articulation in ſinging, at the ſame time as the ear was delighted with ſweet ſounds. This was ſaid to have been the opinion of Minerva. In very high antiquity, mankind gave human wiſdom to their gods, and afterwards took it from them to beſtow it on mortals. In peruſing the liſt of illuſtrious men who have ſprung from the ſchool of Pythagoras, it appears that the love and cultivation of muſic was ſo much a part of their diſcipline, that almoſt every one of them left a treatiſe behind him upon the ſubject.

Euclid, as a writer on muſic, has ever been held in the higheſt eſtimation by all men of ſcience who have treated of harmonics, or the philoſophy of ſound. As Pythagoras was allowed by the Greeks to have been the firſt who found out muſical ratios, by the diviſion of a monochord, or ſingle ſtring, a diſcovery which tradition only had preſerved, Euclid was the firſt who wrote upon the ſubject, and reduced theſe diviſions to mathematical demonſtration. His Introduction to Harmonics, (Εισαγωγη Ἁρμονικη,) which in ſome MSS. was attributed to Cleonidas, is in the Vatican copy given to Pappus. Meibomius, however, accounts for this, by ſuppoſing thoſe copies to have been only two different MS. editions of Euclid's work, which had been reviſed, corrected, and reſtored from the corruptions incident to frequent tranſcription, by Cleonidas and Pappus, whoſe names were, on that account, prefixed. It firſt appeared in print with a Latin verſion, in 1498, at Venice, under the title of "Cleonidæ Harmonicum Introductorium:" but who Cleonidas was, neither the editor, George Valla, nor any one elſe, pretends to know. It was John Pena, a mathematician in the ſervice of the king of France, who firſt publiſhed this work at Paris, under the name of Euclid, in 1557. After this, it went through ſeveral editions with his other works. His Section of the Canon, Κατατομη Κανονος follows his Introduction; it went through the ſame hands and ſame editions, and is mentioned by Porphyry, in his Commentary on Ptolemy, as the work of Euclid. This tract chiefly contains ſhort and clear definitions of the ſeveral parts of Greek muſic, in which it is eaſy to ſee that mere melody was concerned; as he begins by telling us, that the ſcience of *harmonics* conſiders the nature and uſe of melody, and conſiſts of ſeven parts: ſounds, intervals, genera, ſyſtems, keys, mutations, and melopœia; all which have been ſeverally conſidered in the diſſertation.

Of all the writings upon ancient muſic, that are come down to us, this ſeems to be the moſt correct and compreſſed: the reſt are generally looſe and diffuſed; the authors either twiſting and diſtorting every thing to a favourite ſyſtem, or filling their books with metaphyſical jargon, with Pythagoric dreams, and Platonic fancies, wholly foreign to muſic. But Euclid in this little treatiſe is like himſelf, cloſe and clear; yet ſo mathematically ſhort and dry, that he beſtows not a ſyllable more upon the ſubject than is abſolutely neceſſary. His object ſeems to have been the compreſſing into a ſcientific and elementary abridgment, the more diffuſe and ſpeculative treatiſes of Ariſtoxenus. He was the d'Alembert of that author, explaining his principles, and at the ſame time ſeeing and demonſtrating his errors. The muſical writings of Rameau were diffuſe, obſcure, and indigeſted; but d'Alembert, extracting the eſſence of his confuſed ideas, methodized his ſyſtem of a *fundamental baſs*, and compreſſed, into the compaſs of a pamphlet, the ſubſtance of many volumes.

According to Dr. Wallis, (Phil. Tranſ. No. 242.) Euclid was the firſt who demonſtrated that an octave is ſomewhat leſs than *ſix whole* tones: and this he does in the 14th theorem of his Section of the Canon. In the 15th theorem, he demonſtrates that a fourth is leſs than two tones and a half, and a fifth leſs than three and a half: but, though this proves the neceſſity of a temperament upon fixed inſtruments, where one ſound anſwers ſeveral purpoſes, yet he gives no rules for one, which ſeems to furniſh a proof that ſuch inſtruments were at leaſt not generally known or uſed by the ancients. What Ariſtoxenus called a *half-tone*, Euclid demonſtrated to be a ſmaller interval, in the proportion of 256 to 243. This he denominated a *limma*, or remnant; becauſe, giving to the *fourth*, the extremes of which were called *ſoni-ſtabiles*, and were regarded as fixed and unalterable, the exact proportion of 4 to 3, and taking from it two major tones $\frac{8}{9}\times\frac{8}{9}$, the limma was all that remained to complete diateſſaron. This diviſion of the diatonic genus being thus, for the firſt time, eſtabliſhed upon mathematical demonſtration, continued in favour, ſays Dr. Wallis, for many ages. But theſe ancient ſyſtems have been juſtly laid aſide ſince the invention of a temperament, as being unfit for the execution of muſical compoſitions in ſeveral parts. See Smith's Harmonics, p. 33.

The firſt lyre, with three ſtrings, is ſaid to have been invented in Egypt by Hermes, under Oſiris, between the years 1800 and 1500 before Chriſt. The ſecond and third ſtring were, perhaps, the octave and fifth of the firſt, or more probably its fifth and fourth, as it would be eaſy to ſing the octave with the accompaniment of the primitive note only. The melody might be either always in uniſon with one of the ſtrings, reſembling a very ſimple modern baſs part; or the intervals might occaſionally be filled up by the voice, without accompaniment. We have, in modern muſic, a ſpecimen of a pleaſing air, by Rouſſeau, formed on three notes alone, the key-note, with its ſecond and third; but there can be little doubt that the earlieſt melodies muſt have had a greater compaſs than this; although ſome ſuppoſe the three ſtrings of the oldeſt lyre to have been ſucceſſive notes of the ſcale. It is uncertain when, or by whom, the fourth ſtring was added: but the merit of increaſing the number to ſeven is attributed to Terpander, about the year 700 before Chriſt, two centuries after Homer: although ſome perſons have aſſerted that he only brought the improvement from Egypt, and that Hermes was alſo the inventor of the lyre with ſeven ſtrings. Pythagoras, or Simonides, about the year 500, added an eighth, and Timotheus a ninth, tenth, and eleventh, ſtring: the number was afterwards extended to two octaves: and Epigonus is ſaid to have uſed a lyre of forty ſtrings, or rather a harp, as he played without a plectrum. But the theory of the ancient muſic ſoon became more intricate than intereſting. The lyre of eight ſtrings comprehended an octave, correſponding pretty accurately with the notes of our natural ſcale; but there was a conſiderable diverſity in the manner of tuning the lyre, according to the great variety of modes and genera that were introduced. Theſe modes were of a nature totally different from the modern modulations into various keys; but they muſt have afforded a more copious fund of ſtriking, if not of pleaſing, melodies, than we have at preſent. In ſome of the genera, intervals of a quarter-tone were employed; but this practice, on account of its difficulty, was ſoon abandoned; a difficulty which is not eaſily overcome by the moſt experienced of modern ſingers; although ſome great maſters have been ſaid to introduce a progreſſion of quarter-tones, in pathetic paſſages, with ſurpriſing effect.

The narrative of the famous *ſenatus conſultum*, or rather decree, againſt the muſician Timotheus, at Sparta, for augmenting the number of ſtrings on his lyre, is confirmed by Pauſanius and Suidas. This curious piece of antiquity is preſerved at full length by Boethius, (De Muſica, cap. i.) Mr. Stillingfleet (Princ. and Power of Harm. § 185.) has given an extract from it, in proof of the ſimplicity of the ancient Spartan muſic. The fact is mentioned in Athenæus; and Caſaubon, in his notes on that author, has inſerted the whole original text from Boethius, with corrections, to which we refer the learned reader. We ſhall here, however, give a faithful tranſlation of this extraordinary Spartan *act of parliament*. "Whereas Timotheus the Mileſian, coming to our city, has diſhonoured our ancient muſic, and, deſpiſing the lyre of ſeven ſtrings, has, by the introduction of a greater variety of notes, corrupted the ears of our youth; and by the number of his ſtrings, and the novelty of his melody, has given to our muſic an effeminate and artificial dreſs, inſtead of the plain and orderly one in which it has hitherto appeared; rendering melody infamous, by compoſing in the chromatic, inſtead of the enharmonic;—— The kings and the ephori have, therefore, reſolved to paſs cenſure upon Timotheus for theſe things; and, farther, to oblige him to cut off all the ſuperfluous ſtrings of his *eleven*, leaving only the *ſeven* tones; and to baniſh him from our city, that men may be warned for the future, not to introduce into Sparta any unbecoming cuſtoms."

The ſame ſtory, as related in Athenæus, has this additional circumſtance; that, when the public executioner was on the point of fulfilling the ſentence, by cutting off the new ſtrings, Timotheus, perceiving a little ſtatue in the ſame place, with a lyre in his hand of as many ſtrings as that which had given the offence, and ſhowing it to the judges, was acquitted. Indeed the decree only informs us, that the uſe of a lyre with more than ſeven ſtrings was not allowed at this time by the Lacedæmonians; but does not prove that the reſt of Greece had confined their muſic within the compaſs of *ſeven* notes; nor, conſequently, aſcertain how many of the *eleven* ſtrings were additions *peculiar* to Timotheus. That the outcry againſt the novelties of this muſician was, however, not confined to Sparta, appears from a paſſage in Plutarch's Dialogue, where he gives a liſt of the innovators who had corrupted and enervated the good old melody, by additional notes both upon the flute and lyre. "Laſus of Hermione," ſays he, "by changing muſical rhythms to the dithyrambic irregularity of movement, and, at the ſame time, emulating the compaſs and variety of the flute, occaſioned a great revolution in the ancient muſic. Melanippides, who ſucceeded him, in like manner, would not confine himſelf to the old muſic, any more than his ſcholar Philoxenus, or Timotheus."

Plutarch alſo tells us, that the comic poet Pherecrates introduced Muſic on the ſtage, under the figure of a woman, whoſe body was terribly torn and mangled. She is aſked by Juſtice, under the figure of another woman, the cauſe of her ill-treatment? when ſhe relates her ſtory in the following words: "The firſt ſource of all my misfortunes was Melanippides, who began to enervate and debilitate me by his *twelve ſtrings*. However, this would not have reduced me to the deplorable condition in which I now appear, if Cineſias, that curſed Athenian, had not contributed to ruin and disfigure me in his dithyrambic ſtrophes, by his falſe and untuneable inflexions of voice. In ſhort, his cruelty to me was beyond all deſcription; and next to him, Phrynis took it into his head to abuſe me by ſuch diviſions and flouriſhes as no one ever thought of before, making me ſubſervient to all his whims, twiſting and twirling me a thouſand ways, in order to produce from *five ſtrings*, the *twelve* different *modes*. But ſtill, the freaks of ſuch a man would not have been ſufficient to complete my ruin, for he was able to make me ſome amends. Nothing now was wanting but the cruelty of one *Timotheus* to ſend me to the grave, after maiming and mangling me in the moſt inhuman manner." "Who is this Timotheus?" ſays Juſtice. Muſic replies:

Oh! 'tis that vile Mileſian blade,
Who treats me like an arrant jade:
Robs me of all my former fame;
And loads me with contempt and ſhame:
Contriving ſtill, where'er he goes,
New ways to multiply my woes:
Nay more, the wretch I never meet,
Be it in palace, houſe, or ſtreet,
But ſtraight he tries to clip my wings,
And *ties* me with a *dozen ſtrings*.

It has been imagined, with much appearances of probability, that the occupation of the firſt poets and muſicians of Greece reſembled that of the Celtic and German bards and the ſcalds of Iceland and Scandinavia. They ſung their poems in the ſtreets of cities and in the palaces of princes. They were treated with high reſpect, and regarded as inſpired perſons. Such was the employment of Homer. His poems, ſo juſtly celebrated, exhibit the moſt authentic picture that can be found in the annals of antiquity, although perhaps ſomewhat highly coloured, of the times of which he wrote and in which he lived. Muſic is always named throughout the Iliad and Odyſſey with rapture; but, as in theſe poems no mention is made of inſtrumental muſic unaccompanied with poetry and ſinging, a conſiderable ſhare no doubt of the poet's praiſes is to be attributed to the poetry. The inſtruments moſt frequently named are the lyre, the flute, and the ſyrinx. The trumpet appears not to have been known at the ſiege of Troy, although it had come to be in uſe in the days of Homer himſelf.

From the time of Homer till that of Sappho, there is almoſt a total blank in literature. Only a few fragments remain of the works of thoſe poets and muſicians whoſe names are preſerved as having flouriſhed between thoſe periods. During the century which elapſed between the days of Sappho and thoſe of Anacreon, no literary productions are preſerved entire. From Anacreon to Pindar there is another chaſm of near a century. Subſequent to this time, the works ſtill extant of the three great tragic poets, Æſchylus, Sophocles, and Euripides, together with thoſe of Plato, Ariſtotle, Ariſtoxenus, Euclid, Theocritus, Callimachus, Polybius, and many others, produced all within a ſpace leſs than three hundred years, diſtinguiſh this illuſtrious and uncommon period as that in which the whole powers of genius ſeem to have been exerted to enlighten and inſtruct mankind in future ages. Then it was that eloquence, poetry, *muſic*, architecture, hiſtory, painting, ſculpture, like the ſpontaneous bloſſoms of nature, flouriſhed without the appearance of labour or of art.

The poets, as well epic as lyric and elegiac, were all likewiſe muſicians; ſo ſtrictly connected were muſic and poetry for many ages. It would afford amuſement to collect the biographical anecdotes of theſe favourites of genius, and to aſſign to each the reſpective improvements made by him in muſic and poetry; but our limits do not admit of ſo extenſive a diſquiſition; for which, therefore, reference muſt be made to the editors and commentators of theſe authors, and to the voluminous hiſtories of muſic publiſhed by Burney and Hawkins.

The invention of notation and muſical characters marked a diſtinguiſhed æra in the progreſs of muſic. There is a diverſity of accounts reſpecting the perſon to whom the honour of that invention is due; but the evidences ſeem to preponderate in favour of Terpander, a celebrated poet and muſician, to whoſe genius muſic is much indebted. He flouriſhed about the 27th Olympiad, or 671 years before Chriſt.

Before that valuable diſcovery, muſic, being entirely traditional, muſt have depended much on the memory and taſte of the performer; and there is an incident mentioned in the accounts handed down to us of the Olympic games, which may ſerve in ſome degree to mark the character of muſic at that time. Lucian relates, that a young flute-player named Harmonides, at his firſt public appearance in theſe games, began a ſolo with ſo violent a blaſt, that he *breathed his laſt breath into his flute, and died on the ſpot*. When to this anecdote, wonderful to us, and almoſt incredible, is added the circumſtance, that the trumpet-players at theſe public exhibitions expreſſed an exceſs of joy when they found their exertions had neither rent their cheeks nor burſt their blood-veſſels, ſome idea may be formed of the noiſy and vociferous ſtyle of muſic which then pleaſed; and from ſuch facts only can any opinion be obtained of the actual ſtate of ancient muſic. In whatever *manner* the flute was played on, there is no doubt that it was long in Greece an inſtrument of high favour, and that the flute-players were held in much eſtimation. The flute uſed by Iſmenias, a celebrated Theban muſician, coſt at Corinth three talents, or 581l. 5s. If, ſays Xenophon, a bad flute-player would paſs for a good one, he muſt, like the great flute-players, expend large ſums on rich furniture, and appear in public with a great retinue of ſervants.

The ancients, it appears, were not leſs extravagant in gratifying the miniſters of their pleaſures than ourſelves. Amœbæus, a harper, was paid an Attic talent, or 193l. 15s. per day for his performance.

It is proper to obſerve, that the celebrated muſicians of Greece who performed in public were of both ſexes; and that the beautiful Lamia, who was taken captive by Demetrius, in the ſea-engagement in which he vanquiſhed Ptolemy Soter, and who herſelf captivated her conqueror, was a public performer, as well as were many other elevated female ſpirits, who are recorded by ancient authors in terms of admiration. This will not ſo much ſurpriſe us, when it is added, that in modern times, at the *conſervatorios*, or muſical ſchools, of Venice, of which there are four, the performers, both vocal and inſtrumental, are *all* females: the organs, the flutes and French horns, the violins, violoncellos, and even the double-baſſes, are all played by women.

The ſtate of muſic among the ROMANS retained but little of the elegance of the Greeks. Their muſic in general was rough and diſcordant, and even their hymeneal odes were full of noiſe and clamour. In the time of Cicero, though the chief part of Greece was ſubdued by the Romans, yet the Greeks preſerved a kind of ſuperiority over their conquerors, and even their conſuls ſubmitted to apply for inſtruction at Athens, and to become diſciples of Greek maſters. We find ſeveral of the Roman emperors wonderfully attached to muſic. Nero and Commodus make a conſiderable figure in the hiſtory of the art. Nero was very early in life inſtructed in muſic. As ſoon as he became emperor, he ſent for Terpnus, a harper in the higheſt eſtimation for his excellence in his profeſſion; and would ſit till very late for many ſucceeding days, to hear him ſing. Thus by degrees he applied himſelf to muſic, till at length he raiſed himſelf ſo high in his own opinion, as to think himſelf ſufficiently ſkilled for a public performer. He inſtituted exerciſes of muſic, poetry, and eloquence, to be performed at Rome every fifth year. In the year 60, he appeared on the ſtage at Naples as a public ſinger, and performed there many days. Among other things, he ſung Canace in Labour, Oreſtes the Matricide, the Blind Oedipus, and the Mad Hercules. His next appearance was in Greece, where he entered the liſts with common muſicians at the Olympic Games, and, by corrupting the judge, or his competitors, he obtained the prize. He travelled through Greece for the ſole purpoſe of diſplaying his ſkill, in ſinging and playing on the cithara. He every-where challenged the beſt performers; and, as may be imagined, was always declared victor. He commanded the ſtatues of other victors to be pulled down and defaced, that their memorials might be forgotten. On his return from Greece, he entered Naples drawn by white horſes, in the manner of conquerors in the ſacred games; and, after having viſited many other cities, he made his public entry into Rome through a breach in the wall, with the greateſt ſplendour and ſolemnity as an Olympic victor, with eighteen hundred prizes, which he had extorted from arbitrators in muſical conteſts. He was dreſſed in a purple veſt, and his robe was adorned with ſtars of gold; on his head he wore the Olympic crown, and in his right hand he carried the Pythian crown. He was met by all ranks of people; ſome thouſand ſlaves followed the chariot of Auguſtus, in which he rode; and the ſtreets were every-where ſtrewed with flowers. He was induced to viſit Greece, by being told that he excelled the moſt celebrated performers on the Grecian ſtage. He was likewiſe flattered into an opinion that he underſtood the poets perfectly; and imagined himſelf ſuperior to them all, though he was mean enough to recite the compoſitions of one of his paraſites, and to paſs them on the public as his own. He was ſo anxious about his voice, that he uſed to lie on his back with a thin plate of lead on his ſtomach; he abſtained from all kind of fruits, and ſuch meats as were thought prejudicial to the voice; he ceaſed to harangue the ſoldiery or ſenate, giving out all his orders in writing; he appointed a *phonoſcus*, or officer to take care of his voice, and would never ſpeak but in his company, whom he ordered, in caſe he ſhould at any time ſeem to ſtrain his voice, to ſtop his mouth with a napkin. But we find that Nero united a fondneſs for the ſofteſt pleaſures with a thirſt for the greateſt cruelties; and that, while he was enjoying the irreſiſtible charms of muſic, he premeditated the moſt dreadful and diabolical ſchemes that ever debaſed the character of man. The emperor Commodus alſo, who was almoſt as great a monſter as Nero, appeared frequently on the ſtage as a public ſinger.

We ſhall travel back to Egypt, in order to introduce another royal tyrant who was a lover of muſic. Ptolemy, the father of Cleopatra, derived his cognomen of *Auletes*, the "flute-player," from his exceſſive attachment to that inſtrument. Strabo ſays of him, that, beſides his debaucheries, he applied himſelf in a particular manner to playing the flute. He had ſuch an opinion of his own abilities, as to inſtitute muſical conteſts at his palaces; and had there the courage to diſpute the prize, publicly, with the firſt muſicians of his time; and, as the dreſs of players on the flute among the ancients was peculiar to that profeſſion, this prince ſubmitted to wear the robe, the buſkins, the crown, and even the bandage and veil, of a tibicen, as may be ſeen on a beautiful amethyſt in the king of France's poſſeſſion, of ineſtimable value, which is ſuppoſed to have been engraved by command of this prince, and worn by him to gratify his vanity on account of his muſical excellence. Indeed the ſurname of Auletes is ſeriouſly given to him by Cicero, and by Strabo. He had likewiſe an opprobrious appellation beſtowed on him, by his own ſubjects, in the Egyptian language, of the ſame import, being called *Pothingos*, ſignifying the ſame as the Greek *Monaulos*, or "ſingle flute." His violent paſſion for muſic, and for the company of muſicians, gained him the name of Νεος Διονυσος, the New Bacchus.

A melancholy truth forces itſelf upon the mind in reading the hiſtory of this prince, and that of the emperor Nero, whom he very much reſembled; which is, that, if the heart is depraved, muſic has not the power to correct it. And, though theſe muſical princes obtained prizes in the public games, they acquired no honour to themſelves, nor did they reflect any upon the profeſſion of muſic. A muſician is ſo diſtant in character and dignity from a ſovereign prince, that the one muſt ſtoop too low, or the other mount too high, before they can approximate; and the public ſuffers with equal impatience, a ſovereign who degrades himſelf, or an artiſt who aſpires at a rank above his ſtation in the community. An inordinate love of fame, or a rapacious deſire of monopolizing all the glory as well as goods of this world to themſelves, muſt have incited theſe princes to enter the liſts in competition with perſons ſo much their inferiors: a paſſion that ſhould always be diſtinguiſhed from the love of muſic, which they might have gratified either from their own performance, or from that of others, in private, much more commodiouſly than on a public ſtage.

Among the Romans, the minſtrels had the privilege of eating in the temple of Jupiter; they wore a long gown as the badge of their profeſſion, and claimed the liberty of walking in proceſſion through the ſtreets of Rome in their robes, three days in every year, exerciſing their art, and indulging themſelves in the moſt extravagant exceſſes.

The northern nations had likewiſe their bards, who were allowed conſiderable rank, and reſpected with a degree of veneration. The laws of the ancient Germans were written in verſe, and the ſtanzas in which they were compoſed were generally ſung. To the ſongs of the bards, or *ſkalds*, we owe the firſt accounts of the Swediſh hiſtory. Theſe poets were held in high eſteem; they were conſtantly admitted to the king's preſence, and frequently were both his generals and miniſters. At a time when the knowledge of letters was not general in Europe, it is not to be wondered at, that many actions thought worthy to be conſigned to poſterity were recorded in words compoſed according to a certain meaſure, by which the ear alone might determine if any word had been omitted or altered.

Princes and great men, when they went from home, always conſidered the honour of their wives ſecure, when under the protection of a *bard*. Ægyſthus could not get the advantage of Clytemneſtra till he had removed the bard who was the guardian of her morals. It is however remarkable, that in the ſpace of twenty-nine years, the favourite bards or muſicians of three queens, belonging to this iſland, fell ſacrifices for departing from the ancient character.—Mark Smeaton, muſician and groom of the chamber to Anne Bullen, was accuſed of being too great a favourite of the queen, for which he was executed May 12, 1536.—Thomas Abel, muſical preceptor and grammarian to queen Catharine, wife to Henry VIII. was hanged and quartered, July 30, 1540, for having written a treatiſe againſt the divorce.—And David Rizzio, ſecretary to Mary queen of Scots, on ſuſpicion of an improper correſpondence with her, was murdered in her preſence, March 9, 1565. Charity, perhaps, may attribute their unhappy exits to the turbulence of the times in which they lived; but we certainly do not ſet muſicians to guard the chaſtity of women in the preſent day.

Among the Saxons and Danes, muſic was in great repute; it is recorded that Alfred the Great introduced himſelf in the character of a harper into the Daniſh camp; and, paſſing unſuſpected through every quarter, he gained admiſſion, by his excellence on that inſtrument, to the principal general; and, diſcovering their great neglect of all military regulations, he ſeized the favourable moment, took the field at the head of his troops, forced the camp, routed them with great ſlaughter, and gained a complete victory. See the article ENGLAND, vol. vi. p. 550.

It is related that the ſacred poet Cadmon, who lived during the heptarchy, had attached himſelf ſo much to ſerious ſtudies, that he neglected muſic; and, being ſometimes in company where the harp uſed to go round, (for it was cuſtomary at feſtivals, for each of the company to ſing and play in his turn,) he left the company, being aſhamed that it ſhould be remarked he was deficient in a branch of education which was eſteemed neceſſary to complete the character of a gentleman. *Bede*, lib. iv. c. 24.

In one of the eccleſiaſtical laws of Canute, the ſecond Daniſh monarch who ſwayed the Engliſh ſceptre, among other things it is ordered, that every Chriſtian learn the Lord's Prayer and the Creed. In this law is a remarkable paſſage, which ſerves in ſome meaſure to ſhow in what general uſe muſic was in thoſe days; it ſays, that "Chriſt himſelf *ſang* the Pater-noſter," for which reaſon perhaps our boys and girls are taught to *ſing* the bible to this day.

Muſic had been ſo long in vogue, that at laſt the word *ſingan* came to ſignify not only to *ſing*, but to *pray*; a proof of this may be found in Oelfrick's Canons to Biſhop Wulfin, where, in his direction for viſiting the ſick, he expreſſes the rule of St. James, "And they ſhall pray over him," in theſe words: *Hi him ofer ſingon*; that is, "they ſhall *ſing* over him." James iv. 14.

Muſic was introduced into the Chriſtian church by Chriſt and his apoſtles, as plainly appears in many parts of the New Teſtament. St. Matthew ſays, that, when our Saviour and his diſciples *had ſung a hymn, they went out into the Mount of Olives.* St. Mark gives the ſame account; and this is recorded to have taken place immediately after our Saviour's inſtitution of his bleſſed ſupper. *Matth.* xxvi. *Mark* xiv. St. Paul, in his Epiſtle to the Epheſians, a people diſtinguiſhed by peculiar vices, remarkable for drunkenneſs and exceſs, admoniſhes them thus: "Be not drunk with wine, wherein is exceſs; but be filled with the Spirit, *ſpeaking to yourſelves in pſalms and hymns, and ſpiritual ſongs, ſinging and making melody in your hearts unto the Lord.*" Eph. v. 8. St. Matthew ſays, "When Jeſus came into the ruler's houſe, he ſaw the *minſtrels* and the people making a noiſe;" that is, they were tumultuouſly bewailing and lamenting the ruler's daughter. *Matth.* ix. 23. In the Acts of the Apoſtles, we read, that "Paul and Silas, being impriſoned, at midnight prayed and *ſang praiſes unto God,* and the priſoners heard them." Acts xvi. 25.

Among the Cambro-Britons, muſic was in ſuch general eſtimation, that the character of a gentleman was conſidered as imperfect, if he was not able to perform ſufficiently on the harp to accompany the Welſh ſongs; and they paid the higheſt reſpect to their bards. The firſt muſician, or bard, was the eighth officer in dignity at the court of the Welſh kings. Muſic was conſidered by them as a regal accompliſhment; and to ſing to the harp was thought neceſſary to form a perfect prince and complete hero. When Edward I. of England conquered Wales, he found that the ſongs of the Welſh bards had ſo powerful an influence over the minds of the people, that he adopted the cruel policy of putting them all to death. Britiſh harpers were in great repute long before the conqueſt. In Doomſday-book is recorded the bounty of William the Conqueror to his bard.

Richard I. in his return from the holy wars in Paleſtine, not thinking it ſafe to paſs through France, ſailed to the Adriatic, and, being ſhipwrecked, landed upon the coaſt of Italy. He put on the habit of a pilgrim, with an intention of taking his journey in this diſguiſe through Germany; but, being diſcovered, he was arreſted and confined cloſe priſoner in a caſtle, by Leopold duke of Auſtria, who ſold him to the emperor Henry VI. No one knew, but thoſe immediately concerned, where he was. Blondel, his minſtrel, or bard, miſſing his royal maſter, wandered through a vaſt extent of country in ſearch of him. After a conſiderable time he came to the caſtle where he was confined; and, enquiring whether there were any priſoners in it, was anſwered that there was one priſoner, who had been there a year, but who he was remained a ſecret. Blondel could not obtain a ſight of the priſoner; but he thought of an expedient to ſatisfy himſelf whether it was his royal maſter or not. Placing himſelf over againſt a window of the tower, wherein the captive was, he began to ſing a Provençal ſong, which they had compoſed together: when Blondel had ſung the firſt part, Richard immediately began the other, and ſung it through; by which means Blondel diſcovered the condition of his ſovereign, and immediately returned to England, that meaſures might be taken for his liberation.

Henry III. in the 26th year of his reign, gave forty ſhillings and a pipe of wine to Richard his harper, and likewiſe a pipe of wine to Beatrice the harper's wife. Edward I. his ſon and ſucceſſor, a ſhort time before he aſcended the throne, took his harper with him to the Holy Land; and, when Edward was wounded with a poiſoned knife at Ptolemais, the muſician ruſhed into the royal apartment and killed the aſſaſſin. But we have not many inſtances of fighting muſicians: their buſineſs, in war, ſeems to be to make others fight. John of Gaunt, king of Caſtile and Leon, and duke of Lancaſter, granted a charter to the minſtrels, bearing date the 22d of Auguſt, in the 4th year of Richard II. intitled, "*Carta de Roy de Minſtraelæ.*" This charter included the counties of Stafford, Derby, Nottingham, Leiceſter, and Warwick; it gave the governor the title of *King of the Minſtrels*. He held court; and had power to apprehend and arreſt, to impannel juries, hear plaints, and determine controverſies between the members of his ſociety. Edward IV. likewiſe granted a charter to the minſtrels, which bears date April 24th, 1469, making them one body and commonalty perpetual; and Charles I. in the 11th year of his reign, granted them another charter. About the year 1330, Philip de Valois granted the minſtrels of Paris a charter; and in the year 1331, Jaques Grure and Hugues le Lorrain, two of the minſtrels, built the church of St. Julien des Ménéſtriers, and the company were allowed patrons, governors, and adminiſtrators, of the ſame. But the licentiouſneſs of their conduct cauſed them to be baniſhed by Philip Auguſtus, in the firſt year of his reign; they were however recalled by his ſucceſſor. In the reign of Charles VI. in the year 1401, the minſtrels obtained another charter; but at length their inſolent demeanour degraded them in the public opinion, and they ſunk into total neglect, and, from being ſeated at the tables of kings and heroes, were neceſſitated to become companions of the loweſt orders of the people.

Among the Iriſh and Scotch, not only their kings, but every petty chief, had anciently their bards attending them; and the chief bards had a number of inferior ones in their train. The duties of the chief bards were to attend their patrons to the field of battle, to animate them by their verſe, and by their muſic; to celebrate their achievements; to write birth-day odes, and funeral elegies; and to ſing their odes to the modulations of the harp. Upon particular occaſions, when they celebrated their victories, or lamented their chiefs ſlain in battle, they would all join in one chorus. Many of theſe odes are yet preſerved; and Mr. O'Halloran mentions, in his Hiſtory of the Antiquities of Ireland, that he has ſeveral of them in his poſſeſſion, and that they are beautiful and animating in the higheſt degree. The Iriſh excelled greatly in compoſition and execution in muſic; Polydore Virgil declares, *Hiberni ſunt muſicæ peritiſſimi.* The bards among the ancient Iriſh compoſed a part of the body of the Literati. The Literati were conſidered as a body of men of the firſt conſequence. The arch-druid, which was a dignity of the higheſt truſt, and conferred on ſome branch of the royal family, was their chief; they were exempt from all civil juriſdiction, and acknowledged no power but that of the arch-druid; they poſſeſſed large eſtates, which were ſettled on them; were not ſubject to public taxes, and their perſons and property were inviolable; it was ſacrilege to moleſt them. After the introduction of Chriſtianity, ſome of the bards ſerved likewiſe in the capacity of clergymen; but, living in the full enjoyment of ſuch ſingular immunities, the members of their order became ſo very numerous, and ſo inſufferably inſolent, that their chiefs retrenched their fraternity, and leſſened their privileges.

The genius of the Scots has in different ages conſpicuouſly appeared, not only in the more uſeful branches of literature, but likewiſe in poetry and muſic; and, as long as a pure and genuine taſte remains, the muſic of the old Scottiſh ſongs will continue to be admired. The melodies, particularly thoſe of a melancholy caſt, are ſo very chaſte, and expreſs the paſſions ſo ſtrongly, that their various ſtrains ſeem to breathe the language of hope, deſpondency, or ſupplication. The vulgar opinion that David Rizzio was the compoſer of the old Scottiſh melodies, is an idle conjecture, which has long ſince been exploded. Many of them were known as far back as James I. of Scotland; and, as this monarch is celebrated by ſeveral hiſtorians, not only as a conſiderable poet, but alſo as a great theoriſt in muſic, and an excellent performer on the lute and harp; ſome have ſtyled him "the father of the Scottiſh ſongs." In the royal exhibition at Somerſet-houſe, in 1793, there was a picture of James playing on the harp; and in the moulding of the under part of the frame was written, "King James the firſt of Scotland, the original inventor of the Scotch muſic." Some have pretended to trace back the old Scottiſh melodies long before the reign of James I. and have thought them to be the wild tunes of the ſhepherds or highland-pipers; and have likewiſe imagined the more modern ones to be the effuſions of the ſtrolling minſtrels. James I. IV. and V. kings of Scotland, were great friends to the bards; poetry and muſic during their reigns were in great eſtimation. The Scottiſh nobility, poſſeſſed of large eſtates and a numerous vaſſalage, lived, during the vigour of the feudal ſyſtem, in the greateſt ſtate and ſplendour; their feſtivals were conducted with the utmoſt magnificence, and every chief of a clan entertained his bard with honourable diſtinction. In the courſe of time, the order of bards degenerated into ſtrolling minſtrels, who wandered though the country with their harps. There was one of them living about fifty years ago, called Roderic Dall: his compoſitions were in great repute among the highland families of diſtinction; he was thought a fine player on the harp, and uſed to ſing in a very pleaſing manner.

Moſt nations have agreed in introducing muſic into their religious ceremonies. That art was early admitted into the rites of the Egyptians and Hebrews; and that it conſtituted a conſiderable part of the Grecian and Roman religious ſervice, appears from the writings of many ancient authors. The ſame pleaſing art ſoon obtained an introduction into the Chriſtian church, as we have already noticed. There remain no ſpecimens of the muſic employed in the worſhip of the primitive Chriſtians; but probably it was at firſt the ſame with that uſed in the pagan rites of the Greeks and Romans. The practice of chanting the pſalms was introduced into the weſtern churches by St. Ambroſe, about 350 years after Chriſt. In the year 600, the method of chanting was improved by St. Gregory the Great. So early as the age of Conſtantine the Great, prior to either of the periods laſt mentioned, when the Chriſtian religion firſt obtained the countenance of power, inſtrumental muſic came to be introduced into the ſervice of the church. In England, according to biſhop Stillingfleet, muſic was employed in the church-ſervice, firſt by St. Auguſtine, and afterwards much improved by St. Dunſtan, who was himſelf an eminent muſician, and who is ſaid to have firſt furniſhed the Engliſh churches and convents with the organ. The *organ*, the moſt majeſtic of all inſtruments, ſeems to have been an improvement of the hydraulicon, or water-organ of the Greeks. The firſt organ ſeen in France, was ſent from Conſtantinople in 757, as a preſent to king Pepin from the emperor Conſtantine Copronymus VI. In Italy, Germany, and England, that inſtrument became frequent about the 10th century.

During the dark ages no work of genius or taſte in any department of ſcience ſeems to have been produced in any part of Europe; and, except in Italy, where the cultivation of muſic was rather more the object of attention, that art was neglected equally with all others. There has always been obſerved a correſpondence in every country between the progreſs of muſic and the cultivation of other arts and ſciences. In the middle ages, therefore, when the moſt fertile provinces of Europe were occupied by the Goths, Huns, Vandals, and other barbarous tribes, whoſe language was as harſh as their manners were ſavage, little perfection, and no improvement, of muſic is to be looked for. Literature, arts, and refinements, were encouraged more early at the courts of the Roman pontiffs than in any other country; and owing to that circumſtance it is, that the ſcale, the counterpoint, the beſt melodies, the dramas religious and ſecular, the chief graces and elegancies of modern muſic, have derived their origin from Italy. In modern times, Italy has been to the reſt of Europe what ancient Greece was to Rome. The Italians have aided the civilization of their conquerors, and enlightened the minds of thoſe whoſe ſuperior proweſs had enſlaved them.

Counterpoint, or muſic in parts, ſeems to be an invention purely modern. The term *harmony* meant in the language of antiquity what is now underſtood by *melody*. Guido, a monk of Arezzo, in Tuſcany, is, in the general opinion, ſuppoſed to have entertained the firſt idea of counterpoint about the year 1022: an art which, ſince his time, has experienced gradual and imperceptible improvements, far exceeding the powers or comprehenſion of any one individual. The term counterpoint, or *contra punctum*, denotes its own etymology and import. Muſical notation was at one time performed by ſmall points; and the preſent mode is only an improvement of that practice. Counterpoint, therefore, denotes the notation of harmony, or muſic in parts, by points oppoſite to each other. The improvements of this important acquiſition to the art of muſic kept pace at firſt with thoſe of the organ; an inſtrument admirably adapted to harmony: and both the one and the other were till the 13th century employed chiefly in ſacred muſic. It was at this period that ſacred muſic began to be cultivated.

Giraldus Cambrenſis, otherwiſe Archbiſhop Baldwin, ranks the muſical proficiency of the Welſh above that of any other nation of the time. It is to be obſerved, that he wrote about the year 1188. "In their muſical concerts (ſays he), they do not ſing in uniſon, like the inhabitants of other countries, but in many different parts; ſo that in a company of ſingers, which one very frequently meets with in Wales, you will hear as many different parts and voices as there are performers, who all at length unite with organic melody, in one conſonance, and the ſoft ſweetneſs of B flat. In the northern diſtrict of Britain, beyond the Humber, and on the borders of Yorkſhire, the inhabitants make uſe of the ſame kind of ſymphonious harmony, but with leſs variety; ſinging only in two parts, one murmuring in the baſs, the other warbling in the acute or treble. Neither of the two nations has acquired this peculiarity by art, but by long habit, which has rendered it natural and familiar; and the practice is now ſo firmly rooted in them, that it is unuſual to hear a ſimple and ſingle melody well ſung; and, what is ſtill more wonderful, the children, even from their infancy, ſing in the ſame manner. As the Engliſh in general do not adopt this mode of ſinging, but only in the northern counties, it ſeems probable that theſe parts of the iſland were more frequently invaded, and remained longer under the dominion of the Danes and Norwegians, from whom the natives contracted their mode of ſinging, as well as of ſpeaking." Hoare's Tranſlation of the Itinerary of Archbiſhop Baldwin, p. 320.

Before the invention of characters for a time, muſic in parts muſt have conſiſted entirely of *ſimple counterpoint*, or note againſt note, as is ſtill practiſed in pſalmody. But the happy diſcovery of a time-table extended infinitely the powers of combined ſounds. The ancients had no other reſource to denote the time and movement in muſic except two characters, (¯ ˘), equivalent to a long and a ſhort ſyllable. But *time* is of ſuch importance in muſic, that it can impart meaning and energy to the repetition of the ſame ſound. Without it, variety of tones has no effect with reſpect to gravity and acuteneſs. The invention of the *time-table* was long aſcribed to John de Muris, (ſee Muris, p. 225.) who flouriſhed about the year 1330; but it is now clearly proved that the inventor was Magiſter Franco, of Cologne, author of a treatiſe De Muſica Menſurabili, about the year 1080, two hundred and fifty years before Muris was born, in which the form of the notes is given, and their relative value explained. This very ſcarce treatiſe is preſerved in the Bodleian library, 842. f. 49. In the ancient primitive time-table, the ſhorteſt notes then in uſe are thoſe which are now the longeſt, namely, the ſemibreve and minim; and theſe, only, as now, were open; the other, longer, notes, were black, like our ſhort notes at preſent.

During almoſt two centuries after the arrangement of the ſcale attributed to Guido, and the invention of the time-table aſcribed to Franco, no remains of ſecular muſic can be diſcovered, except thoſe of the troubadours or Provençal poets. In the ſimple tunes of theſe bards no time indeed is marked, and but little variety of notation appears. It is not difficult, however, to diſcover in them the germs of the future melodies, as well as the poetry, of France and Italy.

In the 13th century melody ſeems to have been little more than plain ſong, or chanting. The notes were ſquare, and written on four lines only, like thoſe of the Romiſh church, in the cliff C, and without any marks for time. It was not till towards the end of St. Louis's reign (1269) that the fifth line began to be added to the ſtave.

As the *lyre* is the favourite inſtrument in Grecian poetry, ſo the *harp* held the ſame place in the eſtimation of the poets who flouriſhed in the period of which we at preſent ſpeak. A poet of the 14th century, Machau, wrote a poem on the ſubject of the harp alone; in which he aſſigns to each of its 25 ſtrings an allegorical name; calling one *liberality*, another *wealth*, &c. The inſtrument which frequently accompanied, and indeed diſputed the pre-eminence with, the harp, was the *viol*. Till the 16th century this inſtrument was furniſhed with frets; after that period it was reduced to four ſtrings; and ſtill, under the denomination of *violin*, holds the firſt place among the treble inſtruments. The viol was played with a bow, and differed entirely from the vielle, the tones of which were produced by the friction of a wheel: the wheel performed the part of a bow.

Britiſh harpers were famous long before the conqueſt: Giraldus Cambrenſis (writing in 1188) ſays, that the Welſh bards, and ſingers, or reciters, have the genealogies of their princes, *written* in the Welſh language, in their ancient and authentic books, and alſo retain them in their memory, from Roderic the Great, from whom they aſcend to Sylvius, Aſcanius, Æneas, and thence to Adam! *Hoare's Itinerary of Archbiſhop Baldwin*. The harp continued to be the favourite inſtrument in Britain for many ages, under the Britiſh, Saxon, Daniſh, and Norman, kings. The *fiddle*, however, is mentioned ſo early as 1200 in the legendary life of St. Chriſtopher.

Chaucer, who in the 14th century enlarged our vocabulary, poliſhed our numbers, and with acquiſitions from France and Italy augmented our ſtore of knowledge, entitles one of his poems the Hiſtory of St. Cecilia; and the celebrated patroneſs of muſic muſt no doubt be mentioned in a hiſtory of the art. Neither in Chaucer, however, nor in any of the hiſtories or legendary accounts of this ſaint, does any thing appear to authoriſe the religious veneration paid to her by the votaries of muſic; nor is it eaſy to diſcover whence it has ariſen. She was a native of heathen Rome, and ſuffered martyrdom for refuſing to renounce the Chriſtian religion, though her ſeveral legends are not agreed either as to the period of her birth or ſufferings, nor as to the particular death to which ſhe was condemned. She is ſtated to have very early made a vow of perpetual chaſtity, but that her parents nevertheleſs compelled her to marry a young man named Valerianus, a heathen, and who, "going to bed on the wedding-night, as," we are told, "*the cuſtom then was*," received information from his ſpouſe that he muſt withdraw from her chamber, as ſhe was nightly viſited by an angel from heaven, who would otherwiſe deſtroy him. Valerianus pleaded for an interview with the angel, which Cecilia explained to him as impoſſible, unleſs he would abjure his pagan errors, and receive baptiſm; adding ſuch "ſweet and convincing arguments" in ſupport of her ſuperior faith, as in the end completely to convince his reaſon. Valerianus, therefore, and his brother Tibertius, to whom he communicated all that had paſſed, were made converts to the true church; ſhortly after which the good huſband found his wife at prayers in her cloſet, and by her ſide, joining in her devotion, an angel clothed with brightneſs, in the ſhape of "*a beautiful youth*;" who aſſured Valerianus, that both his own and his brother's converſion were accepted, and would ſoon be crowned with the "bleſſings of martyrdom." Valerianus and Tibertius were ſoon after *beheaded*, as the angel had *encouraged them to hope;* and Cecilia, ſtill remaining ſtedfaſt, in deſpite of the efforts made to perſuade or intimidate her into idolatry, was, according to ſome authors, thrown into a cauldron of boiling water and ſcalded to death, or, as others ſtate, ſtifled in a dry bath; while ſome aſſert, that, ſurviving the latter attempt on her life, ſhe was beheaded. Her martyrdom is generally regarded as having taken place about the year 230, though there are various authorities which place it ſo early as between 176 and 180. There is at Rome an elegant church dedicated to St. Cecilia, which it would be deemed prophane not to believe to ſtand on the preciſe ſite of the houſe in which ſhe received the viſits of her heavenly admirer; and, conforming to the tale of her having been ſcalded to death, a chapel is ſhown which is declared to have been erected on the ſpot where ſhe met that dreadful fate. To this ſaint, as we have ſaid, has been aſſigned the patronage of eccleſiaſtical melody, from her alleged excellence in ſinging the divine praiſes, to which ſhe joined inſtrumental muſic: and we are not only aſſured, by the members of the papal church, that the angel who was enamoured of her, quitted the celeſtial manſions, overcome by the facination of her harmony; but that, when ſhe was beheaded, he joined in a ſweet melodious concert with other angels, who conducted her to the realms of bliſs. When Stationers' Hall was rebuilt after the fire of London, a ſolemn annual muſical meeting was held there on her anniverſary; and for the celebration of that ſolemnity, Purcell compoſed his juſtly-admired Te-Deum and Jubilate; while it is to be noticed, that Dryden, Pope, and others of our beſt poets, compoſed Odes on St. Cecilia's Day, all joining in her praiſe as the patroneſs of muſic, and, according to poetical licence, alluding to the ſtory of an angelic admirer coming down to viſit her. Dryden's Alexander's Feaſt, which, for its ſtrength and beauty of expreſſion, ſtands pre-eminent, cloſes with the following encomium on this muſical ſaint:

Ere heaving bellows learn'd to blow,
While organs yet were mute;
Timotheus, to his breathing flute
And ſounding lyre,
Could ſwell the ſoul to rage, or kindle ſoft deſire.
At laſt divine Cecilia came,
Inventreſs of the vocal frame;
The ſweet enthuſiaſt, from her ſacred ſtore,
Enlarg'd the former narrow bounds,
And added length to ſolemn ſounds,
With nature's mother-wit, and arts unknown before.
Let old Timotheus yield the prize,
Or both divide the crown;
He rais'd a mortal to the ſkies,
She drew an angel down.

The title of *doctor in muſic*, peculiar to the univerſities of our own country, according to Anthony Wood was firſt conferred in the reign of king Henry II. but this is fixing it at an earlier period than that in which ſuch a title can be proved to have ſubſiſted at Oxford or Cambridge, or to have been conferred on the profeſſors of other ſciences. Spelman, a more nice and accurate ſifter of facts, believes that the appellation of doctor was not among the degrees granted to graduates in England till the reign of king John, about 1207.

It is known that this title was created on the continent about the middle of the twelfth century, as more honourable than that of *magiſter*, or maſter, which was become too common. Its original ſignification implied not only learning and ſkill, but abilities to teach, according to the opinion of Ariſtotle, who ſays, that the moſt certain proof of knowledge in any ſcience is the being able to inſtruct others. John de Muris begins the ſecond part of his Treatiſe on Muſic with the following paſſage: "Princeps philoſophorum Ariſtotles ait in principio mathematicæ ſuæ, omnino ſcientis ſignum eſt poſſe docere." Muſices Tract. MS. Bodl. 300.

But the preciſe time when this creation extended to the faculties of medicine and muſic does not appear; nor can the names be found of thoſe profeſſors in either to whom the title was firſt granted. It has, however, been frequently remarked, (Burney's Hiſt. Muſ. vol. ii.) that during the middle ages muſic was always ranked among the ſeven liberal arts, that it was included in the trivium and quadrivium, and that it was ſtudied by all thoſe who aſpired at reputation for learning throughout Europe. The *trivium* compriſed the three ſciences of grammar, rhetoric, and logic, which teach us how to reaſon with accuracy and preciſion; and the *quadrivium* comprehended arithmetic, muſic, geometry, and aſtronomy, as the four branches of the mathematics which ſilently contemplate whatever is capable of being numbered or meaſured. Now it is remarkable, that, in our univerſities, *muſic* is the only one of theſe ſeven ſciences that confers degrees on its ſtudents; and in other countries, though theology, law, and medicine, beſtow this honour, which are *not* of the ſeven, yet muſic, which *is*, can aſpire at no ſuch diſtinction. However, it evidently appears that the muſic which was regarded as a ſcience by our forefathers, was merely ſpeculative, and ſuch as concerned harmonics, the ratio of muſical intervals, and the philoſophy of ſound; and in this ſenſe muſical degrees are perhaps but ſeldom conferred in our univerſities according to the original ſpirit of the inſtitution. But the preſent ſtatutes, not wholly neglecting the gratification of the ear, are more favourable to practical muſic, and allow candidates for degrees to perform exerciſes, in which ſpecimens may be furniſhed of their ſkill in melody, harmony, and compoſition, where thoſe ſounds are arranged and combined which ſcience meaſures and fixes by calculation.

By the ſtatutes of the univerſity of Oxford, it is required of every proceeder to the degree of bachelor in muſic, that he employ ſeven years in the ſtudy or practice of that faculty, and at the end of that term produce a teſtimonial of his having ſo done, under the hands of credible witneſſes; and that, previous to the ſupplication of his grace towards this degree, he compoſe a piece of five parts, and perform the ſame publicly in the muſic-ſchool, with vocal and inſtrumental muſic, firſt cauſing to be affixed on each of the doors of the great gates of the ſchools a programma, giving three days notice of the day and hour of each performance. Of a bachelor proceeding to the degree of doctor, it is required that he ſhall ſtudy five years after the taking his bachelor's degree, and produce the like proof of his having ſo done as is requiſite in the caſe of a bachelor; and farther, ſhall compoſe a piece in ſix or eight parts, and publicly perform the ſame "tum vocibus quam inſtrumentis etiam muſicis," on ſome day to be appointed for that purpoſe, previouſly notifying the day and hour of performance in the manner before preſcribed. Such exerciſe to be performed in the preſence of Dr. Heyther's profeſſor of muſic. This being done, the candidate ſhall ſupplicate his grace in the convocation-houſe; which being granted by both the Savilian profeſſors, or by ſome maſter of arts deputed by them for that purpoſe, he ſhall be preſented to his degree.

The firſt qualification for the degree either of bachelor or doctor in muſic, was formerly the reading and expounding of certain books in Boethius, as the only writings whence knowledge in the principles of the ſcience could be acquired. (See the ſtatutes of the univerſity.) But the candidate for academical degrees is no longer put to this teſt; he is now to compoſe an exerciſe for voices and inſtruments in ſix or eight parts, which he is to ſubmit to the inſpection of the muſic-profeſſor, and to have publicly performed in the muſic-ſchool of the univerſity.

Wood, in his Faſti, has been able to produce no names of muſicians that have been enrolled among the graduates of the univerſity of Oxford before the ſixteenth century, though we are told of ſeveral at Cambridge of an earlier period. John Hambois is imagined by ſome to be the firſt muſician who was honoured in England with the title of doctor; but, whether this Hambois was a member of this univerſity, or of Oxford, does not appear; nor indeed is it preciſely known at what time he received his diploma. In Hollinſhed's Chronicle, vol. ii. p. 1355, there is an enumeration of the moſt eminent men of learning in the reign of Edward IV. among whom the author includes John Hamboys, "an excellent muſician," adding, that "for his notable cunning therein he was made a doctor of muſic." But academical honours in the faculty of muſic may be traced up to the year 1463, when Henry Habengton was admitted to the degree of bachelor of muſic at Cambridge, and Thomas Saintwix, doctor in muſic, was made maſter of king's college in the ſame univerſity.

After the invention of printing, an art which has tended to diſſeminate knowledge with wonderful rapidity among mankind, muſic, and particularly counterpoint, became an object of high importance. The names of the moſt eminent compoſers who flouriſhed in England, from that time to the reformation, were, Fairfax, William of Newark, Sheryngham, Turges, Baniſter, Tudor, Taverner, Tye, Johnſon, Parſons; to whom may be added John Marbeck, who ſet the whole Engliſh cathedral-ſervice to muſic.

Before the reformation, as there was but one religion, there was but one kind of ſacred muſic in Europe, plain chant, and the deſcant built upon it. That muſic likewiſe was applied to one language only, the Latin. On that account, the compoſitions of Italy, France, Spain, Germany, Flanders, and England, kept pace in a great degree with each other in ſtyle and excellence. All the arts ſeem to have been the companions, if not the produce, of ſucceſsful commerce: they appeared firſt in Italy, then in the Hanſeatic Towns, next in the Netherlands; and during the ſixteenth century, when commerce became general, in every part of Europe.

In the ſixteenth century muſic was an indiſpenſable part of polite education. All the princes of Europe were inſtructed in that art. There is a collection preſerved in manuſcript called *Queen Elizabeth's Virginal Book.* Dr. Burney ſays, that, if her majeſty was able to execute any of the pieces in that book, ſhe muſt have been a great player; and he adds, what we (who have not ſeen them) can hardly credit, that a month's practice would not be ſufficient for any maſter now in Europe to enable him to play one of them to the end. *Tallis,* ſingularly profound in muſical compoſition, and *Bird* his admirable ſcholar, were two of the authors of this famous collection. During the reign of Elizabeth, the genius and learning of the Britiſh muſicians were not inferior to any on the continent; an obſervation ſcarcely applicable at any other period of the hiſtory of this country. Sacred muſic was the principal object to ſtudy all over Europe.

During the ſixteenth century, and a great part of the next, many of the moſt eminent muſical theoriſts of Italy employed their time in ſubtle diviſions of the ſcale, and viſionary purſuits after the ancient Greek genera; nor was this rage wholly confined to theoriſts, but extended itſelf to practical muſicians, ambitious of aſtoniſhing the world by their deep ſcience and ſuperior penetration, though they might have employed their time more profitably to themſelves, and the art they profeſſed, in exploring the latent reſources of harmonic combinations and effects in compoſition, or in refining the tone, heightening the expreſſion, and extending the powers of execution, upon ſome particular inſtrument. Theſe vain enquiries certainly impeded the progreſs of modern muſic; for hardly a ſingle tract or treatiſe was preſented to the public, that was not crowded with circles, ſegments of circles, diagrams, diviſions, ſubdiviſions, commas, modes, genera, ſpecies, and technical terms, drawn from Greek writers, and the now unintelligible and uſeleſs jargon of Boethius.

Don Nicolo Vicentino, publiſhed at Rome, 1555, a work in quarto, entitled *L'Antica Muſica ridotta alla moderna Prattica,* or "Ancient Muſic reduced to modern Practice," with precepts and examples for the *three genera* and their ſpecies; to which is added, an account of a new inſtrument for the moſt perfect performance of muſic, together with many muſical ſecrets. Vicentino, by the title of *Don* prefixed to his name, ſeems to have been an eccleſiaſtic of the Benedictine order. He was a practical muſician, and appears to have known his buſineſs. In his treatiſe he has explained the difficulties in the muſic of his time, with ſuch clearneſs, as would have been uſeful to the ſtudent, and honourable to himſelf, if he had not ſplit upon enharmonic rocks and chromatic quickſands. He gives a circumſtantial account of a diſpute between him and another muſician at Rome, Vicentio Luſitanio, who maintained that modern muſic was entirely diatonic; while Vicentino was of opinion, that the preſent muſic was a mixture of all the three ancient genera, diatonic, chromatic, and enharmonic. This diſpute having produced a wager of two gold crowns, the ſubject was diſcuſſed in the pope's chapel, before judges appointed by the diſputants, and determined againſt Vicentino; whether juſtly or unjuſtly, depends upon the preciſe ſenſe aſſigned to the term *chromatic* by the ſeveral diſputants. Though Vicentino loſt his wager by the deciſion of the judges againſt him, he recovered his honour ſome time after, by his antagoniſt, Luſitanio, recanting, and coming over to his opinion. According to Kircher, Vicentino was the firſt who imagined that the proportions or ratios of the ancient diatonic genus were inadmiſſible in our counterpoint; and tried in his work to eſtabliſh the tetrachord to conſiſt of a major ſemitone, and two tones, one major and one minor; which forms the diatonic ſyntonas of Ptolemy, which Zarlino has propagated, and which is now in general uſe.

Other eminent muſical theoriſts of Italy, who flouriſhed in the ſixteenth century, were, Franchinus Gaſerius, or Gafforio of Lode, Pietro Aaron of Florence, Lodovico Fogliano, Giov. Spatro, Giov. Maria da Terentio Lanfranco, Steffano Uanneo, Anton. Franciſco Done, Luigi Dentice, and Gioſeffo Zarlino, the moſt general, voluminous, and celebrated, theoriſt of that period; Vincentio Galilei, a Florentine nobleman, and father of the great Galileo; Maria Artuſe of Bologna, Oraſeo Tegrini, Pietro Pontio, Lodovico Zacconi, &c. The principal Roman authors were, Giovanni Anmuccia, Giovanni Pierluigi da Paleſtrina, juſtly celebrated, Ruggiero Giovanelli, Luca Marenzio, who brought to perfection madrigals, the moſt cheerful ſpecies of ſecular muſic. Of the Venetians, Adrian Willaeri is allowed to be at the head. At the head of the Neapolitans is deſervedly placed Rocco Rodio. Lombardy might alſo furniſh an ample liſt of eminent muſicians during the ſixteenth century, of whom, however, our limits will not admit of a particular enumeration: the chief of them were, Conſtanzo Porta, Gaſtoldi, Biſſi, Cima, Vecchi, and Monteverde. At Bologna, beſides Artuſi already mentioned, Andrea Rota of the ſame city appears to have been an admirable contrapunctiſt. Franciſco Corteccia, a celebrated organiſt and compoſer, and Aleſſandro Striggio, a lutaniſt, and voluminous compoſer, were the moſt eminent Florentines.

The inhabitants of the extenſive empire of Germany, have long made muſic a part of general education. They hold the place, next to Italy, among the moſt ſucceſsful cultivators of the art. During the ſixteenth century, their moſt eminent compoſers of muſic, and writers on the ſubject, were, Geo. Reiſchius, Michael Roſwick, Andreas Ornithorparchus, Paul Hofhaimer, Luſpeinius, Henry Loris or Lorit, Faber, Fink, Hoſman, and many others whom it would be tedious to mention; and for a particular account of whoſe treatiſes and compoſitions we muſt refer to more voluminous hiſtories of muſic.

In France, during the ſixteenth century, no art except the art of war made much progreſs in improvement. Ronſard, Baif, Goudimel, Claud le Jeune, Caurroy, and Maudit, are the chief French muſicians of that period.

In Spain, muſic was early received into the circle of ſciences in the univerſities. The muſical profeſſorſhip at Salamanca was founded and endowed by Alfonſo the Wiſe, king of Caſtile. One of the moſt celebrated of the Spaniſh muſicians was Francis Salinas, who had been blind from his infancy. He was a native of Burgos. Don Criſtofero Morales, and Tomaſo Lodovico da Vittorio, deſerve likewiſe to be mentioned; and to mention them is all we can attempt; the purpoſe of which is, to excite more minute enquiry by thoſe who may chooſe to inveſtigate the ſubject particularly.

The Netherlands, likewiſe, during the period of which we have been ſpeaking, produced eminent compoſers; of whom we may mention Verletot, Gombert, Arkadelt, Berchem, Richefort or Ricciafort, Crequilon, Le Coq, Canis, Jacob Clemens Non Papa, Pierre Manchicourt, Baſton, Kerl, Rore, Orlandi di Laſſo, and his ſons Ferdinand and Rodolph.

Though organs were known in churches as early as the year 663, yet figured baſſes, that is, what we now call *thorough baſs*, were not practiſed till about 1605, near a thouſand years after. *Stevens's Greſham Lectures*, Trinity Term, 1817.

Ludovico Viadana, the inventor of the expedient of expreſſing chords by figures in accompaniment or thorough-baſs, which the Italians call *baſſo-continuo*, was born at Lodi, in the Milaneſe, the latter end of the ſixteenth century. His firſt preferment was that of maeſtro di capella of the cathedral of Fano, and the ſecond that of Mantua. He was one of the moſt diſtinguiſhed eccleſiaſtical compoſers of his time. Inſtances of the minute beginnings of this expedient have been obſerved previous to the time of Viadana; but he was, doubtleſs, the firſt who drew up general rules for expreſſing harmony by figures over the baſs in 1615. Draudius, in an ample liſt of his eccleſiaſtical compoſitions, which were very numerous, tells us of one that authenticates his claim to this invention, which was a collection of all his choral pieces, of one, two, three, and four, parts; "with a continued and general baſs, adapted to the organ *according to a new invention*, and uſeful for every ſinger as well as organiſt; to which are added ſhort rules and explanations for accompanying a general baſs, according to the new method." Viadana was therefore the firſt who compoſed an organ-baſs different from the voice-part, in the execution of which the new-invented figures enabled the performer to give the fingers the whole harmony of the ſeveral parts of a full compoſition, without ſeeing the ſcore. This practice was introduced into France about the year 1650, by Henry du Mont; (ſee vol. xv. p. 712.)

In the ſeventeenth century, the greateſt performer on the organ and harpſichord, and the beſt compoſer for thoſe inſtruments that Italy could boaſt, was Girolamo Freſcobaldi, a native of Ferrara; but who went early in his life to Rome with his maſter Milleville, where he was elected organiſt of St. Peter's church. All the muſical writers of Italy have celebrated his talents; and his works, which ſtill remain, are indiſputable vouchers of the truth of their encomiums. Quadrio ſays, that early in his youth, as a ſinger, he delighted every ear, and was praiſed by every tongue in the principal cities of Italy. But his chief excellence conſiſted in compoſing and playing on the organ and harpſichord, for which he became ſo renowned, that his works, both printed and manuſcript, were in the hands of all profeſſors and collectors of muſical compoſitions. According to Della Valle, Freſcobaldi was living in 1641. His firſt work, entitled "Ricercari e Canzoni Franceſe, fatte ſopra diverſi obblighi in Partitura, libro primo, 1615," contains the firſt compoſitions we have ſeen printed in ſcore, and with bars. They are likewiſe the firſt regular fugues that we have found upon one ſubject, or of two ſubjects carried on at the ſame time, from the beginning of a movement to the end. *Ricercari* and *fantaſie* preceded ſonatas and concertos, and were the firſt compoſitions expreſsly made for inſtruments, after the invention of counterpoint. The fugues of Freſcobaldi have great merit, if we conſider the ſtate of inſtrumental muſic at the time they were produced: the ſubjects are marked, the harmony pure, and the ſtyle chaſte and clear. Freſcobaldi's maſterly and pleaſing fugues added new dignity and attraction to the organ; they were ſoon imitated all over Europe, and wherever there was an organ and an organiſt poſſeſſed of hand and head capable of emulating a ſtyle ſo ſuitable to the genius of that inſtrument. It is not ſaid in the title page for what inſtruments the ſeveral parts were deſigned; but, as the author was a great organ player, we make no doubt but that they were firſt produced by and for that inſtrument, as all the four parts are ſo compact and cloſely connected, that they are ſtill within the graſp of the two hands. Notwithſtanding many of theſe fugues are upon two, three, and even four, ſubjects, and every learned artifice of inverſion, augmentation, diminution, and moto contrario, is uſed, he has had the dexterity to avoid confuſion. The "Sonate d'Intavolatura di Cimbalo ed Organo partite di diverſe Arie e Corrente, Ballati, Ciaccone, Paſſacagli di Freſcobaldi," publiſhed at Rome in 1637, upon ſix lines for the right hand, and eight for the left, are very full, and of difficult execution. Theſe pieces, being embelliſhed with the faſhionable diviſions and graces of the times, have ſuffered more by age than the ricercari, which have all the ſimplicity of vocal fugues in the church-ſtyle. But even in his variations on old airs, we find more taſte and paſſages which have ſtood their ground, than in any other harpſichord-muſic of the ſame period.

Our Bird, Dr. Bull, and Giles Fornaby, ſeem to have been the greateſt organ-players in Europe during the ſixteenth century, and the beginning of the next, till Freſcobaldi introduced a ſuperior ſtyle of treating the organ, diveſted of rapid and frivolous diviſions which diſgrace that moſt noble and comprehenſive of all inſtruments. Indeed the fugues of Freſcobaldi are worked with ſuch genius and learning as have never been ſurpaſſed, unleſs by thoſe of Sebaſtian Bach, and Handel, which ſeem to include every perfection of which this ingenious and elaborate ſpecies of compoſition is capable. And, if we except theſe fugues, all inſtrumental muſic, particularly that for keyed inſtruments, ſeems to have been in a very rude ſtate at this time throughout Europe. It was dry, difficult, unaccented, and inſipid.

The muſical writers and compoſers who acquired fame in England during the ſeventeenth century, were, Dr. Nathanael Giles, Thomas Tomkins, and his ſon of the ſame name; Elway Bevin, Orlando Gibbons, Dr. William Child, Adrian Batten, Martin Pierſon, William Lawes, Henry Lawes, Dr. John Wilſon, John Hilton, John Playford, Capt. Henry Cook, Pelham Humphrey, John Blow, William Turner, Dr. Chriſtopher Gibbons, Benjamin Rogers, and Henry Purcell. Of theſe, Orlando Gibbons, Pelham Humphrey, and Henry Purcell, far excelled the reſt.

About the end of the reign of James I. a muſic-lecture or profeſſorſhip was founded in the univerſity of Oxford by Dr. William Hychin.

In the reign of Charles I. a charter was granted to the muſicians of Weſtminſter, incorporating them, as the king's muſicians, into a body politic, with powers to proſecute and fine all who, except themſelves, ſhould "attempt to make any benefit or advantage of muſic in England or Wales;" powers which in the ſubſequent reign were put in execution.

About the end of the reign of Charles II. a paſſion ſeems to have been excited in England for the *violin*, and for pieces expreſsly compoſed for it in the Italian manner. This may be pronounced the moſt powerful, the moſt perfect, and the moſt uſeful, inſtrument that has ever been invented. It is in the power of the performer on this ſovereign of the orcheſtra, to make the intonation of all keys equally perfect. We have not been able to trace its antiquity higher than the ſixteenth century. In the beginning of the ſeventeenth century it was hardly known to the Engliſh in ſhape or name; and, therefore, that ſuperior power of expreſſing almoſt all that a human voice can produce, except the articulation of words, ſeemed at this time ſo utterly impoſſible, that it was not thought a gentleman's inſtrument, or one that ſhould be admitted into good company. Viols of various ſizes, with ſix ſtrings, and fretted like the guitar, began indeed to be admitted into chamber-concerts; for, when the performance was public, theſe inſtruments were too feeble for the obtuſe organs of our Gothic anceſtors; and the low ſtate of our regal muſic in the time of Henry VIII. 1530, may be gathered from the accounts given in Hall's and Hollingſhead's Chronicles of a maſque at cardinal Wolſey's palace, Whitehall, where the king was entertained with "a concert of drums and fifes." But this was ſoft muſic compared with that of his heroic daughter Elizabeth, who, according to Henxner, uſed to be regaled during dinner "with twelve trumpets and two kettle-drums; which, together with fifes, cornets, and ſide-drums, made the hall ring for half an hour together." *Itinerarium*, edit. 1757, Strawberry-Hill.

It has long been a diſpute among the learned, whether the violin, or any inſtrument of that kind, as now played with a bow, was known to the ancients. The little figure of Apollo, playing on a kind of violin, with ſomething like a bow, in the grand duke's tribuna at Florence, which Mr. Addiſon and others ſuppoſed to be antique, has been proved to be modern by the abbé Winckelmann and Mr. Mings. So that, as this was the only piece of ſculpture reputed ancient, in which any thing like a bow could be found, nothing more remains to be diſcuſſed relative to that point. With reſpect to an inſtrument with a double neck, beſides that on the broken obeliſk at Rome, and one from a ſepulchral grotto in the ancient city of Tarquinia, there is an antique painting in the collection of William Locke, eſq. which conſiſts of a ſingle figure, ſuppoſed to be a muſe, with an inſtrument nearly in the form of a modern violin, but the neck is much longer, and neither bow nor plectrum are diſcoverable near it. This, as Dr. Burney apprehends, may have been a *chelys*, which was a ſpecies of guitar, either thrummed by the fingers or twanged with a quill. The ancients had, indeed, inſtead of a bow, the *plectrum*; but, in all the repreſentations which painting and ſculpture have preſerved of this implement, it appears too clumſy to produce from the ſtrings tones that had either the ſweetneſs or brilliancy of ſuch as are drawn from them by means of the bow or quill. Dr. Burney ſuppoſes, though it is repreſented ſo maſſive, that it was a quill, or piece of ivory in imitation of one, rather than a ſtick or blunt piece of wood or ivory; and, indeed, Virgil tells us, Æn. vi. 647, that it was made of ivory.

The violin ſeems to have been brought into favour at the court of France before any honourable mention is made of it elſewhere, by the arrival of Baltazarini, a great performer on that inſtrument; who, at the head of a band of violin-players, was ſent from Piedmont by marſhal Briſſac to Catharine de Medicis, and appointed by that princeſs her firſt valet de chambre and ſuperintendant of her muſic. Galilei (Dial. p. 147.) ſays, that "both the violin and baſs, or violoncello, were invented by the Italians, perhaps by the Neapolitans;" and we are unable to confute that opinion. Corelli's violin, long in the poſſeſſion of Giardini, was made in 1578, and the caſe painted by Annibal Caracci, probably ſeveral years after the violin was finiſhed, at which time that painter was but eight years old. Montaigne, who was at Verona in 1580, ſays that "there were organs and violins to accompany the maſs in the great church."

The reſtoration of monarchy and epiſcopacy in England ſeems to have been not only favourable to ſacred muſic, but ſecular; for it may be aſcribed to the particular pleaſure which king Charles II. received from the gay and ſprightly ſound of the violin, that this inſtrument was introduced at court, and the houſes of the nobility and gentry for any other purpoſe than country-dances, and feſtive mirth. Hitherto there ſeem to have been no public concerts; and in the muſic of the chamber, in the performance of *fancies* on inſtruments, which had taken place of vocal madrigals and motets, the violin had no admiſſion, the whole buſineſs having been done by viols. After Charles had, in imitation of Louis XIV. eſtabliſhed a band of twenty-four violins, tenors, and baſſes, inſtead of the viols, lutes, and cornets, of which the court-band uſed to conſiſt, the violin-family began to riſe in reputation, and had an honourable place aſſigned it in the muſic of the court, the theatres, and the chamber; and the ſucceſſion of performers and compoſitions with which the nation was afterwards ſupplied from Italy and elſewhere, ſtimulated the practice and eſtabliſhed the character of that claſs of inſtruments, which have ever ſince been univerſally acknowledged to be the pillars of a well-ordered orcheſtra.

Prior to the year 1600, there was little other muſic except maſſes and madrigals, the two principal diviſions of ſacred and ſecular muſic; but from that time to the preſent dramatic muſic becomes the chief object of attention. The muſic of the church and of the chamber continued indeed to be cultivated in Italy with diligence, and in a learned and elaborate ſtyle, till near the middle of the century; yet a revolution in favour of melody and expreſſion was preparing, even in ſacred muſic, by the ſucceſs of dramatic compoſition, conſiſting of recitation and melodies for a ſingle voice. Such melodies began now to be preferred to muſic of many parts; in which canons, fugues, and full harmony, had been the productions which chiefly employed the maſter's ſtudy and the hearer's attention.

So late as the beginning of the eighteenth century, according to Riccoboni, the performers in the operas of Germany, particularly at Hamburgh, "were all tradeſmen or handicrafts. Your ſhoemaker (ſays he) was often the firſt performer on the ſtage; and you might have bought fruit and ſweatmeats of the ſame girls whom the night before you had ſeen in the characters of Armida or Semiramis." Soon, however, the German opera aroſe to a more reſpectable ſituation; and even during the ſeventeenth century many eminent compoſers flouriſhed in that country.

The liſt of great muſicians which France produced during the early part of the ſame century is not numerous. Muſic ſeems to have been but little cultivated in that country, till the operas of Lulli, under the powerful patronage of Louis XIV. excited public attention. The favourite ſinging-maſter and compoſer of France, about the middle of the ſeventeenth century, was Michael Lambert. John Baptiſt Lulli, ſoon after this time; roſe from the rank of a menial ſervant to fame, opulence, and nobility, by his ſkill in muſical compoſitions. The celebrated ſinger La Rochois was taught ſinging and acting by Lulli.

The Engliſh muſician whom we laſt mentioned was the celebrated Purcell. After his time the chief compoſers for the church were Clarke, Dr. Holden, Dr. Creyghton, Tucker, Aldrich, Golwin, Weldon, Dr. Crofts, Dr. Greene, Boyce, and Nares; to whom may be added John Stanley, who attained high proficiency in muſic, although from two years old totally deprived of ſight.

The annals of modern muſic have hitherto furniſhed no event ſo important to the progreſs of the art as the invention of *recitative*, or dramatic melody; a ſtyle of muſic which reſembles the manner of the ancient rhapſodiſts. See CAVALIERI, vol. iii. p. 921.

As the Orfeo of Politiano was certainly the firſt attempt at the muſical drama now called an *opera*, which was afterwards perfected by Apoſtolo Zeno and Metaſtaſio, we ſhall give the reader a ſketch of the fable. To this drama there is an argument in verſe. The piece is in five acts. Ariſtæus, a ſhepherd, the ſon of Apollo, loved Eurydice, the wife of Orpheus, in ſo violent a manner, that he purſued her in the fields; and in her flight from him ſhe was bitten by a ſerpent, of which ſhe died. Orpheus, by ſinging, ſo ſoftened the infernals, that they ſuffered her to depart, on condition that he would not look behind him. But, not obeying this injunction, ſhe was forced back to hell. Upon his great grief, and reſolution, never to love another female, the Thracian women tore him to pieces.

That no muſical dramas, ſimilar to thoſe that were afterwards known by the names of operas and oratorios, had exiſtence in Italy before the beginning of the ſeventeenth century, ſeems certain by no mention being made of them in the ample liſt given by Angelo Ingegneri, 1598, of all that were then known, in his diſcourſe on the repreſentation of dramatic fables and poetry, where he treats of *tragedie, comedie, paſtorali, piſcatorie, boſchereccie*, &c. all declaimed entirely, except the choruſes, which ſeem to have conſiſted of odes or madrigals, ſet to muſic in parts. Muſic is the *firſt* conſideration in operas and oratorios; but this author ſays, at the end of his book, "I now come to muſic, the *third* and *laſt* part of dramatic repreſentations, which, in comedies and paſtorals without choruſes, will be uſed at pleaſure, in interludes between the acts, to relieve the ſpectators, whoſe minds may be fatigued by the attention they have beſtowed on the fable." We are often told, however, of muſical dramas performed at Rome and Venice, long before this period: and every writer on the ſubject informs us, that Sulpitius, in his dedication of Vitruvius, ſpeaks of a tragedy that was recited and ſung at Rome, under the auſpices of cardinal Riario, in 1480; that Alfonſo della Viola ſet a drama to muſic, in 1560, for the court of Ferrara; and that at Venice there was an opera performed for the enternent of Henry III. of France, at his return from Poland, on the death of his brother Charles IX. in 1574, which was ſet by the famous Zarlino. Theſe, and more, have been confounded by father Meneſtrier with the muſical dramas of later times, after the invention of recitative, which alone ſhould diſtinguiſh the opera and oratorio from every other ſpecies of theatrical exhibition; but theſe early attempts at ſinging were no more dramatic than a maſs, ſervice, full anthem, or madrigal, would be if ſung on a ſtage. Indeed ſome of the dramas, which preceded the year 1600, had choruſes, and intermezzi in meaſured muſic, and incidental ſongs, like our maſques in the reigns of queen Elizabeth, and James I. in which, however, the dialogue was all ſpoken.

Three Florentine noblemen, Giovanni Bardi count of Verona, Pietro Strozzi, and Jacopo Corſi, of good taſte in literature, being diſcontented with every former attempt at perfecting dramatic poetry and exhibitions, determined to unite the beſt lyric poet with the beſt muſician of their time; and therefore choſe Ottavio Rinuccini and Jacopo Peri, their countrymen, to write and ſet to muſic the drama of Dafne, which was performed in the houſe of ſignor Corſi, in 1597, with great applauſe; and this ſeems the true era whence the opera, or drama, *wholly ſet to muſic*, and in which the dialogue was neither ſung in meaſure, nor declaimed without muſic, but *recited* in ſimple muſical tones, which amounted not to ſinging, and yet was different from ſpeech, ſhould be dated. After this ſucceſsful experiment, Rinuccini wrote Euridice and Arianna, two other dramas, for the ſame kind of muſic.

Peri, in his preface, after enumerating the great perſonages who were preſent at the repreſentation of the muſical drama of Euridice at Florence in 1600, and the eminent muſicians to whom his muſic has been ſhown, tells us, that it was ſung by the moſt excellent performers of the time; among whom were ſignor Franceſco Raſi, a nobleman of Arezzo, who repreſented the part of Aminto; ſignor Brandi, Arcetro; and ſignor Melchior Palantrotto, Pluto. He then tells us, that "behind the ſcenes, ſignor Jacopo Corſi played the harpſichord; Don Garzia Montalvo the *chitarone*, or large guitar; Meſſer Giovambatiſta dal Violino the *lira grande*, or viol da gamba; and Meſſer Giovanni Lapi a large lute." Theſe four ſeem to have compoſed the whole band. For, though he celebrates the performance of Giovambatiſta Jacomelli on the violin, neither he, nor any one elſe, played on that inſtrument at the exhibition. He concludes his account of this drama by owning that ſome parts of it were compoſed by Giulio Caccini, detto Romano, "whoſe great merit was known to the whole world," becauſe it was to be ſung by perſons dependent on him; by which he probably means to ſay, that they were his ſcholars. He boaſts of having *opened the road* for others, by his eſſays at dramatic muſic.

Monteverde ſet Rinuccini's Arianna for the court of Mantua, in 1606; the words only were then printed, and reprinted ſeveral times after. This opera was performed at Venice, 1640, to Monteverde's compoſition, and the words again reprinted; but whether the muſic was ever publiſhed, we know not.

In a Diſcourſe by Pietro della Valle on the Muſic of his own time, addreſſed by that celebrated traveller to Lelio Guidiccione 1640, and publiſhed in the ſecond volume of the works of Battiſta Doni, at Florence, 1763, there is an intereſting, clear, and admirable, account of the ſtate of muſic in Italy, but particularly at Rome, during the beginning of the ſeventeenth century. We ſhall tranſcribe his account of the manner in which the firſt opera, or muſical drama, was exhibited at Rome, which is extremely amuſing and curious. "Though no more than five voices or five inſtruments were employed, the exact number which an ambulant cart could contain, yet theſe afforded great variety: as, beſides the dialogue of ſingle voices, ſometimes two or three, and at laſt all the five, ſang together, which had an admirable effect. The muſic of this piece, as may be ſeen in the copies of it that were afterwards printed, though dramatic, was not all in ſimple recitative, which would have been tireſome, but ornamented with beautiful paſſages, and movements in meaſure, without deviating however from the true theatrical ſtyle; on which account it pleaſed extremely, as was manifeſt from the prodigious concourſe of people it drew after it, who, ſo far from being tired, heard it performed five or ſix ſeveral times; there were ſome even who continued to follow our cart to ten or twelve different places where it ſtopt, and who never quitted us as long as we remained in the ſtreet, which was from four o'clock in the evening till after midnight."

This narration ſeems to furniſh a curious circumſtance to the hiſtory of the ſtage, which is, that the firſt opera, or muſical drama, performed in modern Rome, like the firſt tragedy in ancient Greece, was exhibited *in a cart.* It has been imagined by many of the learned, that the recitative in modern operas is a revival of that ſpecies of *melos* in which ancient dramas were ſung; and here the *moveable ſtage* on which it was performed, like that uſed by Theſpis at Athens, furniſhes another reſemblance.

What follows is extremely curious and ſatisfactory concerning a delicate point of muſical hiſtory; which is the firſt eſtabliſhment of *evirati* in the pope's chapel, and the uſe of them in early operas.

It was about the year 1600, or little earlier, that eunuchs were firſt employed for ſinging in Italy. There ſeem to have been no *ſinging* eunuchs in ancient times, unleſs the galli or archigalli, prieſts of Cybele, were ſuch. Caſtration has, however, at all times been practiſed in eaſtern countries for the purpoſe of furniſhing to tyrannic jealouſy guards of female chaſtity; but never, ſo far as modern writers on the ſubject have diſcovered, merely to preſerve the voice, till about the end of the ſixteenth century.

At Rome, the firſt public theatre opened for the exhibition of muſical dramas, in modern times, was the Torra de Nona, where in 1671 Giaſone was performed. In 1679, the opera of Due Amore, ſet by the famous organiſt Bernardo Paſquini, was repreſented at the Sala de Signori Capranica; a theatre which ſtill ſubſiſts. In the year 1680, L'Oneſta negl'Amore was exhibited; the firſt dramatic compoſition of the elegant, profound, and original, Aleſſandro Scarlatti.

The inhabitants of Venice cultivated and encouraged the muſical drama with more zeal and diligence than the reſt of Italy, during the end of the ſeventeenth and beginning of the eighteenth century; yet the opera was not eſtabliſhed at Venice before the year 1637. In that year the firſt regular drama was performed. It was Andromeda.

In 1680 the opera of Berenice was exhited at Padua with ſuch aſtoniſhing ſplendour as to merit notice. There were choruſes of 100 virgins, 100 ſoldiers, 100 horſemen in iron armour, 40 cornets of horſe, 6 trumpeters on horſeback, 6 drummers, 6 enſigns, 6 ſackbuts, 6 great flutes, 6 minſtrels playing on Turkiſh inſtruments, 6 others on octave flutes, 6 pages, 3 ſergeants, 6 cymbaliſts. The were 12 huntſmen, 12 grooms, 6 coachmen for the triumph, 6 others for the proceſſion, 2 lions led by two Turks, 2 elephants by two others, Berenice's triumphal car drawn by 4 horſes, 6 other cars with priſoners and ſpoils drawn by 12 horſes, 6 coaches. Among the ſcenes and repreſentations in the firſt act were, a vaſt plain with two triumphal arches, another plain with pavillions and tents, and a foreſt for the chaſe. In act third, the royal dreſſing-room completely furniſhed, ſtables with 100 live horſes, the portico adorned with tapeſtry, and a ſtupendous palace in perſpective. At the end of the firſt act were repreſentations of every kind of chaſe, wild boar, ſtag, deer, bears. At the end of the third act, an enormous globe, deſcending as from the ſky, divided itſelf into other globes ſuſpended in the air, and ornamented with emblematical figures of time, fame, honour, &c.

Thus we may perceive that, in the firſt operas, muſic was the principal object, with mythological characters in the fable; and that machinery next took the lead, with perſpective and decoration.

It was near fifty years, from the time of Della Valle, before regular airs had admiſſion in theſe early muſical dramas. At firſt they were generally accompanied by the ſinger himſelf on the violin, harp, or violoncello; but, during the mythological paſſion, and the rage for machinery, the only wiſh of the impreſario was to dazzle the eyes and ſtun the ears of the audience. Gods and devils, heroes and heroines, and at length men and women as hiſtory repreſents them, were brought on the ſtage. Theſe ſeveral reforms and changes of taſte in the public, led at length to Apoſtolo Zeno and Metaſtaſio; when the exquiſite airs of Leo, Vinci, and Pergoleſi, with the great vocal talents of Piſtocci, Nicolini, Farinelli, Fauſtina, and Cuzzoni, exalted the lyric ſtage to its higheſt degree of public favour.

The vocal compoſitions of Vinci form an era in dramatic muſic, as he was the firſt among his countrymen who, after the invention of recitative, ſeems to have occaſioned any conſiderable revolution in the muſical drama. The airs in the firſt operas were few and ſimple; but, as ſinging improved, and orcheſtras became more crowded, the voice-parts were more laboured, and the accompaniments more complicated. In proceſs of time, however, poetry ſeems to have ſuffered as much as ever from the pedantry of muſicians, who forgot that the true characteriſtic of dramatic muſic is clearneſs; and that, ſound being the vehicle of poetry and colouring of paſſion, the inſtant the buſineſs of the drama is forgotten, and the words are unintelligible, muſic is ſo totally ſeparated from poetry, that it becomes merely inſtrumental, and the voice-part may as well be performed by a flute or violin, in the orcheſtra, as by one of the characters of the piece on the ſtage. Vinci ſeems to have been the firſt opera-compoſer who ſaw this abſurdity, and, without degrading his art, rendered it the friend, though not the ſlave, to poetry, by ſimplifying and poliſhing melody, and calling the attention of the audience chiefly to the voice-part, by diſentangling it from fugue, complication, and laboured contrivance. In 1726, he ſet Metaſtaſio's Didone Abandonata, which eſtabliſhed his reputation; for in this exquiſite drama, not only the airs were greatly applauded, but the recitative, particularly in the laſt act, which, being chiefly accompanied, had ſuch an effect, that, according to count Algarotti, "Virgil himſelf would have been pleaſed to hear a compoſition ſo animated and ſo terrible, in which the heart and ſoul were at once aſſailed by all the powers of muſic." Saggio ſopra l'Opera in Muſica.

We ſhall mention the reſt of this pleaſing and intelligent compoſer's operas, the airs of which long ſerved as models to other maſters, and are not yet become either ungraceful or inelegant. In 1727, he compoſed Giſmondo, Re di Polonia; in 1728, Catone in Utica; in 1729, Semiramide Riconoſciuta; and in 1730, Aleſſandro nell' Indie, and Artaſerſe; all for the theatres in Rome. The celebrated air at the end of the firſt act of Artaſerſe, *Vo ſolcando un mar crudele,* originally compoſed for Careſtini, is well known, and is perhaps the only production of Vinci by which his merits have been favourably eſtimated in England. In the printed book of the words, Vinci is called "Pro-vice maeſtro della Real Capella di Napoli." We have been able to find no more of his works after this period; ſo that he muſt either have begun late, or been cut off early in life, as his great and durable renown ſeems to have been acquired in the ſhort ſpace of ſix years of his exiſtence; namely, from 1724 to 1730.

The word *opera* ſeems to have been familiar to Engliſh poets from the beginning of the laſt century. *Stilo recitativo,* a recent innovation even in Italy, is mentioned by Ben Johnſon ſo early as 1617. See LANIERE, vol. xi. p. 208. From this time it was uſed in maſques, occaſionally in plays, and in cantatas, before a regular drama wholly ſet to muſic was attempted. By the united abilities of Quinault and Lulli, the opera in France had ariſen to high favour. This circumſtance afforded encouragement to ſeveral attempts at dramatic muſic in England, by ſir William Davenant and others, before the muſic, language, or performers, of Italy, were employed on our ſtage. Pieces ſtyled *dramatic operas*, preceded the Italian opera on the ſtage of England. Theſe were written in Engliſh, and exhibited with a profuſe decoration of ſcenery and habits, and with the beſt ſingers and dancers that could be procured: Pſyche and Circe are entertainments of this kind: the Tempeſt and Macbeth were acted with the ſame accompaniments.

During the ſeventeenth century, whatever attempts were made in muſical drama, the language ſung was always Engliſh. About the end of that century, however, Italian ſinging began to be encouraged, and vocal as well as inſtrumental muſicians from that country began to appear in London.

The firſt muſical drama, performed wholly after the Italian manner, in recitative for the dialogue or narrative parts, and meaſured melody for the airs, was Arſinoë Queen of Cyprus, tranſlated from an Italian opera of the ſame name, written by Stanzani of Bologna. The Engliſh verſion of this opera was ſet to muſic by Thomas Clayton, one of the royal band, in the reign of William and Mary. The ſingers were all Engliſh: Meſſrs. Hughes, Leveredge, and Cook; Mrs. Tofts, Mrs. Croſs, and Mrs. Lyndſey. The tranſlation of Arſinoë, and the muſic to which it is ſet, are execrable; yet ſuch is the charm of novelty, that this miſerable performance, deſerving neither the name of a drama by its poetry, nor of an opera by its muſic, ſuſtained twenty-four repreſentations, and the ſecond year eleven.

Operas, notwithſtanding their deficiencies in poetry, muſic, and performance, (no foreign compoſer or eminent ſinger having yet arrived,) became ſo formidable to our actors at the theatres, that it appears from the Daily Courant, 14th January 1707, a ſubſcription was opened "for the encouragement of the comedians acting in the Haymarket, and to enable them to keep the diverſion of plays under a ſeparate intereſt from operas."

Mr. Addiſon's opera of Roſamond appeared about this time; but the muſic ſet by Clayton is ſo contemptible, that the merit of the poetry, however great, could not of itſelf long ſupport the piece. The choice of ſo mean a compoſer as Clayton, and Mr. Addiſon's partiality to his abilities, betray a want of muſical taſte in that elegant author.

The firſt truly great ſinger who appeared on the ſtage of Great Britain was Cav. Nicolino Grimaldi, commonly known by the name of *Nicolini*. He was a Neapolitan; and, though an harmonious ſinger indeed, was ſtill more eminent as an actor. In the Tatler, N° 115. the elegance and propriety of his action are particularly deſcribed. Recently before his appearance, Valentini Urbani, and a female ſinger called the Baroneſs, arrived. Margarita de l'Epine, who afterwards married Dr. Pepuſch, had been in this country ſome time before.

The firſt opera performed wholly in Italian, and by Italian ſingers, was Almahide. As at preſent, ſo at that time, operas were generally performed twice a-week.

Dr. Crotch calls the productions of the 15th, 16th, and 17th, centuries, *ancient muſic*. We are now, therefore, arrived at the æra of *modern muſic*. We would rather call it the *æra of Handel*.

The year 1710 is diſtinguiſhed by the arrival of George Frederic Handel. This great muſician had been in the ſervice of the elector of Hanover, and came firſt to England on a viſit of curioſity. His fame had reached this country before he himſelf arrived in it; and Aaron Hill, then in the direction of the Haymarket theatre, inſtantly applied to him to compoſe an opera. It was *Rinaldo*; the admirable muſic of which he produced entirely in a fortnight. Soon after this period appeared, for the firſt time as an opera-ſinger, the celebrated Mrs. Anaſtaſia Robinſon. Mrs. Robinſon, who was the daughter of a portrait-painter, had made her firſt public exhibitions in the concerts at York-buildings; and acquired ſo much public favour, that her father was encouraged to take a houſe in Golden-ſquare, for the purpoſe of eſtabliſhing weekly concerts and aſſemblies, in the manner of the Italian *Converſazioni*, which became the reſort of the moſt polite audiences. Soon after, Mrs. Robinſon accepted an engagement at the opera, where her ſalary is ſaid to have been 1000l. and her other emoluments equal to that ſum. She quitted the ſtage in conſequence of her marriage with the earl of Peterborough; as to which, ſee vol. xv. p. 788. The eminent virtues and accompliſhments of this lady, who died at the age of eighty-eight, entitled her to be mentioned even in a compend too ſhort for biography.

The conducting the opera having been found to be more expenſive than profitable, it was entirely ſuſpended from 1717 till 1720, when a fund of 50,000l. for ſupporting and carrying it on was ſubſcribed by the firſt perſonages of the kingdom. The ſubſcribers, of whom king George I. was for 1000l. were formed into a ſociety, and named the Royal Academy of Muſic. Handel was commiſſioned to engage the performers. For that purpoſe he went to Dreſden, where Italian operas were at that performed in the moſt ſplendid manner at the court of Auguſtus elector of Saxony, then king of Poland. Here Handel engaged Seneſino-Berenſtadt, Boſche, and the Duranſtanti.

In the year 1723, the celebrated Franceſca Cuzzoni appeared as a firſt-rate ſinger: and two years afterwards arrived her diſtinguiſhed rival, Fauſtina Bordoni. In a cantabile air, though the notes Cuzzoni added were few, ſhe never loſt an opportunity of enriching the cantilena with the moſt beautiful embelliſhments. Her ſhake was perfect. She poſſeſſed a creative fancy; and ſhe enjoyed the power of occaſionally accelerating and retarding the meaſure in the moſt artificial and able manner, by what is in Italy called *tempo rubato*. Her high notes were unrivalled in clearneſs and ſweetneſs. Her intonations were ſo juſt and ſo fixed, that it ſeemed as if ſhe had not the power to ſing out of tune. Fauſtina Bordoni, wife of the celebrated Saxon compoſer Haſſe, invented a new kind of ſinging, by running diviſions, with a neatneſs and velocity which aſtoniſhed all who heard her. By taking her breath imperceptibly, ſhe had the art of ſuſtaining a note apparently longer than any other ſinger. Her beats and trills were ſtrong and rapid; her intonation perfect. Her profeſſional perfections were enhanced by a beautiful face, fine ſymmetry of figure, and a countenance and geſture on the ſtage which indicated an entire intelligence and poſſeſſion of the ſeveral parts allotted to her. Theſe two angelic performers excited ſo ſignally the attention of the public, that a party-ſpirit between the abettors of the one and of the other was formed, as violent and as inveterate almoſt as any of thoſe that had ever occurred relative to matters either theological or political; yet ſo diſtinct were their ſtyles of ſinging, ſo different their talents, that the praiſe of the one was no reproach to the other.

In leſs than ſeven years, the whole 50,000l. ſubſcribed by the Royal Academy, beſides the produce of admiſſion to non-ſubſcribers, was expended, and the governor and directors of the ſociety relinquiſhed the idea of continuing their engagements; conſequently, at the cloſe of the ſeaſon of 1727, the whole band of ſingers diſperſed. The next year we find Seneſino, Fauſtina, Balde, Cuzzoni, Nicolini, Farinelli, and Boſche, at Venice.

Handel, however, at his own riſk, after a ſuſpenſion of about a twelvemonth, determined to re-commence the opera; and accordingly engaged a band of performers entirely new. Theſe were ſignior Bernacchi, ſignora Merighi, ſignora Strada, ſignior Anibale Pio Fabri, his wife, ſignora Bertoldi, and John Godfrid Reimſchneider.

The ſacred muſical drama, or *oratorio*, was invented early in the fourteenth century. Every nation in Europe ſeems firſt to have had recourſe to religious ſubjects for dramatic exhibitions. The oratorios had been common in Italy during the laſt century. They had never been publicly introduced in England, till Handel, ſtimulated by the rivalſhip of other adventurers, exhibited in 1732 his oratorios of Eſther, and of Acis and Galatea, the laſt of which he had compoſed twelve years before for the duke of Chandos's chapel at Cannons. The moſt formidable oppoſition which Handel met with in his conduct of the Italian opera, was a new theatre for exhibiting theſe operas, opened by ſubſcription in Lincoln's-inn-fields, under the conduct of Nicola Porpora, a reſpectable compoſer. A difference having occurred between Handel and Seneſino; Seneſino had for ſome time deſerted the Haymarket, where Handel managed, and was now engaged at the rival theatre of Lincoln's-inn-fields. To ſupply the place of Seneſino, Handel brought over Giovanni Careſtini, a ſinger of the moſt extenſive powers. His voice was at firſt a powerful and clear ſoprano: afterwards it changed into the fulleſt, fineſt, deepeſt, countertenor that has perhaps ever been heard. Careſtini's perſon was tall, beautiful, and majeſtic. He rendered every thing he ſang intereſting by energy, taſte, and judicious embelliſhment. In the execution of difficult diviſions from the cheſt, his manner was articulate and admirable. It was the opinion of Haſſe, as well as other eminent profeſſors, that whoever had not heard Careſtini, was unacquainted with the moſt perfect ſtyle of ſinging. The opera under the direction of Porpora was removed to the Haymarket, which Handel had left. Handel occupied the theatre of Lincoln's-inn-fields; but his rivals now acquired a vaſt advantage of attraction, by the acceſſion of Carlo Broſchi, called *Farinelli*, to their party, who at this time arrived. This renowned ſinger ſeems to have tranſcended the limits of all anterior vocal excellence. No vocal performer of the eighteenth century has been ſo unanimouſly allowed to poſſeſs an uncommon power, ſweetneſs, extent, and agility, of voice, as Farinelli. Nicolini, Seneſino, and Careſtini, gratified the eye as much by the dignity, grace, and propriety of their action and deportment, as the ear by the judicious uſe of a few notes within the limits of a ſmall compaſs of voice; but Farinelli, without the aſſiſtance of ſignificant geſtures or graceful attitudes, enchanted and aſtoniſhed his hearers, by the force, extent, and mellifluous tones, of the mere organ, when he had nothing to execute, articulate, or expreſs. Though during the time of ſinging he was as motionleſs as a ſtatue, his voice was ſo active, that no intervals were too cloſe, too wide, or too rapid, for his execution.

Handel, having loſt a great part of his fortune by the opera, was under the neceſſity of trying the public gratitude in a benefit, which was not diſgraced by the event. The theatre, for the honour of the nation, was ſo crowded, that he is ſaid to have cleared 800l. After a fruitleſs attempt by Heidegger, the coadjutor of Handel in the conduct of the opera, and patentee of the King's Theatre in the Haymarket, to procure a ſubſcription for continuing it, it was found neceſſary to give up the undertaking.

It was about this time that the ſtatue of Handel was erected in Vauxhall, at the expenſe of Mr. Tyers, proprietor of thoſe gardens. It has often been remarked lately, that Vauxhall opens too ſoon and ſhuts too ſoon. It commonly opens about the 4th of June, before the evenings have become warm. But, about the year 1712, it uſed to open on the 1ſt of May. Are the ſeaſons grown colder, or more backward; or are we become more tender and effeminate? At the time we ſpeak of, however, (Spectator, N° 383.) no mention is made of muſic or lamps; the refreſhments were mead, Burton ale, and hung beef. Sir Roger de Coverley obſerved, that he wiſhed there were more nightingales and fewer ſtrumpets; the ſame remark might be made now, after the lapſe of a full century; to which we may add, that the ſtrumpets, who at that time wore maſks, are now bare-faced enough. Vauxhall had no vocal entertainments till the year 1745, when Mrs. Arne, Mr. Lowe, and Mr. Reinhold, ſen. were engaged. See the article LAMBETH, vol. xii. p. 103.

Ranelagh was planned by Lacy and Garrick, patentees of Drury-lane, about the year 1743 or 4. The performances at firſt were in a morning; and oratorio-choruſſes chiefly furniſhed the bill of fare. Afterwards the doors opened at 6 in the evening, the performances began at 8, and cloſed at 10.

Marybone Gardens flouriſhed from the year 1740 till about 1777. See the article LONDON, vol. xiii. p. 577.

The arrival of Giardini in London (in the year 1750) forms a memorable æra in the hiſtory of muſic in England. His powers on the violin were unequalled. He was a native of Piedmont; and when a boy was a choriſter in the Duomo at Milan, under Paladini, of whom he learned ſinging, the harpſichord, and compoſition; but, having previouſly manifeſted a diſpoſition and partiality for the violin, his father recalled him to Turin, in order to receive inſtructions on that inſtrument of the famous Somis. Though his preference of the violin, upon which he became the greateſt performer in Europe, ſeems a lucky circumſtance, yet he had talents which would have made him a ſuperior harpſichord-player, had he continued to practiſe that inſtrument; but he uſed to ſay, that he was perfectly cured of that vanity at Paris, by the performance of Mad. de St. Maur, a ſcholar of Rameau, who played in ſuch a manner as not only made him aſhamed of his own performance, but determined him never to touch the inſtrument again in ſerious practice. He went to Rome early in his life, and afterwards to Naples, where, having obtained a place among the ripienos in the opera-orcheſtra, he uſed to flouriſh and change paſſages much more frequently than he ought to have done. "However," ſays Giardini, "I acquired great reputation among the ignorant for my impertinence; yet one night, during the opera, Jomelli, who had compoſed it, came into the orcheſtra; and, ſeating himſelf cloſe by me, I determined to give the maeſtro di capella a touch of my taſte and execution; and, in the ſymphony to the next ſong, which was in a pathetic ſtyle, I gave looſe to my fingers and fancy; for which I was rewarded by the compoſer with a—violent ſlap in the face; which," adds Giardini, "was the beſt leſſon I ever received from a great maſter in my life." Jomelli, after this, was however very kind, in a different way, to this young and wonderful muſician.

Giardini came to England in the ſpring of 1750. His firſt public performance in London was at a benefit-concert for old Cuzzoni, who ſung in it with a thin cracked voice, which almoſt frightened out of the little theatre in the Haymarket the ſons of thoſe who had perhaps heard her at the great theatre in the ſame ſtreet with ecſtaſy. But when Giardini played a ſolo and concerto, though there was very little company, the applauſe was ſo loud, long, and furious, as nothing but that beſtowed on Garrick had ever equalled. We had met him the night before (ſays Burney,) at a private concert, with Guadagni and Fraſi, at the houſe of Napthali Franks, eſq. who was himſelf one of the beſt dilettanti performers on the violin at that time; and we were all equally ſurpriſed and delighted with the various powers of Giardini at ſo early a period of his life; when, beſides ſolos of his own compoſition of the moſt brilliant kind, he played ſeveral of Tartini's, in manuſcript, at ſight, and at five or ſix feet diſtance from the notes, as well as if he had never practiſed any thing elſe. "His tone; bow; execution; graceful carriage of himſelf and his inſtrument; performing a manuſcript-piece of a young compoſer in the room, he declared that Giardini had ſo improved it as to make it better than he intended, or had imagined it to be in the warm moments of conception; and laſtly, playing variations extempore, during half an hour, upon a new but extraordinary kind of birth-day minuet, which accidentally lay on the harpſichord—all this threw into the utmoſt aſtoniſhment the whole company, who had never been accuſtomed to hear better performers than Feſting, Brown, and Collet. "Of his academy, ſcholars, manner of leading at the opera and oratorio, performance in private concerts, compoſitions vocal and inſtrumental, we ſhall ſay nothing here, leſt our praiſe ſhould be too much for others, and too little for ourſelves."

He ſoon got poſſeſſion of all the poſts of honour in this country. He was engaged and careſſed at moſt of the private concerts of the principal nobility, gentry, and foreign miniſters; at the Caſtle and King's-Arms concert in the city; and in 1754 he was placed at the head of the opera-band; in which he introduced a new diſcipline, and a new ſtyle of playing, much ſuperior in itſelf, and more congenial with the poetry and muſic of Italy, than the languid manner of his predeceſſor Feſting; who, except one or two ſeaſons, when Veracini was at the head of the orcheſtra, had led the opera-band, from the time that Caſtrucci was diſmiſſed, till the arrival of Mingotti.

In 1756, on the failure and flight of the *impreſario*, or undertaker of the opera, the Mingotti and Giardini joined their intereſts, and acquired for a while the ſovereignty of the opera kingdom; by which gratification of their ambition, theſe two great performers were ſoon brought to the brink of ruin, as others had been before them. In 1762, on Mattei quitting the management of the opera, in ſpite of former miſcarriages, Giardini and Mingotti again reſumed the reins of opera-government. But, after ſtruggling two years againſt the ſtream, during the decline of Mingotti's favour, and after an inauſpicious ſeaſon, at the end of 1763, Giardini and his partner again abdicated their thrones. From this period, Giardini, always hovering over his former lyric kingdom, without the power of invading it, or bringing about a reſtoration, was forced to content himſelf with teaching ladies of rank and faſhion to ſing, and the produce of a great annual benefit. He continued here, unrivalled as a leader, a ſolo-player, and a compoſer for his inſtrument, ſtill augmenting the importance of his inſtrument and our national partiality for the taſte of his county, till the admirable productions and great performers of Germany began to form a Teutonic intereſt and Germanic body here, which, before Giardini's departure from London, became very formidable rivals to him and his Roman legion. At the end of 1784, he went to Italy, and reſided a conſiderable time at Naples, with ſir William Hamilton, one of his firſt ſcholars on the violin after his arrival in England. Remaining on the continent till the ſummer of 1789, Giardini returned to this country, bringing with him a female pupil and her whole family, and attempted a burletta-opera at the little theatre in the Haymarket, while the great opera-houſe, which had been burned down, was rebuilding; but, his *prima donna* not being approved, their ſpeculation failed, and he had her and her whole family on his hands. During his abſence, the public had learned to do without him, and reconciled themſelves to his loſs. His health, hand, and eyes, were impaired; he was dropſical, his legs were of an enormous ſize, and little of his former ſuperiority on his inſtrument remained, but his fine tone. He compoſed quartets that pleaſed very much, but in which he never played any other part in public than the tenor. The ſtyle of muſic was changed; he printed many of his old compoſitions which uſed to pleaſe; but now could gain neither purchaſers nor hearers; ſo that, about the year 1793, he went to Peterſburg with his burletta troop; which ſeems to have pleaſed as little there and at Moſcow as in London; and he is ſaid to have died in this laſt city in great wretchedneſs and poverty!

We muſt now go back to the year 1750, when a comic opera, called *Il Filoſofo di Campagna*, compoſed by Galuppi, was exhibited, which ſurpaſſed in muſical merit all the comic operas performed in England till the *Buona Figliola*. Signora Paganini acquired ſuch fame by the airs allotted to her in that piece, that the crowds at her benefit were beyond example: caps were loſt, gowns torn in pieces, and ladies in full dreſs, without ſervants or carriages, were obliged to walk home, amidſt the merriment of the ſpectators in the ſtreets.

In 1764, the arrival of Giovanni Manzoli marked a ſplendid era in the annals of muſical drama, by conferring on the ſerious opera a degree of importance to which it had ſeldom ariſen ſince its eſtabliſhment in England. Manzoli's voice was the moſt powerful and voluminous ſoprano that had been heard ſince the time of Farinelli: his manner of ſinging was grand, and full of taſte and dignity. At this time Tenducci, who had been in England ſome time before, and was now returned much improved, performed in the ſtation of ſecond man to Manzoli.

In 1769, Gaetano Guadagni made a great figure. He had been in this country early in life (1748), as ſerious man in a burletta-troop of ſingers. His voice was then a full and well-toned counter-tenor; but he ſung wildly and careleſsly. The excellence of his voice, however, attracted the notice of Handel, who aſſigned him the parts in his oratorios, the Meſſiah and Samſon, which had been originally compoſed for Mrs. Cibber. He quitted London for the firſt time about 1753. The higheſt expectations of his abilities were raiſed by fame before his ſecond arrival, at the time of which we treat. As an actor he ſeems to have had no equal on any ſtage in Europe. His figure was uncommonly elegant and noble; his countenance replete with beauty, intelligence, and dignity; his attitudes were full of grace and propriety. But, though his manner of ſinging was perfectly delicate, poliſhed, and refined, his voice ſeemed at firſt to diſappoint every hearer. Thoſe, who remembered it when he was in England before, found it now comparatively thin and feeble; for he had changed it to a ſoprano, and extended its compaſs, from ſix or ſeven notes, to fourteen or fifteen. Let a fluid of ſix feet in depth (ſays Dr. Burney) be ſpread over more than double its uſual ſurface, and it will neceſſarily be ſhallower, though of greater extent. The muſic he ſang was the moſt ſimple imaginable; a few notes with frequent pauſes, and opportunities of being liberated from the compoſer and the band, were all he required. In theſe effuſions, ſeemingly extemporaneous, he diſplayed the native power of melody unaided by harmony or even by uniſonous accompaniment. The pleaſure he communicated proceeded principally from his artful manner of diminiſhing the tones of his voice, like the dying notes of the Æolian harp. Moſt other ſingers affect a ſwell; but Guadagni, after beginning a note with force, attenuated it ſo delicately that it poſſeſſed all the effect of extreme diſtance. During the ſeaſon of 1770 and 1771, Tenducci was the immediate ſucceſſor of Guadagni. This performer, who appeared in England firſt only as a ſinger of the ſecond or third claſs, was during his reſidence in Scotland and Ireland ſo much improved as to be well received as firſt man, not only on the ſtage of London, but in all the great theatres of Italy.

In the firſt opera performed in 1773, appeared Miſs Cecilia Davies, known in Italy by the name of *l'Ingleſina*. Miſs Davies had the honour of being the firſt Engliſh woman who had ever been thought worthy of ſinging on any ſtage in Italy. She even performed with eclat the principal female characters on many of the great theatres of that country. Gabrielli only on the continent was ſaid to ſurpaſs her. Her voice, though not of great volume, was clear and perfectly in tune; her ſhake was open and diſtinct, without the ſluggiſhneſs of the French cadence. The flexibility of her throat rendered her execution equal to the moſt rapid diviſions.

Next ſeaſon introduced Venanzio Rauzzini, a beautiful and animated young man; a compoſer as well as a ſinger. His voice was ſweet, clear, flexible; in compaſs more than two octaves.

The ſeaſon of 1775 and 76 was rendered memorable by the arrival of the celebrated *Caterina Gabrielli*, ſtyled early in life La Cuochetina, being the daughter of a cardinal's cook at Rome. She had, however, in her countenance and deportment no indications of low birth. Her manner and appearance depicted dignity and grace. So great was her reputation before her arrival in England for ſinging and for caprice, that the public, expecting perhaps in both too much, were unwilling to allow her due praiſe for her performance, and were apt to aſcribe every thing ſhe did to pride and inſolence. Her voice, though exquiſite, was not very powerful. Her chief excellence having been the neatneſs and rapidity of her execution, the ſurpriſe of the public muſt have been much diminiſhed on hearing her after miſs Davies, who ſung many of the ſame ſongs in the ſame ſtyle, and with a neatneſs ſo nearly equal, that common hearers could diſtinguiſh no difference. The diſcriminating critic, however, might have diſcovered a ſuperior ſweetneſs in the natural tone of Gabrielli's voice, an elegance in the finiſhing of her muſical periods or paſſages, an accent and preciſion in her diviſions, ſuperior not only to miſs Davies, but to every other ſinger of her time. In ſlow movements her pathetic powers, like thoſe in general of performers moſt renowned for agility, were not exquiſitely touching.

About the time of which we have been treating, the proprietors of the Pantheon ventured to engage *Agujari* at the enormous ſalary of 100l. per night, for ſinging two ſongs only! Lucrezia Agujari was a truly wonderful performer. The lower part of her voice was full, round, and of excellent quality; its compaſs amazing. She had two octaves of fair natural voice, from A on the fifth line in the baſe to A on the ſixth line in the treble, and beyond that *in alt* ſhe had in early youth more than another octave. She has been heard to aſcend to B b *in altiſſimo*. Her ſhake was open and perfect; her intonation true; her execution marked and rapid; the ſtyle of her ſinging, in the natural compaſs of her voice, grand and majeſtic.

In 1776 arrived Anna Pozzi, as ſucceſſor to Gabrielli. She poſſeſſed a voice clear, ſweet, and powerful; but her inexperience, both as an actreſs and as a ſinger, produced a contraſt very unfavourable to her when compared with ſo celebrated a performer as Gabrielli. After that time, however, Pozzi, with more ſtudy and knowledge, became one of the beſt and moſt admired female ſingers in Italy.

After the departure of Agujari for the ſecond and laſt time, the managers of the Pantheon engaged *Georgi* as her ſucceſſor. Her voice was exquiſitely fine, but totally uncultivated. She was afterwards employed as the firſt woman in the operas of the principal cities of Italy.

During the ſeaſon of 1777 and 78, the principal ſingers at the opera in London were Franceſco Roncaglia and Franceſca Danze, afterwards madame Le Brun. Roncaglia poſſeſſed a ſweet-toned voice; but of the three great requiſites of a complete ſtage-ſinger, pathos, grace, and execution, which the Italians call *cantabile, grazioſa*, and *bravura*, he could lay claim only to the ſecond. His voice, a *voce de camera*, when confined to the *grazioſa* in a room, left nothing to wiſh for. Danze had a voice well in tune, a good ſhake, great execution, prodigious compaſs, with great knowledge of muſic; yet the pleaſure her performance imparted was not equal to theſe accompliſhments. But her object was not ſo much pathos and grace, as to ſurpriſe by the imitation of the tone and difficulties of inſtruments.

This year *Gaſparo Pachierotti* appeared in London, whither his high reputation had penetrated long before. The natural tone of his voice was intereſting, ſweet, and pathetic. His compaſs downwards was great, with an aſcent up to B b, and ſometimes to C *in alt*. He poſſeſſed an unbounded fancy, and the power not only of executing the moſt difficult and refined paſſages, but of inventing embelliſhments entirely new. Ferdinando Bertoni, a well-known compoſer, came along with Pacchierotti to England.

About this time dancing became an important branch of the amuſements of the opera-houſe. Mademoiſelle Heinel, Veſtris the younger, and mademoiſelle Baccelli, had, during ſome years, delighted the audience at the opera; but, on the arrival of the elder Veſtris, pleaſure was exchanged for ecſtaſy. In the year 1781, Pacchierotti had by this time been ſo frequently heard, that his ſinging was no impediment to converſation; but, while the elder Veſtris was on the ſtage, not a breath was to be heard. Thoſe lovers of muſic who talked the loudeſt while Pacchierotti ſung, were in agonies of terror leſt the graceful movements of Veſtris, *le dieu de la danſe*, ſhould be diſturbed by audible approbation.

The year 1784 was rendered a memorable æra in the annals of muſic by the ſplendid and magnificent manner in which the birth and genius of Handel were celebrated in Weſtminſter Abbey and the Pantheon, by five performances of pieces ſelected from his own works, and executed by a band of more than five hundred voices and inſtruments, in the preſence and under the immediate auſpices of their majeſties and the firſt perſonages of the kingdom.

No ſooner was the projected undertaking known, but moſt of the practical muſicians in the kingdom eagerly manifeſted their zeal in forwarding it; and many of the moſt eminent profeſſors, waving all claims to precedence in the band, offered to perform in any ſubordinate ſtation in which their talents could be moſt uſeful. It was alſo determined to employ every ſpecies of inſtrument that was capable of producing grand effects. When the orcheſtra and galleries were filled, they conſtituted one of the grandeſt and moſt magnificent ſpectacles which imagination can paint. The preparations for receiving their majeſties, the royal family, and the firſt perſonages of the kingdom, at the eaſt end; the orcheſtra at the weſt; and the public in general, to the number of three and four thouſand perſons, in the area and galleries; ſo judiciouſly correſponded with the architecture of this venerable and beautiful ſtructure, that there was nothing viſible, either for uſe or ornament, which did not harmoniſe with the principal tone of the building, and may not metaphorically be ſaid to have been in perfect tune with it. At the eaſt end of the aiſle, juſt before the back of the choir-organ, a throne was erected in a beautiful gothic ſtyle, correſponding with that of the abbey; and a centre-box, richly decorated, and furniſhed with crimſon ſatin fringed with gold, for the reception of their majeſties and the royal family: on the right hand of which was a box for the biſhops; and on the left, one for the dean and chapter of Weſtminſter. Immediately below theſe boxes were two others; one, on the right, for the families and friends of the directors, and the other for thoſe of the prebendaries of Weſtminſter. Immediately below the king's box was placed one for the directors themſelves, who were all diſtinguiſhed by white wands tipped with gold, and gold medals, ſtruck on the occaſion, appending from white ribbons. Theſe their majeſties likewiſe condeſcended to wear at each performance. Behind and on each ſide of the throne were ſeats for their majeſties' principal attendants, maids of honour, grooms of the bed-chamber, pages, &c. The orcheſtra was built at the oppoſite extremity, aſcending regularly from the height of ſeven feet from the floor to upwards of forty from the baſe of the pillars, and extending from the centre to the top of the ſide-aiſles. At the top of the orcheſtra was placed the occaſional organ in a gothic frame, mounting to and mingling with the patriarchs and prophets repreſented on the weſt window. Nor was this commemoration more wonderful for the ſplendour of its arrangement and the unparalleled multiplicity of voices and inſtruments employed, than for vocal and inſtrumental accuracy and preciſion. The totality of ſound ſeemed to proceed from one voice and one inſtrument; and was declared, by many of the diſtinguiſhed judges and lovers of muſic, to have produced ſenſations of wonder and delight which they never felt before.

The multitude of angels, with a ſhout
Loud as from numbers without number, ſweet
As from bleſs'd voices uttering joy, heaven rung
With jubilee, and loud hoſannas fill'd
Th' eternal regions. *Milton.*

Nor was the celebration leſs diſtinguiſhed by the company which it aſſembled. Such an audience was never before collected together on ſuch an occaſion in any country; among whom not only the king, queen, royal family, nobility, great officers of ſtate, appeared, but the archbiſhops, biſhops, and other dignified clergy, with the heads of the law, the patrons and profeſſors of ſcience, the world of faſhion, and the ſplendour of beauty.

The commemoration of Handel was for ſome time continued as an annual muſical feſtival for charitable purpoſes; in which the number of performers and the perfection of the performances continued to increaſe. In 1785, the band, vocal and inſtrumental, amounted to 616: in 1786 to 741; in 1787 to 806; and in ſubſequent years to ſtill greater numbers. Dr. Burney publiſhed An Account of the Muſical Performances in Commemoration of Handel, for the benefit of the Muſical Fund. The members and guardians of that fund are now incorporated under the title of the Royal Society of Muſicians.

This memorable year is diſtinguiſhed alſo by the arrival of madame Mara, whoſe performance in the commemoration of Handel in Weſtminſter Abbey inſpired an audience of 3000 of the firſt people of the kingdom, not only with pleaſure, but with ecſtacy and rapture.

In 1786 arrived Giovanni Rubinelli. His voice was a true and full contr'alto from C in the middle of the ſcale to the octave above. His ſtyle was grand; his execution neat and diſtinct; his taſte and embelliſhments new, ſelect, and maſterly.

In 1788 a new dance, compoſed by the celebrated M. Noverre, called Cupid and Pſyche, was exhibited along with the opera La Locandiera, which produced an effect ſo uncommon as to deſerve notice. So great was the pleaſure it afforded to the ſpectators, that Noverre was unanimouſly brought on the ſtage and crowned with laurel by the principal performers. This, though common in France, was a new mark of approbation in England.

This year arrived Luige Marcheſi, a ſinger whoſe talents had been the ſubject of praiſe and admiration on every great theatre of Europe. Marcheſi's ſtyle of ſinging was not only elegant and refined in an uncommon degree, but often grand and full of dignity, particularly in his recitative and occaſional low notes. His variety of embelliſhment and facility of running extempore diviſions were wonderful. Many of his graces were elegant, and of his own invention.

The three greateſt Italian ſingers of theſe times were certainly Pacchierotti, Rubinelli, and Marcheſi. In diſcriminating the ſeveral excellencies of theſe great performers, a very reſpectable judge, Dr. Burney, has particularly praiſed the ſweet and touching voice of Pacchierotti; his fine ſhake, his exquiſite taſte, his great fancy, and his divine expreſſion in pathetic ſongs: of Rubinelli's voice, the fullneſs, ſteadineſs, and majeſty, the accuracy of his intonations, his judicious graces: of Marcheſi's voice, the elegance and flexibility, his grandeur in recitative, and his boundleſs fancy and embelliſhments.

During the latter part of the eighteenth century many eminent compoſers flouriſhed on the continent; ſuch as Jomelli, the family of the Bachs, Gluck, Haydn, and many others, whoſe different ſtyles and excellencies would well deſerve to be particularized, would our limits permit. With the ſame regard to brevity, we can do no more than juſt mention the late king of Pruſſia, the late elector of Bavaria; and prince Lobkowitz, as eminent dilettanti of modern times.

Beſides the opera-ſingers whom we have mentioned, our theatres and public gardens have exhibited ſingers of conſiderable merit. In 1730, miſs Rafter, afterwards the celebrated Mrs. Clive, firſt appeared on the ſtage at Drury-lane as a ſinger. The ſame year introduced Cecilia Young, afterwards the wife of Dr. Arne. Her ſtyle of ſinging was infinitely ſuperior to that of any other Engliſh woman of her time.

Our favourite muſicians at this time were, Dubourg, Clegg, Clarke, and Feſting, on the violin; Kytch on the hautboy; Jack Feſting on the German flute; Baſton on the common flute; Karba on the baſſoon; Valentine Snow on the trumpet; and, on the organ, Roſeingrave, Green, Robinſon, Magnus, Jack James, and the blind Stanley, who ſeems to have been preferred. The favourite play-houſe-ſinger was Salway; and, at concerts, Mountier of Chicheſter.

As compoſers for our national theatre, Pepuſch and Galliard ſeem to have been unrivalled till 1732; when two competitors appeared, who were long in poſſeſſion of the public favour: we allude to John Frederic Lampe and Thomas Auguſtus Arne.

In 1736, Mrs. Cibber, who had captivated every hearer of ſenſibility by her native ſweetneſs of voice and powers of expreſſion as a ſinger, made her firſt attempt as a tragic actreſs. The ſame year Beard became a favourite ſinger at Covent-garden. At this time miſs Young, afterwards Mrs. Arne, and her two ſiſters Iſabella and Eſther, were the favourite Engliſh female ſingers.

In 1738 was inſtituted the fund for the ſupport of decayed muſicians and their families.

Of near 150 muſical pieces brought on our national theatres within forty years, 38 of them at leaſt were ſet by Arne. The ſtyle of this compoſer, if analyzed, would perhaps appear to be neither Italian nor Engliſh; but an agreeable mixture of both and of Scotch.

The late earl of Kelly, who died ſome years ago, deſerves particular notice, as poſſeſſed of a very eminent degree of muſical ſcience, far ſuperior to other dilettanti, and perhaps not inferior to any profeſſor of his time. There was no part of theoretical or practical muſic in which he was not thoroughly verſed: he poſſeſſed a ſtrength of hand on the violin, and a genius for compoſition, with which few profeſſors are gifted.

Charles Frederic Abel was an admirable muſician: his performance on the viol da gamba was in every particular complete and perfect. He had a hand which no difficulties could embarraſs; a taſte the moſt refined and delicate; a judgment ſo correct and certain as never to permit a ſingle note to eſcape him without meaning. His compoſitions were eaſy, and elegantly ſimple. In writing, and playing an *adagio*, he was ſuperior to all praiſe; the moſt pleaſing yet learned modulation, the richeſt harmony, the moſt elegant and poliſhed melody, were all expreſſed with the moſt exquiſite feeling, taſte, and ſcience. His manner of playing an adagio ſoon became the model of imitation for all our young performers on bowed inſtruments. Barthelomon, Cervetto, Cramer, and Croſdil, were in this reſpect to be ranked as of his ſchool. All lovers of muſic muſt have lamented that Abel in youth had not attached himſelf to an inſtrument more worthy of his genius, taſte, and learning, than the viol da gamba, that remnant of the old cheſt of viols which during the ſeventeenth century was a neceſſary appendage of a nobleman's or gentleman's family throughout Europe, previous to the admiſſion of violins, tenors, and baſſes, in private houſes or public concerts. Since the death of the late elector of Bavaria, (who was next to Abel the beſt performer on the viol da gamba in Europe,) the inſtrument ſeems quite laid aſide. It was uſed longer in Germany than elſewhere; but the place of gambiſt ſeems now as much ſuppreſſed in the chapels of German princes as that of luteniſt.

The celebrated performer on the violin, Lolle, came to England in 1785. Such was his caprice, that he was ſeldom heard; and ſo eccentric was his ſtyle and compoſition, that by many he was regarded as a madman. He was, however, during his lucid intervals, a very great and expreſſive performer in the ſerious ſtyle.

Mrs. Billington, after diſtinguiſhing herſelf in childhood as a neat and expreſſive performer on the piano-forte, appeared all at once in 1786 as a ſweet and captivating ſinger. In emulation of Mara and other great bravura-ſingers, ſhe at firſt too frequently attempted paſſages of difficulty; afterwards, however, ſo greatly was ſhe improved, that no ſong ſeemed too high or too rapid for her execution. The natural tone of her voice is ſo exquiſitely ſweet, her knowledge of muſic ſo conſiderable, her ſhake ſo true, her cloſes and embelliſhments ſo various, her expreſſions ſo fine, that only envy or apathy could hear her without delight. We believe that ſhe has now declined public exhibition, and has retired to Venice with her ſecond huſband, whoſe name we do not know.

Mr. Braham, an Engliſh Jew, firſt appeared, when a boy, at the Royalty Theatre, about the year 1784. He was then under the inſtruction of Leoni, the original Don Carlos in the Duenna, and a celebrated ſinger. Mr. Braham, however, was adviſed, a few years after, to ſeek for better maſters in Italy, which advice he very judiciouſly took; and the conſequence was, that, on his return to England in 1792, he at once (like Mrs. Billington) took precedence of all the ſingers he found here. This country has, perhaps, never produced a vocal performer of ſuch extenſive powers as Mr. Braham. To a voice of the higheſt capabilities, he unites a deep and extenſive knowledge of muſic, which gives him an eaſy and complete command over the reſources of his art. His powers, ſo far from being, like thoſe of the moſt celebrated contemporary vocal performers, confined to a particular line, are of ſuch a widely-comprehenſive nature, as to enable him to do juſtice to every ſpecies of compoſition, from the ſimple ballad to the moſt refined and ſcientific effort of muſical ſkill. Previous to his appearance on a Britiſh ſtage, it might be ſaid, that the Italian performers had obtained (at leaſt in public opinion) a monopoly of thoſe delicate and difficult touches of the voice, which are now become familiar, and can be employed, in ſome degree, by almoſt every member of a muſical club, who aſpires to the fame of giving pleaſure to his companions. This ornamental ſtyle will, perhaps, in time, come into diſrepute, and give way to that unambitious and bewitching ſimplicity, which conſtituted the great charm in the ſinging of our anceſtors. If Mr. Braham has any fault, it is a too great fondneſs for ornament; and, conſidering the amazing power and extent of his voice, we cannot much wonder that it ſhould be ſo. In fact, he lays it on with ſo much profuſion, that, at times, it is no eaſy matter to recognize the air in which he is engaged. But yet, however we might prefer a more unambitious ſtyle, it is difficult not to applaud, even without deriving great pleaſure from, a voice of ſuch aſtoniſhing compaſs and ſweetneſs. Mr. Braham, as an actor, ſeems, like moſt vocal performers, to go through his part with the moſt lazy indifference; but, the moment he begins to ſing, he appears ſtrongly to feel, and expreſſes with great power, the ſentiments conveyed in the poetry of the piece. There is one excellence in which he is unrivalled, and that is, in conveying the words to the ear of his audience. Both Mrs. Billington and Mr. Braham have been engaged as firſt ſingers at the opera-houſe. The eſtabliſhment of theſe two Engliſh ſingers at the head of a foreign corps of artiſts may be conſidered as a triumph to our national feelings.

Madame Graſſini, who had exhibited her vocal powers in Paris with extraordinary applauſe, arrived in London in 1805, where ſhe excited uncommon admiration. She appeared in Zaire, where the diſplay of her powers not only pleaſed, but aſtoniſhed, when it was conſidered that the compaſs of her voice did not exceed eight or ten notes.

The year following, madame Catalani divided the public attention with Graſſini. This eminent performer is a native of Sinigaglia in Italy, where her father was a ſinger of the comic order. She was educated in a convent. The virtuous impreſſions ſhe there received have continued ever ſince invariably to influence her conduct. Her father ſoon diſcovered the excellence and the value of her vocal powers, which were firſt exhibited on the provincial theatres of Italy. He ſoon carried her to Spain, where ſhe attained very high celebrity. It was there her huſband, M. de Valabregue, firſt paid his addreſſes to her; and it was not till after a perſeverance of ſeven months that he at laſt obtained her conſent to unite her fortunes with his. Her heſitation proceeded from the reluctance of her father, at once to be deprived of his daughter, and of the very great emolument which ſhe brought him. M. de Valabregue had been an officer in the French army under Moreau. From Spain, madame Catalani (for ſhe has retained her father's name) proceeded to Portugal, where ſhe accepted an engagement to come to London. She travelled through France; and at Paris appeared at an occaſional concert, where her fame was ſo great, that the uſual price of admiſſion was trebled. She particularly attracted the attention of that extraordinary man who then held the imperial ſceptre of the continent of Europe. He ordered her a penſion, (its value is about 30l. per annum;) and it was with much difficulty, and only through the interference of the Britiſh ambaſſador (the earl of Lauderdale) then at Paris, that ſhe was permitted to leave that capital, and proceed on her journey. In the dramatic muſic of the opera, this ſinger is far ſuperior to any performer ever heard in this country. Her voice is equal to the moſt difficult execution, while her countenance is intereſting, her geſtures graceful, and her perſon elegant. Her eaſy and clear articulation are particularly ſtriking: her tones are full and liquid: her cadenzas are appropriate and maſterly. She has a practice of rapidly deſcending in half notes, which has excited admiration chiefly by its entire novelty. The clearneſs and rapidity diſplayed by her in chromatic paſſages excite aſtoniſhment; and ſhe combines mellowneſs with diſtinctneſs, a high qualification which Mara firſt taught us to appreciate.

The ſtate of muſical compoſition among us at the preſent day, is a ſubject on which much miſunderſtanding has prevailed. Nothing is more common than to hear people very loud in diſpraiſing all modern, and extolling all ancient, muſic, who would be utterly unable to reliſh, or even to tolerate, a piece in the *real ancient* ſtyle. Solidity is certainly not the characteriſtic of modern muſic: but is it more that of modern literature? or can we wonder that, when the demand for novelty is ſo great, the efforts to anſwer that demand ſhould be ſo numerous; or that, when novelty alone is ſo ſure, as it now is, of creating an intereſt, we find it moſt frequently unaccompanied by any quality of more ſterling value? Beſides, when we compare the modern with the ancient muſic, we are apt to take the one in the maſs, while we poſſeſs the other in a ſtate of great refinement. We forget the reams of former days which have long been devoted to oblivion, and think only of the ſelection which the taſte of ſucceeding years has deemed worthy of being handed down to us. Unfair as this may appear, ſuch is the ſort of compariſon generally made. But, in truth, this art never flouriſhed more than in the days which have not yet paſſed away. Whatever may be the merits of Corelli and Handel, (and we are diſpoſed to admit them to be very tranſcendent,) we can ſcarcely conſent to place thoſe maſters higher than many of the great compoſers who have lived, or who ſtill live, in our own days. Hadyn, Mozart, Storace, Cook, and Arnold, are but lately gone; and Beethoven, Winter, Atwood, and Crotch, yet remain to prove that muſical ſcience and taſte are far from extinct. We do not forget that Callcot is alſo a living compoſer; and we would willingly beſtow our mite of praiſe on his truly original and delightful works; but it is painful to reflect on his excellencies, in the melancholy ſtate of eclipſe in which they are underſtood now to be placed. In mentioning theſe names, we muſt not be underſtood as making any compariſon injurious to others. The liſt might be largely increaſed: but we are willing to take thoſe only whoſe works may be ſaid to pretend to a higher character. The oratorio of the Mount of Olives, the work of Beethoven, recently produced in this country, appears to us to combine more excellencies of different kinds than any other piece of the ſame nature which we ever heard performed. The ſubject of it, indeed, violates ſome of the ſober feelings commonly entertained by us: but, in ſpite of that objection, the richneſs and variety of the ſame muſic will always place it among the moſt admired ſpecimens in the higheſt branch of the art. Dr. Crotch too, has been ſcarcely leſs ſucceſsful in his noble oratorio of Paleſtine.

Muſic, indeed, has of late run into a great variety of ſtyles. The operas and the oratorios of Handel were very ſimilar to each other; ſo much that, we believe, ſeveral of the pieces were occaſionally interchanged by him; and, in particular, the fine air of "Lord! remember David," is well known to have been originally adapted to the profane words of a ſong in an Italian opera. That great maſter was certainly no accurate diſtinguiſher of ſtyles: a character of uniformity pervades all his works; and it is related of him, that he was in the habit of keeping pieces ready made, and adapting and introducing them as occaſion required. In the lighter ſtyles of muſic, ſuited to the theatre and the chamber, we cannot doubt the ſuperiority of the modern ſchool. Not, indeed, that we can much compliment the modern Engliſh ſchool in theſe particular departments. Our theatres are obliged perpetually to recur to the works of Arne and his contemporaries; and our concerns are largely indebted to Purcell, Pepuſch, Harrington, &c. but it is chiefly to the Italian ſchool that we are to look for excellence of theſe kinds. There, indeed, a ſtyle of muſic has grown up which, in our opinion, is ſuperior to any thing of which the ancient ſchool can boaſt. The operas of Mozart, Cimaroſa, Winter, Paër, Guglielmi, and Ferrari, carry the art and ſcience of muſic to its greateſt poſſible height, and exhibit it with its greateſt poſſible varieties. In their works, every thing ſeems ſo naturally conceived, that we are apt to imagine ſome real connexion between the muſic and the ſenſe, till the exiſtence of any ſuch connexion is diſproved by their uſing the ſame airs for different words, and producing the ſame natural effect in all. In the compoſition of muſic for the chamber, the Cramers, Clementi, Aſioli, Shield, Webbe, Danby, and Callcot, (moſt of them Engliſh artiſts,) with ſeveral of thoſe foreigners who have been previouſly named, are pre-eminent.

The revolutions which have taken place in the progreſs of this art are worthy of attention. In the earlieſt age of compoſition, we find it ſtrict in ſcience, and ſimple but not very intereſting in ſtyle; of this age we have little to quote but the chants of the Chriſtian churches. The art, like moſt others, was entirely in the hands of the monks. In the next ſtage, we find conceits of various deſcriptions prevailing in muſic; this was the age of madrigals, rounds, canons, &c. and it was alſo that of acroſtics, and thoſe other conceits for which the Italian ſchool of poetry was then ſo cenſurable. Many of theſe are exquiſitely beautiful: but it is well known that their difficulty is ſuch, that they are ſeldom well performed; and in the generality of them the art and labour are ſo obvious as to cauſe a diſagreeable rather than a pleaſant effect. Out of this evil, however, the next ſtage produced ſtrict and free fugues, imitations, and other pieces of that kind, in which the natural and the artificial effect are more agreeably combined than in moſt other ſorts of compoſition. Throughout the whole, ſimplicity of effect has continued gradually to gain ground. In England, the muſic of Purcell, perhaps, led the way; Corelli and the other Italian maſters of his age followed. Something of air and accompaniment was then practiſed; and, at the next ſtep, we meet with the great point of union of all ſtyles in Handel and his contemporaries. Of the works of Handel indeed, ſome are more remarkable for ſcientific compoſition and ingenious contrivance than for ſimplicity of effect: but the obſervation will not hold as a general rule. He was fond of imitative accompaniment, of which his Acis and Galatea affords the fineſt ſpecimen throughout. The taſte of ſucceeding maſters has been more ſparing of this ſtyle. Among thoſe maſters, the name of Mozart will ever ſtand as one of the moſt conſpicuous; ſince, with a ſtrictneſs not inferior to that of Handel or the older compoſers, but with a genius more fertile and unreſtrained, he has ſucceeded in producing the utmoſt novelty and variety of effect, with the cloſeſt and moſt ſtrictly allowed materials.

Of the miraculous Powers aſcribed to Muſic.

The wonderful ſtories of the effects of muſic, as related by the moſt reſpectable hiſtorians, are ſo numerous, that they would fill a volume. Plutarch, in his Dialogue on Muſic, tells us, that Terpander appeaſed a violent ſedition among the Lacedemonians by the aſſiſtance of muſic; and, in his Life of Solon, he relates, that this celebrated legiſlator excited the Athenians to invade and recover the iſle of Salamis, by ſinging an elegy of his own writing. Peace had been reſtored between them and the Megareans, and they were forbidden even to mention the renewing of the war, on the pain of death; but, by the power of his ſong, they were ſo rouſed to glorious deeds, that they made another effort, and never reſted till they had recovered Salamis, the object of the war. This circumſtance is likewiſe recorded by ſeveral other hiſtorians. Pythagoras, we are informed, ſtopped a young ſtranger, who was intoxicated, from ſetting fire to the houſe of his miſtreſs in a fit of jealouſy; and by ordering the *tibicina*, or female performer, to play in a calm plaintive ſtyle, cooled the impetuoſity of his paſſion, and reſtored him to his reaſon. Empedocles is ſaid to have prevented murder by the ſound of his lyre.

We may, however, very reaſonably admit that the words of Solon's elegy were as powerful towards inciting the Athenians to arms as the muſic; and that Pythagoras's ſtopping the young man from ſetting fire to the houſe of his miſtreſs, Terpander's appeaſing a violent ſedition, and Empedocles' having prevented murder by the power of muſic, mean nothing more than that they were brought to moderation by good advice, conveyed through poetry, aſſiſted by her ſiſter art. The ſtory of Amphion's building the walls of Thebes with the ſound of the lyre, is without doubt allegorical. Dr. Burney has given the following ingenious ſolution: "The ſweetneſs of Amphion's poetical numbers, and the wiſdom of his counſel, prevailed upon a rude and barbarous people to ſubmit to law and order, to live in ſociety, and to defend themſelves from the inſults of ſavage neighbours, by building a wall round the town."

The *medicinal effects* attributed to muſic are ſo numerous, and ſome of them ſo well authenticated, that to reject them totally would be to deny credibility to many reſpectable hiſtorians, philoſophers, and phyſicians. Martianus Capella aſſures us that fevers were removed by ſong, and that Aſclepiades cured deafneſs by the ſound of the trumpet. Plutarch ſays that Thelates the Cretan delivered the Lacedemonians from the peſtilence by the ſweetneſs of his lyre. Many of the ancients ſpeak of muſic as a recipe for every kind of malady. M. Buretti, an eminent phyſician, who made the muſic of the ancients his particular ſtudy, thinks it not only poſſible, but even probable, that muſic, by repeated ſtrokes and vibrations given to the nerves, fibres, and animal ſpirits, may ſometimes alleviate the ſufferings of epileptics and lunatics, and even overcome the moſt violent paroxyſms of thoſe diſorders. (Mem. des Inſcriptions & Belles Lettres.) Buretti is by no means ſingular in his opinion; for many modern philoſophers and phyſicians, as well as ancient poets and hiſtorians, have declared that they have no doubt but that muſic has the power, not only of influencing the mind, but of affecting the nervous ſyſtem in ſuch a manner, as will, in certain diſeaſes, proceed, by ſlow degrees, from giving temporary relief to effecting a perfect cure.

In the Memoirs of the Academy of Sciences for 1707, and the following year, are recorded many accounts of diſeaſes, which, having obſtinately reſiſted all the remedies preſcribed by the moſt able of the faculty, at laſt ſubmitted to the powerful impreſſion of harmony. M. de Mairan, in the memoirs of the ſame academy, ſpeaking of the medicinal powers of muſic, ſays, that it is from the mechanical involuntary connexion between the organs of hearing and the conſonances excited in the outward air, joined to the rapid communication of the vibrations of theſe organs to the whole nervous ſyſtem, that we owe the cure of ſpaſmodic diſorders, and of fevers attended with a delirium and convulſions, of which the memoirs give many examples. Dr. Bianchini, profeſſor of phyſic at Udina, who has ſearched numerous ancient authors, and collected all the paſſages relative to the medicinal application of muſic by Aſclepiades, ſays, that it was conſidered by the Egyptians, Grecians, and Romans, as a remedy both in acute and chronical diſorders; and he adds, that he himſelf had ſeen it applied in ſeveral caſes with great effect.

Dr. Mead, Buretti, Baglivi, and all the moſt eminent of their time throughout Europe, ſeemed not to entertain a doubt but that the bite of the tarantula was to be cured by muſic. It has been aſſerted, that the application of muſic always throws the patient into a violent fit of dancing, which, bringing on a plentiful perſpiration, effects the cure. But, as to this, the evidence for and againſt it will be found under the article ARANEA, vol. ii. p. 32, 3.

Cicero aſſerts the amazing power of muſic; and Plato ſuppoſes that the effect of harmony on the mind, is equal to that of air on the body. Its divine influence is fully proved in the cure of Saul; and Alexander, the ſon of Philip of Macedon, after having conquered the greateſt part of the world, was himſelf ſubdued by the harp of Timotheus.

What is recorded, upon the beſt authority, of Farinelli and Philip V. of Spain, is not at all diſſimilar to the account of David's diſpoſſeſſing Saul of an evil ſpirit. See FARINELLI, vol. vii. p. 217.

The ſtory of Stradella, an Italian muſician, is not only intereſting, but much to our preſent purpoſe. Stradella was compoſer to the opera at Venice; and was very high in the public eſtimation, both as a ſinger and a performer on the harp. He was engaged to inſtruct a young lady of noble family, who, notwithſtanding her illuſtrious deſcent, lived in a criminal intimacy with a Venetian nobleman. Stradella employed his muſical powers ſo effectually, that he perſuaded her to break her connexion with the Venetian, and to be the partner of his future fortune. Upon the diſcovery of their flight, reſentment fired the breaſt of the Venetian, and he immediately commiſſioned two aſſaſſins to enquire their intended deſtination, and to murder both Stradella and his miſtreſs, with the promiſe of a large reward if they ſucceeded. On enquiry they heard they were gone to Rome, they immediately followed them, found that they were arrived in that city, and learnt that the next evening at five o'clock Stradella was to give an oratorio in the church of St. John of Lateran. They determined to be preſent at the performance, and to execute their horrid deſign as Stradella and his miſtreſs were retiring from the church. Stradella appeared; the performance commenced, and their attention was entirely taken up with the muſic, which created in them ſuch wonderful ſenſations, that it got the better of that ſavage ferocity which by long habit was interwoven with their natures; they were ſeized with remorſe; and, in ſhort, they deſiſted from their purpoſe, and determined, inſtead of taking away the lives of the intended victims, to uſe every endeavour for their preſervation. As Stradella and his miſtreſs were returning from church, they followed them, and, addreſſing them in the moſt reſpectful manner, after thanking Stradella for the exquiſite pleaſure they had received from his muſic, they told him of the errand they had been ſent upon, and confeſſed that they went into the church *ſavages*, but that they now felt themſelves *men*, and found they were utterly incapable of carrying their deſign into execution. They earneſtly deſired them to quit Rome immediately; and the aſſaſſins, on their return to Venice, told their employer, that Stradella and Hortentia had fled from Rome the morning of their arrival, and had taken refuge in the city of Turin, where the laws were very ſevere, and therefore they declined following them any farther. Other ruffians, however, "who were not mov'd by concord of ſweet ſounds," were employed; and Stradella and his miſtreſs were murdered not long after.

The following melancholy fact, having been witneſſed by a vaſt multitude of people, can want no farther confirmation to eſtabliſh it. At the firſt grand performance in commemoration of Handel, at Weſtminſter-abbey, Mr. Burton, a celebrated chorus-ſinger, well known in the muſical world, was, immediately upon the commencement of the overture of Eſther, ſo violently agitated, that, after lying in a fainting-fit for ſome time, he expired. At intervals, he was able to ſpeak; and, but a few minutes before he drew his laſt breath, declared that it was the wonderful effect of the muſic which had operated ſo powerfully on him. Dr. Hallifax, then biſhop of Glouceſter, was ſo greatly affected during one of the performances of the Meſſiah, at the commemoration, that he greatly wiſhed to quit the abbey, fearing he ſhould be entirely overcome.

But ſuch caſes as theſe, though well authenticated, are yet to be conſidered as out of the ordinary courſe of things, and extreme inſtances of the power of harmony. Let us, therefore, briefly notice thoſe of a more common nature; which by the concurrent experience and teſtimony of all ages and nations have invariably obtained, in which harmony has exerted her powers, and mingled her mighty but milder charms. And it is obvious, in the firſt place, to remark on theſe, in a caſe of the moſt tranſcendent nature; which is the ſolemn and ſublime ſervices of divine worſhip; in which, when employed, muſic is by way of eminence very properly ſtyled *ſacred*. In this connexion, muſic was held both by ancient philoſophers and legiſlators of ſuch importance, that the regulation of it in their temples was preſcribed by the laws, and ſubject to the inſpection of thoſe who were appointed by the ſtate to ſuperintend this important part, as it was deemed, of the commonwealth. And it was held equally criminal to innovate or diſturb the laws and ordinances of this part of religious ſolemnities, as to violate any other eſtabliſhed law of the ſtate.

This we learn from the high authority of Plato himſelf; and, when it is conſidered how muſic, properly choſen and adapted, is calculated to ſoothe and tranquillize as well as elevate the mind, and thereby fit it in a peculiar manner to receive impreſſions of the higher order, we ſhall evidently perceive how well ſuited this muſt be to the ſolemnities of devotion, by drawing off our attention and affections from the preſent imperfect ſtate, and raiſing them to the contemplation of divine things, the perfections of the Deity, and ſpiritual objects; by which means a holy ardour, reverence, and love, are excited; and the mind diſpoſed to receive with delight and joy inſtruction from the oracles of God delivered in his ſacred temple. No doubt but the mind of Milton had often experienced theſe effects of ſacred muſic; as he, in his Il Penſeroſo, deſcribes them in ſo ſweet and ecſtatic a manner:

> There let the pealing organ blow
> To the full-voic'd quire below,
> In ſervice high and anthems clear,
> As may with ſweetneſs through mine ear
> Diſſolve me into ecſtaſies,
> And bring all heaven before mine eyes.

Nor does harmony deſert us when we are in need of her ſoothing, conſolatory, or ſympathetic, aid: for ſhe, like divine Charity, can "weep with thoſe that weep," as well as "rejoice with thoſe that do rejoice." She willingly joins in the mournful dirge, or in the complaining elegy; and, while ſhe lends her cheerful notes to a Solomon, can graciouſly condeſcend to aſſiſt Ovid, Tibullus, and even Cornelius Gallus, while they pour forth their plaintive ſtrains. And gladly did ſhe join with her favourite Gray, who, in ſome of his ſublime Odes, evinced that he had caught the lofty ſpirit of Pindar. But we have another illuſtrious inſtance of her kind and foſtering influence, in the abſtractedly-refined and lofty genius of Collins; who has in a moſt expreſſive and energetic Ode, aptly and wonderfully deſcribed the powers of harmony. This Ode, with that on the Poetic Character, may be conſidered as ſingular and extraordinary proofs of the exquiſite taſte, refined, elevated, and original, genius, of this exalted poet and depreſſed unhappy man, to whoſe memory, while we give juſt and unqualified praiſe, we cannot but afford a tributary tear of ſorrow; and lament, that the intellectual powers of this Bard, ſo highly worthy of that dignified name, (for of him we may appropriately ſay,

Infundit lumen Camænis, et cedere neſcit
Græcorum ingeniis ;)

ſhould have been, by any earthly cauſe, ſubdued to imbecility; and the brilliant light of his elevated ſoul extinguiſhed before that of his vital lamp! See the article Collins, vol. iv. p. 779.

The late James Harris, eſq. (father of the preſent lord Malmeſbury,) author of Philoſophical Arrangements, Treatiſes on Muſic, Painting, and Poetry, &c. &c. was an excellent muſician both in theory and practice. At Saliſbury, where he reſided, he was looked up to as the father of harmony. In his Diſcourſes on Muſic, &c. he ſays, "The ſuperſtitious have not a more previous tendency to be frightened at the ſight of ſpectres, or a lover to fall into raptures at the ſight of his miſtreſs, than a mind tempered by the power of muſic, to enjoy all ideas which are ſuitable to that temper. And hence the genuine charm of muſic, and the wonders which it works through its great profeſſors. A power, which conſiſts not in imitations, and in raiſing *ideas;* but in raiſing *affections* to which ideas may correſpond. There are few to be found ſo inſenſible, I may even ſay ſo inhumane, as, when good poetry is juſtly ſet to muſic, not in ſome degree to feel the force of ſo amiable an union. But to the muſe's friends, it is a force irreſiſtible, and penetrates into the deepeſt receſſes of the ſoul." Chap. vi. p. 98.

The impreſſions made on us by muſical ſounds are certainly more laſting than the impreſſions made by words, as we know that we often retain every note of the melody of a ſong, when the poetry is forgotten. The Hon. Daines Barrington, in his Miſcellanies, mentions a remarkable inſtance of the laſting impreſſion of muſic. He ſays that, being in company with the late venerable lord Bathurſt, the converſation turning upon muſic, and its impreſſions on the mind, his lordſhip mentioned a famous opera-ſong, ſung by Nicolini, in the reign of queen Anne, which he had heard with great pleaſure; B. requeſted his lordſhip to give him an idea of the air, which he immediately complied with, by ſinging it throughout, and imitated, at the ſame time, the peculiarities of Nicolini. Lord Bathurſt, he ſays, was at that time eighty-ſeven, and probably had not heard this ſong for threeſcore years.

It is an undoubted fact, that animals are ſuſceptible of the power of muſic, particularly horſes and deer; nay, we are told, that even inſects feel its influence. Playford, who was a conſiderable writer on muſic in his day, ſays, that he met a herd of ſtags upon the road to Royſton, about twenty in number, following the ſound of ſome muſical inſtruments: as long as the muſic played, they went forward; but, the moment it ceaſed, they all ſtood ſtill; and by this means they were brought out of Yorkſhire to Hampton-court. The duke of Newcaſtle, in his Book of Horſemanſhip, aſſerts, that horſes are delighted with muſic. Shakeſpeare aſſerts the ſame thing:

For do but note a wild and wanton herd,
Or race of youthful and unhandled colts,
Fetching mad bounds, bellowing and neighing loud,
(Which is the hot condition of their blood;)
If they but hear, perchance, a trumpet ſound,
Or any air of muſic touch their ears,
You ſhall perceive them make a mutual ſtand;
Their ſavage eyes turn'd to a modeſt gaze
By the ſweet power of muſic. *Merchant of Venice.*

The following anecdote was communicated, ſome years ſince, by James Tatlow of Mancheſter, who had it from thoſe who were witneſſes of the fact. On a Sunday evening, five choriſters were walking on the banks of the river Marcey, in Cheſhire; after ſome time, they ſat down on the graſs, and began to ſing an anthem. The field in which they ſat, was terminated at one extremity by a wood, out of which, as they were ſinging, they obſerved a *hare* to paſs with great ſwiftneſs towards the place where they were ſitting, and to ſtop at about twenty yards diſtance from them. She appeared highly delighted with the muſic, often turning up the ſide of her head to liſten with more facility. This uncommon appearance engaged their attention; and, being deſirous to know whether the creature paid them the viſit to partake of the muſic, they finiſhed the piece, and ſat ſtill. As ſoon as the harmonious ſound was over, the hare returned ſlowly towards the wood. When ſhe had reached nearly the end of the field, they began the ſame piece again, at which the hare ſtopped, then turned about, and came ſwiftly back again, to about the ſame diſtance as before; where ſhe ſeemed to liſten with rapture and delight, till they had finiſhed the anthem, when ſhe returned again by a ſlow pace up the field, and re-entered the wood.

There is a curious ſtory given by ſir John Hawkins, in his Hiſtory of Muſic, which will afford ſome entertainment to the reader. He tells us, that a captain of the regiment of Navarre, being confined in priſon, requeſted the governor to give him leave to ſend for his lute, to beguile the ſad hours of his captivity; which favour was granted him. After ſinging and playing ſome time, he was greatly aſtoniſhed to ſee the *mice* come out of their holes, and the *ſpiders* deſcend from their webs, and form a circle round him: he ſtood motionleſs, and, laying down his lute, theſe animals and inſects retired to their lodgings. After ſix days ſilence, in which time he was without a viſitor, he uſed the ſame means, and produced the ſame effect; and, trying the ſame experiment frequently, he always found that, whenever he choſe to perform, he was ſure to be attended by an attentive and numerous company; and by this means he formed an acquaintance which alleviated the diſmal hours of impriſonment.

We have ſeen that muſic, in leſs civilized times than the preſent, was in ſuch great eſtimation, that whoever cultivated letters thought it likewiſe neceſſary to make muſic their particular ſtudy; and it was thought as diſgraceful then for learned men to be ignorant of it, as it is for perſons of rank, at this time, not to be able to write or read. Milton ſays, in his Tractate on Education. "If wiſe men and prophets are not out, muſic has a great power over the diſpoſitions and manners, to ſoothe and make them gentle from ruſtic harſhneſs and diſtempered paſſions." He recommends to his young diſciples the compoſing of their ſpirits by the aid of this divine art.

But, though muſic muſt be allowed to have the power of exalting the ſoul, and of calming and ſubduing the paſſions, and though it has been admired and cultivated by the greateſt philoſophers and moſt eminent perſons in every age and country, yet we cannot agree with our immortal bard, when he ſays that "The man who has not muſic in his ſoul is fit for treaſons, ſtratagems, and ſpoils." Many intelligent and amiable perſons, who poſſeſs in no ſmall degree the milk of human kindneſs, are totally indifferent to its charms; and we learn from hiſtory, that ſome of the greateſt tyrants that ever diſgraced human nature were paſſionately fond of it. We have already mentioned Nero and Commodus, the Roman emperors; and to theſe we may add, Charles IX. of France, and Henry VIII. of England. Henry was a conſiderable muſician, both in theory and practice. Lord Herbert of Cherbury ſays he was a ſcholar, a philoſopher, a divine, and a *curious muſician;* that he compoſed two entire maſſes for the uſe of the royal chapel. There is an anthem of his compoſition now in uſe, which the late Dr. Boyce has preſerved in his excellent compilations of cathedral-muſic.

Muſic, however, has ever been the delight of the moſt accompliſhed in every civilized country, and has always been conſidered the moſt elegant amuſement of polite courts. The Egyptians, the Grecians, the Romans, ſucceſſively cultivated it; and kings, prophets, philoſophers, and legiſlators, have thought it worthy their ſtudy and ſacred patronage. The Greeks, the wiſeſt and moſt philoſophic race of men to be found in the annals of the world, took great care to have their children thoroughly inſtructed in its principles; they thought it of the utmoſt uſe in forming their minds, and exciting in them a love of decency, ſobriety, and virtue. Every poliſhed nation has been found to delight in it, in proportion to the progreſs it has made in the cultivation of the public taſte; its happy effects are frequently felt, by its ſoothing the mind, gratifying the fancy, and engaging the affections. Thoſe who are enliſted in the more active ſcenes of life cannot always be employed in buſineſs; men of erudition and inveſtigation cannot always be engaged in intenſe ſtudy; nor can the moſt gay and auſpicious ſituation in life enable any man to fill up all his hours with equal pleaſure and ſatisfaction. He, therefore, who has a taſte for the polite arts, has always a ſource of inexhauſtible amuſement for his leiſure hours; and is not in danger of being a burden to himſelf, or obliged to ſeek in the company of the profligate or diſſipated, in folly and vice, a remedy for the croſs incidents of life.

Dr. Blair ſays, that the inequality of taſte among men is owing, without doubt, in part, to the different frame of their natures, to nicer organs, and finer internal powers, with which ſome are endowed beyond others. But, if it be owing in part to nature, it is owing to education and culture ſtill more. With reſpect to a taſte for muſic, only the ſimpleſt and plaineſt compoſitions are reliſhed at firſt; uſe and practice extend our pleaſure, teach us to reliſh finer melody, and by degrees enable us to enter into the intricate and compounded pleaſures of harmony. To a common ear, the ſubject of a complex concerto or a chorus, as it is carried through the ſeveral parts, is an unmeaning jumble of ſounds; few but thoſe who are acquainted with the principles of ſimultaneous harmony, or muſic in parts, feel its influence: the ear muſt have been a long time in the habits of improvement, before it can perceive its beauties. It is not the voice of nature, but the language of education.

The public taſte for muſic, as the word is commonly applied, was perhaps never in a higher ſtate at any period than at preſent. The charming muſic lately produced may be ſaid to divide the hearer's attention between pleaſure and aſtoniſhment, and plainly to evince what wonderful effects may be produced by men of knowledge and genius, when patroniſed by a kind, liberal, and indulgent, public.

The cynical and moroſe, we know, regard muſic as a luxury, fit only to unbend and enervate the mind; but a celebrated writer ſays, “There is no agreeable ſenſation we receive either from beauty or ſublimity, but what is capable of being heightened by the power of muſical ſound.” Monteſquieu, one of the firſt names in modern philoſophy, prefers muſic to all other amuſements; he ſays, in his Spirit of Laws, that “it is the only one of all the arts that does not corrupt the mind.” This is high praiſe indeed. The ſame opinion is entertained by Mr. Bruce. In a letter from him to Dr. Burney, giving an account of ſome muſical inſtruments which he found in Abyſſinia, he ſays, “It ſhould be a principal object of mankind to attach the fair ſex by every means to muſic, as it is the only amuſement that may be enjoyed to exceſs, and the heart ſtill remain virtuous and uncorrupted.”

“Of all the enjoyments of ſenſe (ſays an eminent divine) muſic is the leaſt ſenſual. Its effects, if rightly improved, terminate not in the bare pleaſure of amuſement, but ſeem peculiarly adapted to minds ſuſceptible of religious impreſſions; its charms being calculated to inſpire a juſt idea of Him who formed the heart to a reliſh of ſuch delights; who endowed us with capacities to proclaim his praiſes, and taught us how to raiſe our ſouls to the rapture of angels.” Hanway's Travels in Perſia, vol. ii.

Muſic is daily employed in the cauſe of humanity; and the force of her pathetic addreſſes has frequently opened the heart of the miſer, and cauſed the beneficent to indulge in an exceſs of liberality; her accents form the appropriate language of affliction; ſhe can ſupplicate compaſſion for the diſtreſſed and unfortunate, and triumph with the happy and victorious. In various inſtances ſhe has been the means of “relieving the diſtreſſes of the fatherleſs, and making the widow's heart ſing for joy.” She alleviates labour, mitigates pain, and ſoothes the troubled mind:

Is there a heart that muſic cannot melt?
  Alas! how is that rugged heart forlorn!
Is there, who ne'er thoſe myſtic tranſports felt
  Of ſolitude and melancholy born?
He needs not woo the muſe; he is her ſcorn. *Beattie.*

The muſic of Handel has given bread to thouſands, not only in the metropolis, but in many other places where it has been performed for charitable purpoſes. The meetings at Birmingham, Glouceſter, Hereford, Worceſter, Saliſbury, Wincheſter, &c. &c. are indebted to muſic, and chiefly to Handel's, for their ſupport. The Royal Society of Muſicians has accompliſhed what few other ſocieties can boaſt of, the maintenance of their own poor, by which they have taken off a burden from the public. Upon the whole, there cannot remain a doubt of its great utility. As it has, from the earlieſt ages to this day, been introduced into almoſt all religious ſocieties, and been employed in the ſervice of the Almighty, as it is the harbinger of the greateſt Chriſtian virtue—*Charity;* and, as it is capable of diffuſing ſo much rational pleaſure, we may pronounce it a bleſſing given us by the beneficent Parent of the univerſe, to ſoothe the rugged path of this mortal life; and deſigned, when employed in the ſolemn and ſacred ſervice of religion, to allure our ſouls to ſeraphic ſtrains, and to prepare us for that celeſtial concert where myriads of bleſſed ſpirits continually ſtand in the preſence of God;

And with ſongs and choral ſymphonies
Circle his throne rejoicing. *Paradiſe loſt.*

Thus, though tranſiently, we have ſeen how harmony in general and in particular is ſuited to man's nature, accommodated to his pleaſure, improvement, and delight, from the ſublimeſt degree of worſhip of Deity, to that of recording the merits and praiſeworthy deeds of demi-gods, and of all thoſe illuſtrious characters who have by their virtues and wiſdom been benefactors of mankind; how much man is indebted to this ſovereign power in all circumſtances either of proſperous or adverſe nature, to heighten his joy or afford him ſoothing conſolation; to calm the turbulent paſſions of his mind; and, by refining them from all ſordid ingredients, to purify and ſpiritualize it in this world, ſo as to fit it, in concert with religion, for the enjoyment of a more exalted and glorious ſtate.

Of National Music.

Smollet in his Hiſtory of the Hebrides, tells us, that every laird entertains a piper as one of his houſehold, who always marches at the head of the clan, with his bagpipe, to animate them to battle, with martial tunes compoſed for that purpoſe; and that ſuch is the influence of this ſingle inſtrument over theſe people, that the piper, by varying his airs, never fails to melt them into ſorrow or deſpondence, and by a ſudden tranſition of rouſing them to rage and revenge, and a total contempt of danger and of death; nay even in the greateſt emergency of war they will not march a furlong or draw a ſword, without being rouſed by the muſic of this inſtrument. The highlanders have a particular ſpecies of tune, called a *pibroch;* ſome of their tunes (which a ſtranger cannot poſſibly reconcile to his ear) are intended to repreſent a battle; they begin with a grave movement reſembling a march, then gradually quicken into the onſet, run off with a noiſy confuſion and turbulent rapidity, to imitate the conflict and purſuit; after which they ſwell into a few flouriſhes of triumphant joy; and cloſe with the wild and ſlow wailings of a funeral proceſſion. This tranſports and elevates a highlander; it conveys to his mind the ſublime ideas of danger, courage, armies, and military ſervice.

There is a dance in Swiſſerland, which the young ſhepherds perform to a tune, played on a ſort of bagpipe, called the *ranz des vaches;* it is wild, and has little to recommend it, if we judge only by the notes, without being acquainted with the ſtyle and manner of it. But the Swiſs are ſo intoxicated with this tune, that, when abroad in foreign ſervice, if they hear it, they burſt into tears, and often fall ſick, and even die of a paſſionate deſire to viſit their native country; for which reaſon, in ſome armies where they ſerve, the playing of it is prohibited. This tune, the attendant of their early youth, recalls to their memory thoſe days of liberty and peace, thoſe nights of feſtivity, thoſe tender paſſions, which formerly endeared them to their country; and awakens in them ſuch regret, when they compare their former happineſs with the ſcenes of tumult they are engaged in, and the ſervitude they are obliged to undergo, as entirely overpowers them.

Mr. Bruce, in his deſcription of the war-trumpet uſed in Abyſſinia, ſays that it ſounds only one note, in a loud, hoarſe, and terrible, tone; that it is played ſlow, when on a march, or before an enemy appears in ſight; but afterwards it is repeated very quick, and with great violence; and has the effect upon the Abyſſinian ſoldiers of tranſporting them abſolutely to fury and madneſs, and of making them ſo regardleſs of life, as to throw themſelves into the midſt of the enemy, which they do with great gallantry. He adds, that he has often, in time of peace, tried what effect this change would have upon them; and found that none who heard it could continue ſeated, but that all roſe up, and continued the whole time in motion.

Muſic is in a great meaſure under the continual influence of *memory;* that is to ſay, our pleaſure ariſes not merely from quietly liſtening to the notes, but from our aſſociating the ſounds of thoſe notes with events that have happened long before. This may probably be the reaſon why a new piece of muſic, however we may afterwards do juſtice to its beauty, will ſeldom make ſo ſtrong an impreſſion upon us as an old one; and why, in every country, the favourite and real *national muſic* will for ever be obſerved to have a different ſtyle from what it is found to have in another country. Muſic, thus being an accompaniment to our feelings and actions, will therefore diſplay ſounds analogous to them, and conſequently we ſhall prefer not only the national *tune,* but even that tune if ſung in our *own* perhaps ruder language, to the ſweeteſt foreign one. However finer the laſt may be than our own, however more melodious the ſounds may really be than thoſe of the ſongs of our anceſtors, or of our own living national compoſers, we ſhall, perhaps, in liſtening to their finer melody, luxuriouſly ſpend our hour, but feel nothing of that warmth with which we are inſpired at hearing one of our own national airs ſung or played, particularly when unexpected. And thus that national muſic, viz. thoſe ſounds which expreſs the character of a nation, *will never be entirely fettered by general rules of beauty.*

The voluptuouſneſs of Italian national muſic will paint a life chiefly ſpent in pleaſure and enjoyment under the moſt beautiful ſky in the world. Next to it comes the national muſic of the Portugueſe, more like the Italian than any other, exhibiting a nation, where, in the want of genius for invention, an aſtoniſhing talent for imitation, and a taſte in the choice of what they hear and ſee, has become in itſelf a kind of intereſting originality. Spaniſh ſongs bear a reſemblance to both; but they poſſeſs more energy, united to a romantic turn, and to a certain pompouſneſs.

The national muſic of all northern nations has in general a melancholy caſt, appropriate to a cold climate, connected with a ſolitary life; yet there will be found ſome ſtriking differences by which the ſeveral nations are characteriſed. The national ſongs of the Ruſſians will be eaſily diſtinguiſhed both from the Iriſh or Scottiſh, or from the Daniſh or Swediſh. There is in their melody very often a ſort of barbariſm, as the ſong generally does not finiſh in the key-note, a peculiarity which is much leſs obſerved in the tunes of the other northern nations. To hear a regiment of Coſſacks ſing, on entering a town, is like liſtening to the elaborate choruſſes on the ſtage. Whoever knows how difficult it is, ſometimes, to make a chorus go on well, even when executed by thoſe whoſe profeſſion it is, muſt be ſtruck when he hears common ſoldiers perform with the greateſt accuracy. Whether this talent for muſic is inherent in the Coſſacks, or whether it has been the fruit of ſtudy propagated through many centuries, remains doubtful. With this latter ſuppoſition we might perhaps look upon it as being derived from the Grecian canonic ſong in the churches, in the times of the Chriſtian emperors, when, unlike our choral ſongs, in which every body uniformly ſings only the melody, the ſingers executed the different parts according to what they thought agreed with their voice; a cuſtom which is ſtill kept up in the Grecian liturgy. The imperial horn-muſic, where from fifty to ſixty people play upon the horn, and where *each of them, having but one note to ſound,* yet falls in always exactly at the given time, and ſo contributes to the performance of a moſt beautiful concert, is another inſtance of muſical talent which no other country affords.

The great ſoftneſs of the Swediſh, and particularly the Daniſh, language, makes the ſongs of thoſe two nations appear leſs ſtriking than would be the caſe if we could hear the muſic ſet to words of perhaps ruder language. A language may be ſoft without being agreeable, and may ſometimes want the force of the neighbouring idiom without poſſeſſing the luxuriant and voluptuous harmony of words of that of another more ſouthern nation.

Very characteriſtic, and ſeemingly like each other, yet different, are Scottiſh and Iriſh ſongs: though both are melancholy and gloomy, and though both of them paint the diſcomforts of ſolitude, and of a northern climate, yet there is in the Iriſh tunes more variety than in the Scottiſh.

England may perhaps be ſaid not to poſſeſs any national muſic at all. There are, no doubt, ſongs; yet it would be very difficult to recogniſe by them the character of the nation. To find out the cauſe of this ſingular phenomenon, in ſuch a celebrated and great nation, will prove an intereſting enquiry. Baron Arnim reaſons upon it as follows: If by national muſic we are to underſtand the expreſſion of national character, the word *character* can naturally not be underſtood otherwiſe than the repreſentation of the reigning propenſities of ſuch a nation in conjunction with the climate in which it lives, and with its moral and political ſituation, which have operated either in ſuppreſſing or in encouraging theſe propenſities. But we believe it would be difficult to point out any other propenſities of the generality of the Engliſh nation than the love of virtue, country, and domeſtic happineſs, every effuſion of enthuſiaſm being already ſuppreſſed as well by religion and education as by habit. Theſe propenſities of the mind, united to a mild climate and to a happy and glorious conſtitution, will therefore make the ſongs of the Engliſh appear gay, although not very lively; and therefore pleaſing, without producing a deep and laſting impreſſion.

But, allowing the Engliſh to have ſtrong paſſions, there exiſts another reaſon which explains the abſence of national muſic in them; that is, *they have no leiſure to exhale their character in ſongs.* The national ſong has always been the offspring either of ſolitude, and of activity of mind and feelings, without the means of applying it to action, or of a voluptuous *doing nothing*—the *dolce far niente* of the ſouthern nations, the effect of a hot climate, which, joined to an ardent imagination, invites us either to the enjoyment of repoſe, or to the gratification of the ſenſes. The difference between the ſtanzas of a ſong and the verſes of many an epic or didactic poem is therefore almoſt the ſame as that between a national melody and a great muſical compoſition, in which harmony is often found ſuperior to melody. A genuine national ſong is, as well in words as in melody, the produce of imagination. A poet, who in ſuch a moment is conſcious of the rules of poetry, a muſical compoſer who remembers thoſe of muſic, will never produce any thing that may pleaſe the whole nation, whatever be the occupation in which individuals are engaged. The moſt national ſong that ever has been generally ſung throughout a country is the German air, ***Freut euch des lebens***, "Life let us cheriſh." The compoſer (his name is Nageli) is only known as the author of ſome learned muſic, which perhaps will one day be forgotten; but his ſong will laſt for ever, as well as our famous air of "God ſave the king."

In the ſouthern climates, the youth ſits in the evening before his door; the heat of the day is over, the air is tranquil, no idea of rain or ſtorm, the ſun is ſetting with a glow, the ſky produces a finer blue than anywhere elſe; he is perhaps awaiting the fair one who will bleſs him with love, or is retracing paſt happineſs. What reaſons for inſpiration of rapturous ideas! Words and muſic come almoſt together. Who can think of a rule, or count the ſyllables on his fingers? and yet the ſong is enchanting. If the northern nations do not ſee their ſun ſo glowing, if their ſky has not the ſame blue, and if the plants do not exhale the ſame fragrance in their country, yet not leſs does the want of all this inſpire the poet and the compoſer, and produce ſimilar effects, although the *ſtyle* of the compoſitions will be found very different. It is therefore not always what nations *enjoy*, but very often a conſciouſneſs of the *privation*, which produces their ſongs; and it is this which accounts for the melancholy and gloomy caſt of moſt of them. The moſt fertile inſpirer of ſongs is Solitude. Among all mountainous countries there will of courſe be found ſpecimens of national muſic; and, from the times of old until ours, the ſhepherds have not only invented ſongs, but their occupations have even ſupplied the theme of many a muſical compoſition.

It is for theſe reaſons that any free and at the ſame time commercial nation, where every-body, during the day, is either involved in the buſtle of his own or of the affairs of the community, and where, in the evening, the great intereſts of the ſtate abſorb people's minds, and are diſcuſſed, will not have many national ſongs; and this is particularly the caſe with the Engliſh, where, by the care of the welfare of the community, and the conſtant endeavours to keep up a free and glorious conſtitution, man is almoſt conſtantly attracted, from his earlieſt youth till the laſt days of his exiſtence in this world.

OF MUSICAL NOTATION, OR PRACTICAL MUSIC.

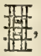
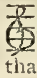
The intervals of the muſical ſcale are expreſſed by the ſeven letters A, B, C, D, E, F, G; but, to expreſs the ſcale of nature, that is, a major ſcale, without the artificial intervention of flats and ſharps, we muſt begin at C; and our ſcale will be C, D, E, F, G, A, B, and C repeated to complete the octave.

The teachers of vocal muſic expreſs theſe tones by the following ſyllables:

C	D	E	F	G	A	B	C
Ut	re	mi	fa	ſol	la	ſi	Ut

Theſe they fix invariably to the ſame notes and their octaves; ſo that a piece in the key of C is always ſaid to be in *ut;* or, if in F, it is called a piece in *fa*, &c. But ſignior Muſſolini (whoſe remarks have not met with all the attention they deſerve) very judiciouſly propoſes, that the key-note of every piece ſhould be made to begin with the ſame ſyllable, ***Ut*** (or ***Do***), as the ſame intervals, eſpecially the ſemitones, would then always be expreſſed by the ſame ſyllables. The Italians now uſe ***Do*** inſtead of ***Ut***, it being found in practice more convenient to intonate, at leaſt in beginning with a low note. In England, however, *ſolfaing* is now little uſed; and we ſhall therefore in all caſes employ the letters, A, B, C, &c. as being more ſimple, more familiar to Britiſh muſicians, and applicable equally to inſtrumental and to vocal muſic.

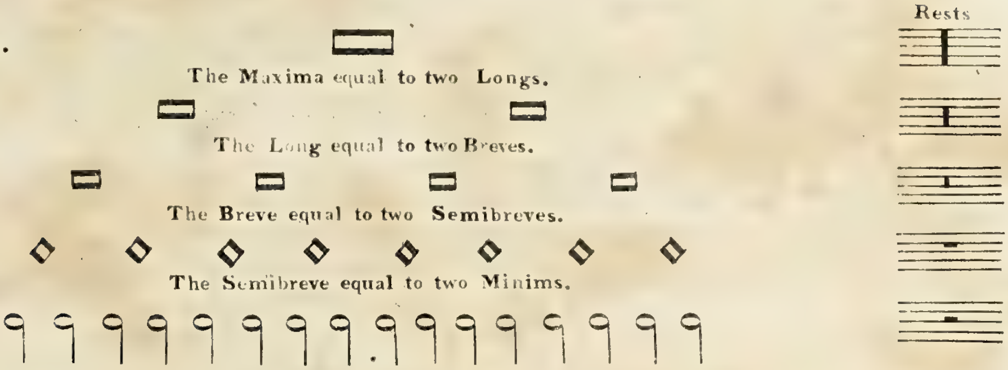
Every one knows that muſical notes are written upon five horizontal lines, (reckoned from below upwards;) to which are occaſionally added portions of lines above and below, which are called *leger-lines;* (from *leger*, Fr. ſlight or faint.)

There are three clefs. The baſs or F clef , placed on the fourth line from the bottom, and which determines every note upon that line to be F, the reſt of the notes being reckoned upwards or downwards, as may be neceſſary. The tenor or C clef , placed commonly on the third line, and making every note upon that line C, a fifth above the former, and the middle C upon the organ or piano. The treble or G clef , moſtly placed on the ſecond line, and every note on that line will then be G, a fifth above C. But, for vocal muſic, the F clef is ſometimes placed on the third line, and is then called the baritone clef, being intended for voices of a low pitch, between a tenor and a baſs. The C clef is occaſionally placed in four different poſitions: on the bottom line, when it is called the ſoprano cliff, being the part ſung by boys or women, (and was formerly uſed in Italy and Germany for inſtrumental muſic inſtead of the treble clef;) on the ſecond line, when it is called mezzo-ſoprano, but now very ſeldom uſed; on the third line, and called contra-alto, which is the counter-tenor or higheſt men's voices; and on the fourth line, for the tenor voices. Thus in fact we have ſeven clefs; and the ſame note, or ſound, may have ſeven different poſitions, according to the clef placed before it; for inſtance, each of the marks in Example 1. Plate I. anſwers to the middle C of the harpſichord: and a note in one poſition upon paper may, in like manner, anſwer to every note or ſound in an octave: Ex. 2. The frequent ſhifting of the C clef makes the old muſic very difficult to read; and it is ſtill the chief difficulty of young practitioners, for no other reaſon than becauſe it is not now in common uſe; but it would be as legible as the treble or baſs, if learned in the ſame manner, and if pupils were accuſtomed to play favourite airs in all kinds of tenor clefs, and tranſpoſe by them early in their ſtudies. The printing new editions of old authors of organ and harpſichord pieces, without the admiſſion of tenor clefs, is a miſchievous indulgence, which,

having

Ancient Musical Characters of the 14th and 15th Centuries.

Ex. 5.

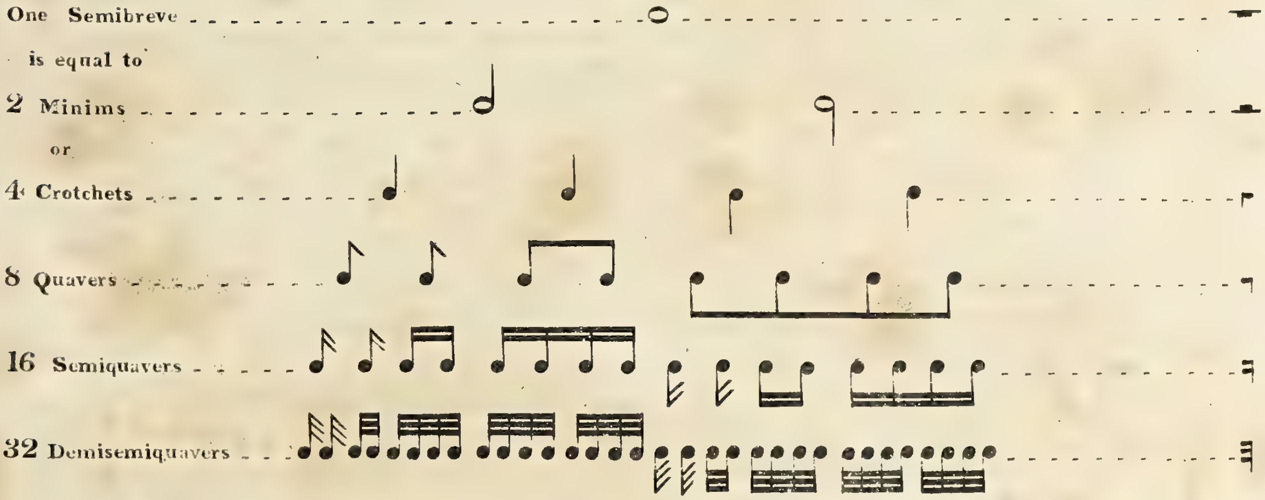

The Maxima equal to two Longs.

The Long equal to two Breves.

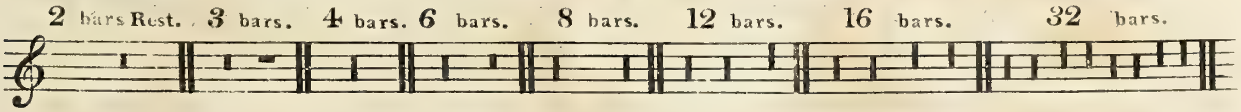
The Breve equal to two Semibreves.

The Semibreve equal to two Minims.

Modern Musical Characters

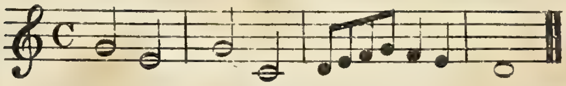


Ex. 6.

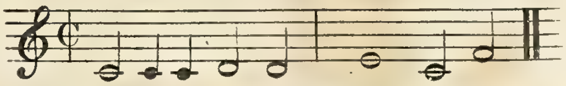


TIME

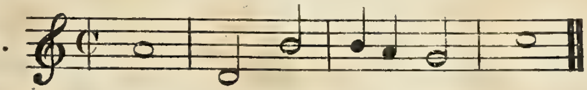
Ex. 7.



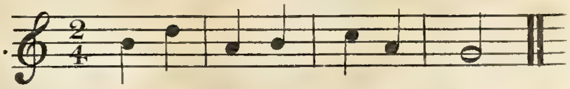
Ex. 8.



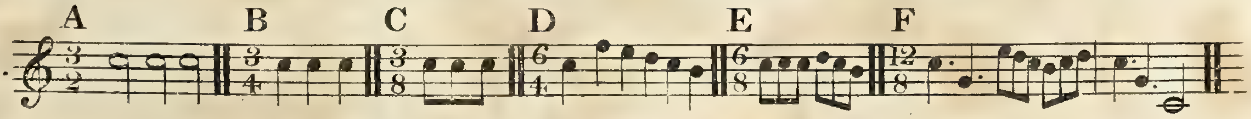
Ex. 9.



Ex. 10.



Ex. 11.



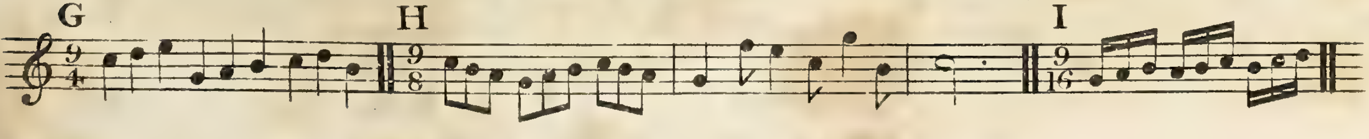


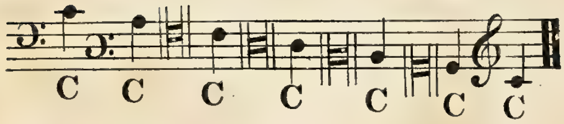
Plate I.

(Engraved for the Encyclopædia Londinensis 1818.)

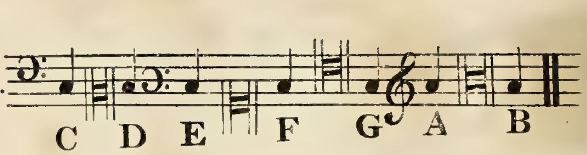
MUSIC.

CLEFS.

Ex.1.

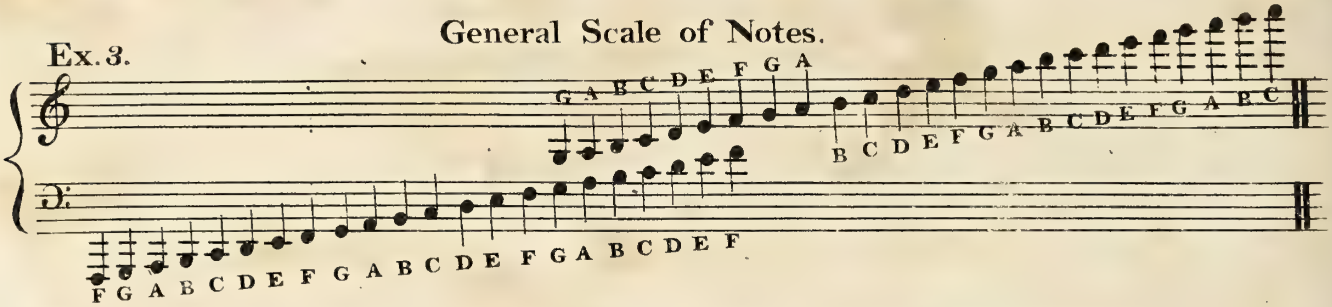


Ex.2.



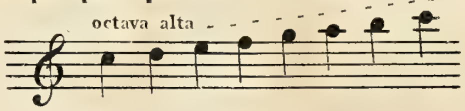
General Scale of Notes.

Ex. 3.


G A B C D E F G A
B C D E F G A B C D E F G A B C
F G A B C D E F G A B C D E F G A B C D E F

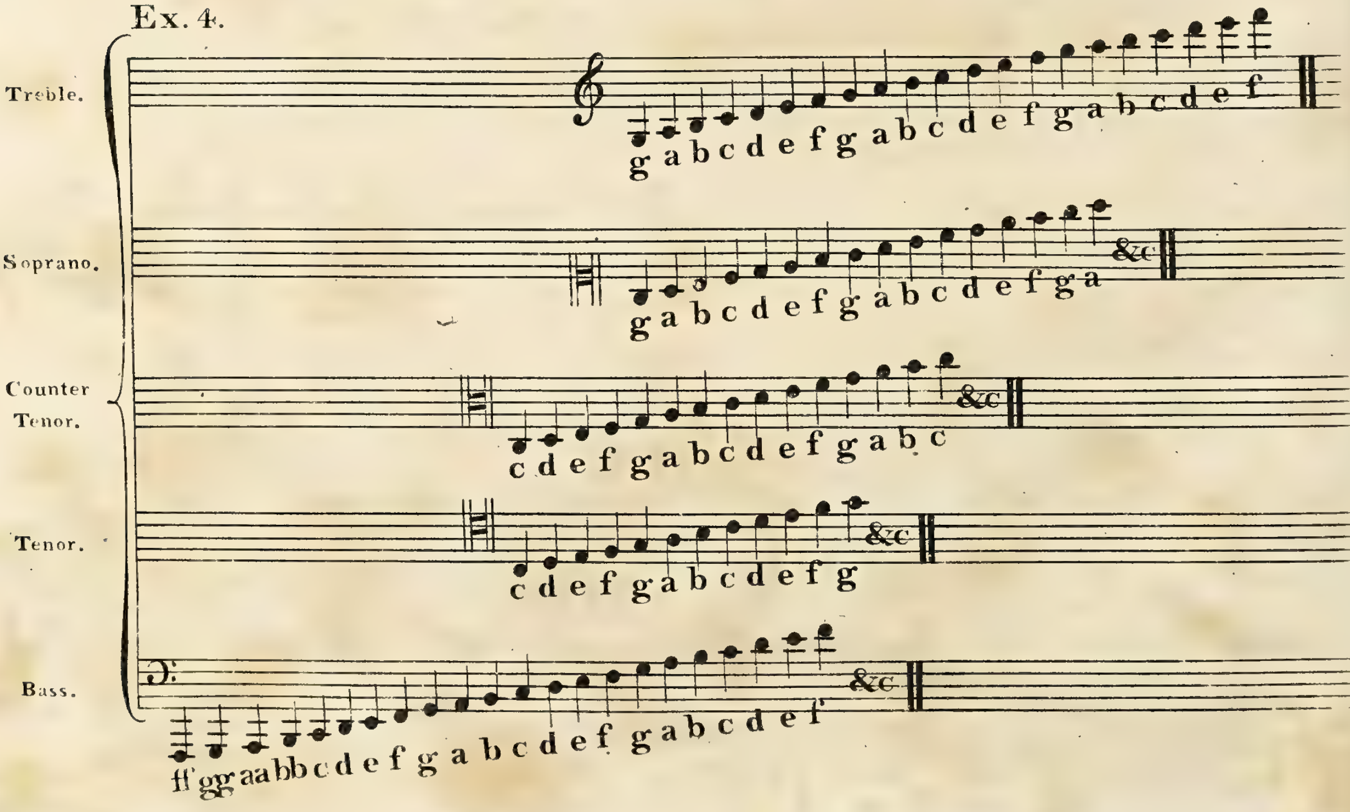
The higher octave is frequently placed an octave lower with the words OCTAVA ALTA written over them, 'till the word LOCO restores the Notes to their proper place

Thus:



Names and Scales of the Notes in the different CLEFS.

Ex. 4.


Treble.
g a b c d e f g a b c d e f g a b c d e f
Soprano.
g a b c d e f g a b c d e f g a
&c
Counter Tenor.
c d e f g a b c d e f g a b c
&c
Tenor.
c d e f g a b c d e f g
&c
Bass.
ff gg aa bb c d e f g a b c d e f g a b c d e f
&c

having precluded the trouble of learning theſe clefs, renders all the old editions of the beſt authors of the laſt century unintelligible; as it does all the muſic in ſcore written or printed abroad; all vocal muſic from Italy, and harpſichord leſſons from Germany compoſed 30 or 40 years ago; all the works of Sebaſtian Bach, and the early productions of his ſon Emanuel, for the harpſichord, of which the treble or right-hand part is in the ſoprano clef, or tenor on the firſt line. Theſe, however excellent, are become totally obſolete and illegible to all but regularly-bred profeſſors, *in our country only.*

Example 3. exhibits the general ſcale of notes, including the additional keys of a modern grand piano-forte. Ex. 4. ſhows the ſcales in the different clefs, as uſed in vocal muſic.

Here every thing is exhibited in progreſſion from low to high, or "from grave to acute," as we call it. But a very curious remark occurs in Dr. Gregory's preface to his edition of Euclid: "As the ideas of acute and high, grave and low, have in nature no neceſſary connexion, it has happened accordingly," ſays Dr. G. "that the more ancient of the Greek writers looked upon *grave ſounds as high, and acute ones as low*; and that this connexion was afterwards changed to the contrary, by the leſs ancient Greeks, and has ſince prevailed univerſally. Probably this latter connexion took its riſe from the formation of the voice in ſinging, which Ariſtides Quinctilianus thus deſcribes: Γινεται δε η μεν βαρυτης, κατωθεν αναφερομενȣ τȣ πνευματος, η δοξυτης, επιπολης προιεμενȣ: Gravity takes place, if the breath is carried upwards from the lower part of the throat, but acuteneſs if it ruſhes forth from the higher part."

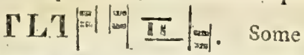
Characters and Values of the Notes and Reſts.

The value of muſical notes is determined according to their degrees of length, or duration. A *reſt* denotes a degree of ſilence equal in length to the duration of the note from which it is named.

It does not appear from hiſtory, that the Egyptians, Phœnicians, Hebrews, or any ancient people, who cultivated the arts, except the Greeks and Romans, had muſical characters; and theſe had no other ſymbols of ſound than the letters of their alphabet, which likewiſe ſerved them for arithmetical numbers and chronological dates.

As the notation of the Greeks was imagined in the infancy of the art of muſic, when the flute had but few holes, and the lyre but few ſtrings, the ſimplicity of expreſſing the octave of any ſound by the ſame ſign, as in modern muſic, was not thought of; the moſt ancient and conſtant boundary of muſical tones having been the *diateſſeron*, or fourth, the extremes of which interval were fixed, though the intermediate ſounds were mutable; and in the manner of tuning theſe conſiſted the difference of intervals in the ſeveral genera.

The ancients uſed likewiſe four different monoſyllables ending with different vowels, by way of *ſolmiſation*, for the exerciſe of the voice in ſinging; like our *mi, fa, ſol, la.* Theſe were, for the firſt note of each tetrachord, τᾶ, for the ſecond τῆ, for the third τῶ, and for the fourth, if it did not ſerve as the firſt of the adjoining and relative tetrachord, τε̃; but, if it began a new tetrachord, it was called by the firſt name, τᾶ. The repetition of theſe monoſyllables is a further proof that the fourth in the ancient muſic ſerved as a boundary to a ſyſtem of four ſounds, in the ſame manner as a hexachord did in the Guido ſcale, and as an octave does for eight ſounds in the more modern practice.

As the Greeks uſed all the four-and-twenty letters of their alphabet for muſical characters, or ſymbols of ſound; and as their moſt extenſive ſyſtem or ſcale did not exceed two octaves, or fifteen ſounds, it ſhould ſeem as if their ſimple alphabet was more than ſufficient to expreſs them; for, their muſic being at firſt only a notation of their poetry, the rhythm, or air, muſt have been determined by the metre of the verſes, without the aſſiſtance of ſigns of proportion peculiar to muſic. But, ſuppoſing it was neceſſary for them to have different characters to expreſs the different feet of the verſe, it is certain that vocal muſic was in no want of them; and inſtrumental, being chiefly vocal muſic played by inſtruments, had likewiſe no need of them, when the words were written, or the player knew them by heart. However, in order to multiply theſe characters, the letters of their alphabet were ſometimes written in capitals, and ſometimes ſmall; ſome were entire, ſome mutilated, ſome doubled, and ſome lengthened; and, beſides theſe diſtinctions in the form of the letters, they had others of ſituation, ſometimes turning them to the right, ſometimes to the left; ſometimes inverting, and ſometimes placing them horizontally; for inſtance, the letter *gamma*, by theſe expedients, ſerved to expreſs ſeven different ſounds: . Some of the letters were alſo barred, or accented, in order to change their ſymbolical import; and, theſe ſtill not ſufficing, they made the common grave and acute accents ſerve as ſpecific muſical notes.

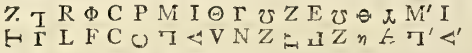
It is a matter that has been long diſputed among the learned, whether *accents* were originally *muſical characters*, or marks of *proſody*. It is in vain to ſet about determining a queſtion concerning which the proofs on both ſides are ſo numerous. (See Gally and Spelman *againſt accents*, and Primatt and Forſter in defence of them.) Mr. Weſt is firmly of opinion "that accents were originally *muſical notes*, ſet over words to direct the ſeveral *tones* and inflexions of the voice, requiſite to give the whole ſentence its proper harmony and cadence." (Pind. vol. ii.) And the abbé du Bos, who frequently by a peremptory deciſion cuts the knot of ſuch difficulties as he is unable to untie, aſſerts, without ſufficient proof, that, as poets originally ſet their own verſes, they placed for this purpoſe a figure, or accent, over each ſyllable. So that, according to this writer, we are at preſent not only in poſſeſſion of the *poetry* of Homer, Pindar, Anacreon, and Sappho, but their *muſic*. Why then do we complain of the total loſs of Greek muſic? But, as muſic had characters different from accents ſo early as the time of Terpander, to whom the invention is given by the Oxford Marbles, which place this event about ſix hundred and ſeventy years before Chriſt; and, as accents for proſody are likewiſe proved to be of high antiquity, it ſeems as if there could have been no neceſſity for the ancients to uſe one for the other.

But it has already been remarked that the letters of the alphabet, though turned, diſtorted, and mutilated, ſo many different ways, were inſufficient to expreſs the ſounds of all the modes in the three genera; ſo that recourſe was had to accents, as the ſcale became more extended, in order to augment the number of characters. And Alypius, in the enumeration of the notes in the enharmonic genus, tells us, that *trite ſynemmenon* is repreſented by *beta* and the *acute accent*; and *paranete ſynemmenon enarmonios* by *alpha* and the *grave accent.* This is a proof that the accents were known at the time of Alypius, and were then uſed chiefly for proſody, not muſic, for which they were only called in occaſionally. Indeed they are mentioned as accentual marks by writers of much higher antiquity than Alypius; for not only Cicero and Plutarch, but Ariſtotle and Plato, ſpeak of them as merely regarding the elevation and depreſſion of the voice in ſpeech. However, in the early Greek and Roman miſſals, the muſical characters uſed in *canto fermo* ſeem to have been only *lengthened accents.*

Theſe various modifications of letters and accents in the Greek notation compoſed in all one hundred and twenty different characters, which were ſtill conſiderably multiplied in practice; for, each of theſe characters ſerving many purpoſes in the vocal as well as inſtrumental tablature or gammut, and being changed and varied according to the different modes and genera, as the names of our notes are changed by different clefs and keys, the one hundred and twenty Greek characters produced one thouſand ſix hundred and twenty notes! Two rows of theſe characters were uſually placed over the words of a lyric poem; the upper row ſerving for the voice, and the lower for inſtruments.

If we had not the teſtimony of all the Greek writers who have mentioned theſe characters, for their uſe and deſtination, it would be natural to ſuppoſe that the double row of different letters placed over each other, and above the words of a poem, were intended to expreſs *different parts*, with reſpect to *harmony;* as with us, in modern muſic, the treble notes are written over the baſs, and the firſt treble over the ſecond; but Alypius, who is extremely minute in his inſtructions concerning the uſe of theſe characters, in all theſe modes, tells us, in expreſs terms, that the upper line of the notes is for the words, and the lower for the lyre. And we are told, not only by Alypius, but by Gaudentius, that, of the two rows of letters uſed for muſical characters, the upper is for the words, that is, *to be ſung*, and the under *to be played.* And he afterwards proves them to have been uniſons to each other, both by his definitions and by placing them oppoſite to the ſame ſound in all the ſcales.

In this author, the notes of the great ſyſtem of the Lydian mode in the diatonic genus are arranged in the following order:



And theſe he defines in ſuch a manner as leaves no room to doubt of the identity of their ſignification.

It is ſomewhat ſtrange that the notes for the voice in ancient muſic ſhould be placed *above* thoſe for the lyre, and conſequently further from the words. Meibomius, in his preface, has, however, given a curious reaſon for this cuſtom, from a fragment of Bacchius, ſenior: "The upper line of notes is for the poem, the lower for the lyre; becauſe the mouth, which alone gives utterance to the words, is placed by nature above the hands, which produce tones from the inſtrument."

It is from the indefatigable labour of the learned Meibomius, in his Commentaries upon the Ancient Greek Muſicians, particularly Alypius, that we are able to decypher theſe characters; which, before his time, had been ſo altered, corrupted, disfigured, and confounded, by the ignorance or negligence of the tranſcribers of ancient manuſcripts, that they were rendered wholly unintelligible. But yet, ſays Dr. Burney, "with our utmoſt ſtudy, reading, and contemplation, we could reduce the Greek notation to no order, nor aſcertain whether it was to be read upwards or downwards."

The ſyſtem of *modern* Greek notation appear ſtill more complicated and obſcure than the ancient. The characters convey nothing to the mind either by their form or names, the greateſt part of which cannot be conſtrued, and the reſt are conſtrued to no purpoſe. Their ſignification, as words, does not point out their meaning as muſical characters; and all that we can diſcover is, that ſome of them ſeem deſcriptive of geſticulations; ſuch as *οὐρανισμα*, which, perhaps, directed the prieſt to look up, or ſtretch his hands towards heaven; *σταυρος*, which might direct him to make the ſign of a croſs, or to carry the croſs; *λυγισμω*, bending. Indeed, it is ſaid that ſome of theſe characters are for the *χειρονομια*, or "legerdemain," and not *δια φωνην*, "for the voice." This is the more likely, as the Greek ſervice abounds in geſticulations and manual dexterity.

The abate Martini was informed, that, though the oriental Greeks have ſigns for muſical ſounds equivalent to ours, they ſing more by tradition than ſcience. However, the diſtinctions for the duration of ſounds, ſuch as our time-table furniſhes, are ſtill wanting. The abate procured an extract from a tract upon the muſic of the modern Greeks, written by Lampadarius; but who he was, or when he lived, no one could inform him. In this it appears, that the characters amount to more than fifty; among which moſt of the names of thoſe muſical terms, given by Du Cange, from a MS. treatiſe on the eccleſiaſtical muſic of the Greeks, are to be found. (Gloſſ. Med. et Inf. Græcitatis.) Du Cange, who has ſo amply collected and explained the characters uſed by the modern Greeks in chemiſtry, botany, aſtronomy, and other arts and ſciences, is ſilent as to their muſical notation; nor have we been able to acquire any information on that ſubject, except that with which the abate Martini has ſupplied us.

To inſert here the muſical characters ſtill uſed in the rituals of the Greek church out of Ruſſia, and endeavour to explain them, will perhaps be conferring but a ſmall favour on our readers; for, from the ſcarcity of muſic written in ſuch characters, ſo few will be their opportunities of making uſe of any knowledge they may acquire by the ſtudy of them, that it would be like learning a dead language in which there are no books, or a living language without the hopes of either reading or converſing in it. Thoſe readers who may be deſirous of gratifying themſelves in matters of curioſity, may conſult Dr. Burney's Hiſtory of Muſic, vol. ii. where they will find the fourteen muſical characters that occur in the Greek MSS. of the Evangeliſts, written in capitals during the ſeventh, eighth, and ninth, centuries, though at preſent they are wholly unintelligible, even to the Greeks themſelves. It is obſervable that the more ancient the MSS. the fewer and more ſimple are the notes: the Codex Alexandrinus, in the Britiſh Muſeum, has none; and the Evangeliſteriæ MSS. in the Harleian collection, 5785, 5598, both of the tenth century, have only ſuch as thoſe in Burney, which were copied in Greece by Martini. The Codex Ephrem, in the king's library at Paris, of the fifth century, has likewiſe the ſame kind of muſical notes; and it is aſſigned as a reaſon for the Codex Alexandrinus not having them, that it was written for private uſe, not for the ſervice of the church.

Kircher undertakes to give his reader an idea of modern Greek muſic and its characters; and has indeed collected a great number of notes and their names, but pretends not to furniſh equivalents in the muſic of the weſtern world. And to inſert ſuch barbarous names, and more barbarous characters here without explanation, would no more help to initiate a ſtudent in the myſteries of Greek muſic, than the Hebrew or Chineſe alphabet. At the firſt glance they very much reſemble the characters uſed in Choregraphy, an art invented about two hundred years ago to delineate the figures and ſteps of dances.

This being the caſe, we ſhall puzzle our readers and ourſelves no more about Greek notation; but come at once to (comparatively) modern times, and that great era in muſic, the time-table. We have already mentioned that the time-table was invented by Franco of Cologne about the year 1040. The characters which he uſed were perhaps more ancient, though Marchetto da Padoua, who wrote in the year 1274, cites him as "the inventor of the four firſt muſical characters." Theſe ancient muſical notes were the maxima, or large, the long, the breve, and the ſemibreve. Thus the ſhorteſt of the ancient notes correſponded with the longeſt of the modern notation; for the ſemibreve is the longeſt note at preſent in uſe; the minim the next; the crotchet the next, and ſo on to the demiſemiquaver, which is the ſhorteſt note. The length of each reſt follows in the ſame decreaſing proportion; and the characters, ancient and modern, are exhibited at one view in Ex. 5.

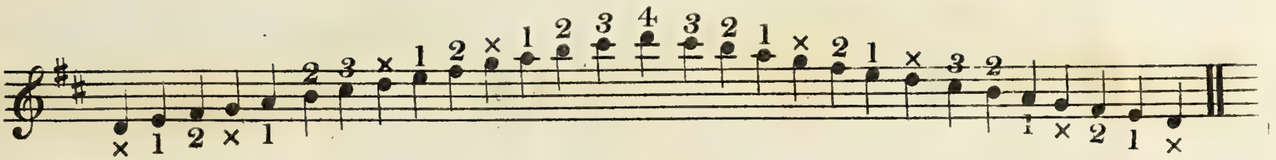
The firſt notes in the old time-table had no tails till the minim was invented, which had a tail to diſtinguiſh it from the ſemibreve, as the crotchet had a black head to diſtinguiſh it from the minim, of which the head is white, and the quaver a hook to the tail, to diſtinguiſh it from the crotchet, of which the tail was ſtraight, &c.

A dot added to any note makes it half as long again. A double dot makes the firſt dot half as long again.

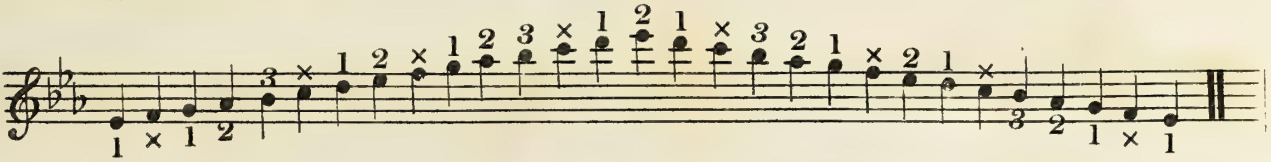
Other Characters uſed in Muſic.—A ſharp ※ raiſes a note one ſemitone, or half-tone. A flat ♭ lowers a note one

FINGERING.

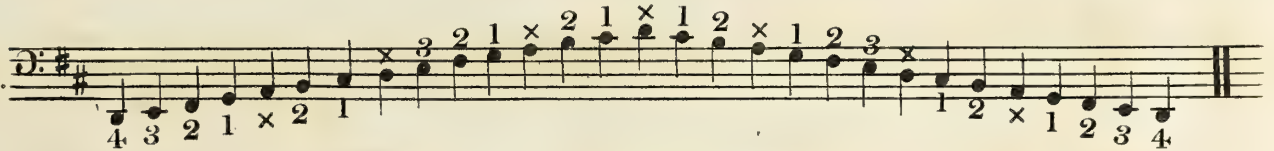
Ex. 25.



Ex. 26.



Ex. 27.



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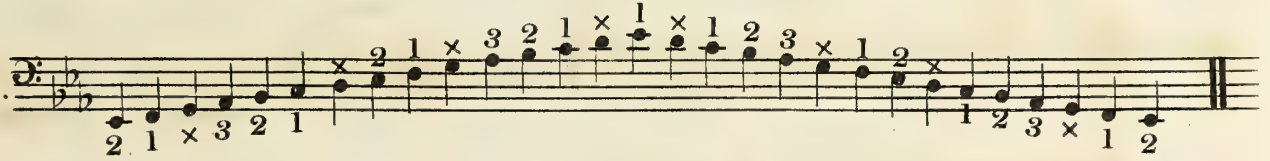
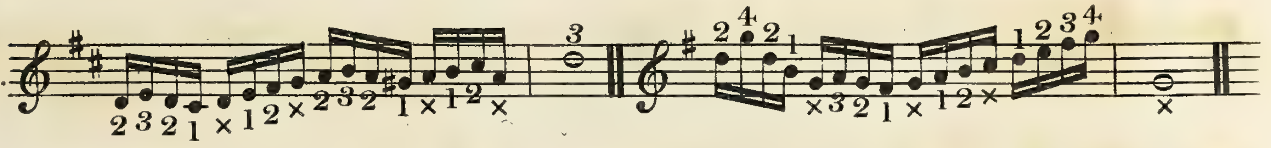
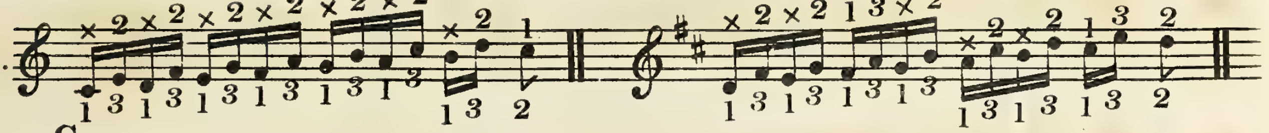


Ex. 29.



Dussek.

Ex. 30.



Clementi.

Ex. 31.

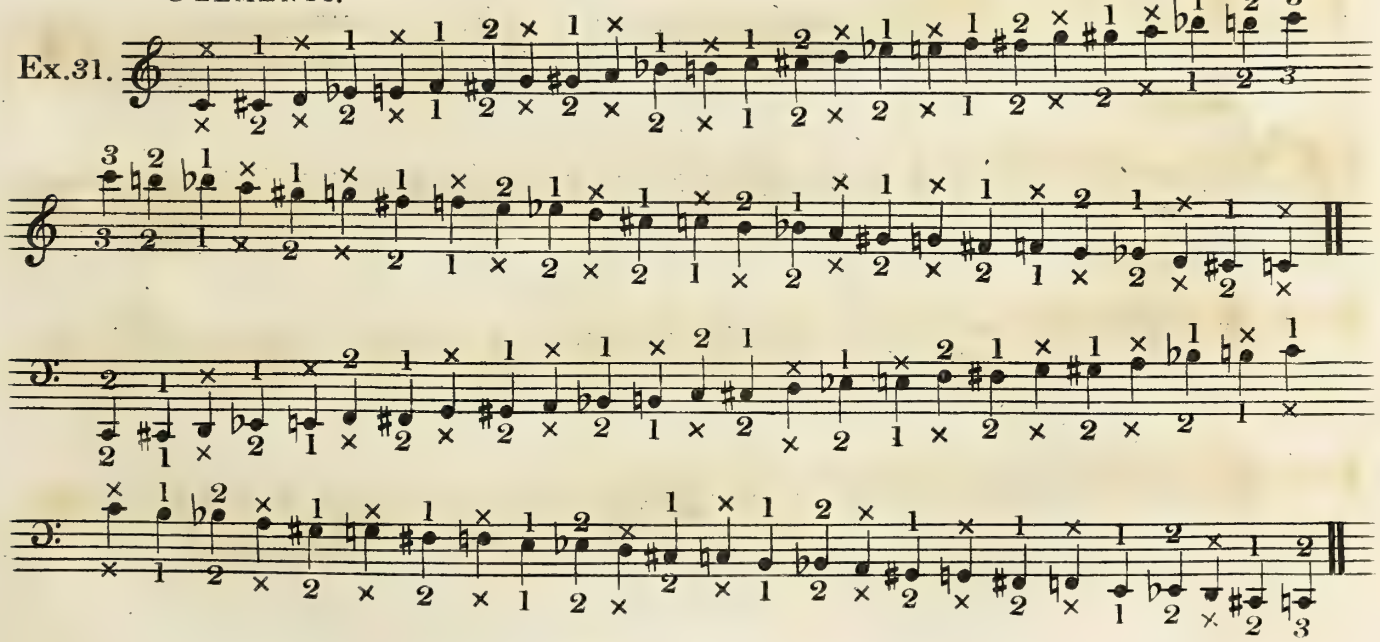


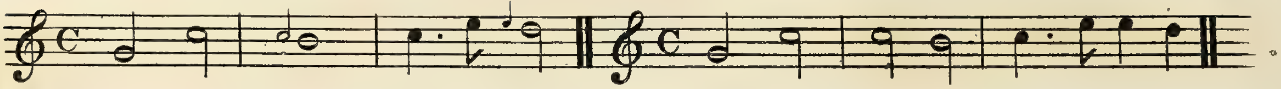
Plate II.

(Engraved for the Encyclopædia Londinensis 1818.)

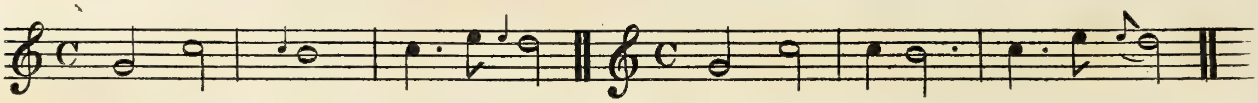
MUSIC.

GRACES.

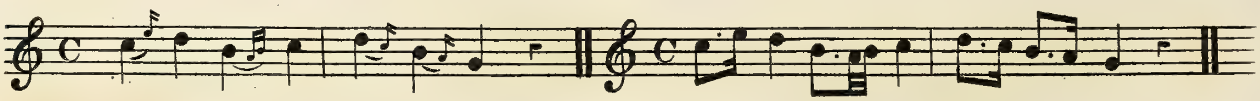
Ex.12.



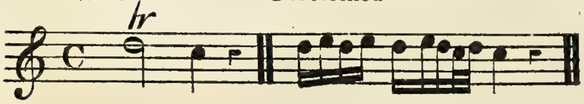
Ex.13.



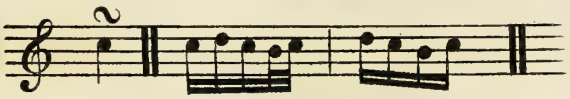
Ex.14.



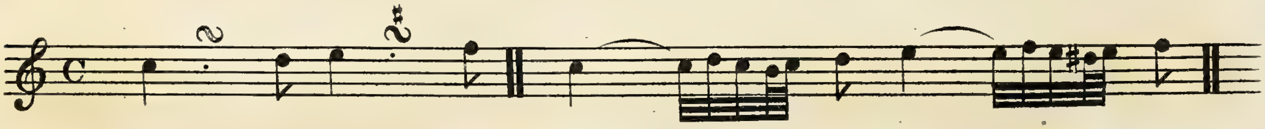
Ex.15.



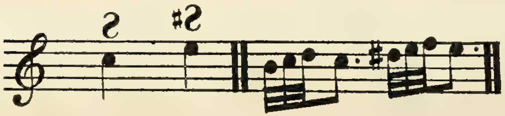
Ex.16.



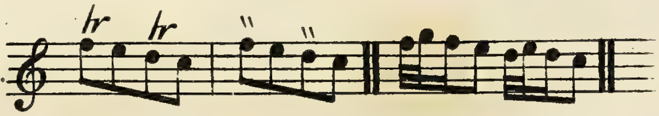
Ex.17.



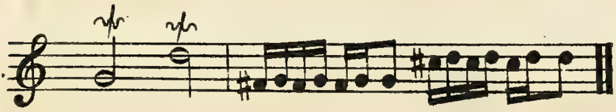
Ex.18.



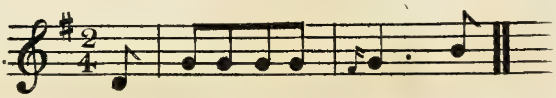
Ex.19.



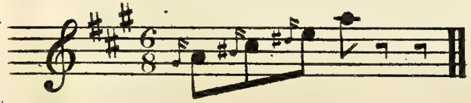
Ex.20.



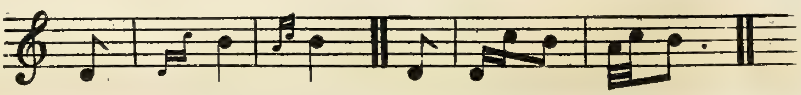
Ex.21.



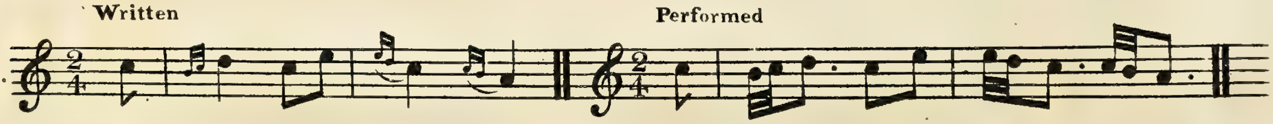
MOZART



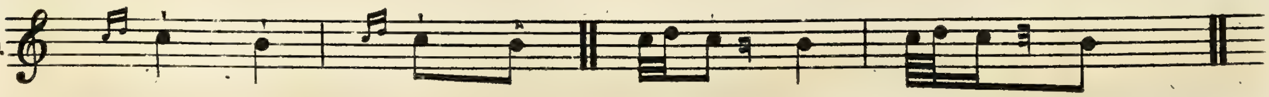
Ex.22.



Ex.23.



Ex.24.



one ſemitone. A natural ♮, takes off a ſharp or flat. The double ſharp ※※ or × raiſes a note two ſemitones. The double flat ♭♭, lowers a note two ſemitones. The ſlur ⌒ denotes that the notes it comes over are to be connected in playing as much as poſſible. Little dots or ſhort ſtrokes over the notes, are called *Staccato*, and ſignify the reverſe, or that every note is to be played as diſtinct as poſſible. The pauſe 𝄐 denotes a ſhort ceſſation of ſound, in order afterwards to proceed with more effect. 𝄋 for *ſegno*, is uſed for a mark of reference. The bar | divides notes when they amount to a certain value. See the word Bar, vol. ii. p. 703 and p. 301 of this article. The double bar ‖ divides pieces into ſections or parts, and denotes a concluſion. Repeats, :‖:, ⁞‖⁞, or :𝄋:, take place firſt from the beginning, afterwards from the right of the dotted bar. The reſts for bars will be ſeen at Ex. 6. but it is to be obſerved, that the number of bars reſt is more uſually marked with figures on the lines.

Of Time.—Time regulates the duration of muſical ſounds; and divides their notes by bars, when they amount to a given value. Time is either common or triple: in the firſt we count 2, 4, or 8, in every bar; in the laſt, we count 3 or 6.

Common Time contains one ſemibreve, two minims, four crotchets, eight quavers, or their value, in every bar. This time is known by a ſemicircle, or 𝄴, placed at the beginning, after the clef, as in Ex. 7.

The barred ſemicircle is uſed to denote a quicker movement, and is called alla breve, becauſe it was formerly with one breve in a bar. Ex. 8. This is now commonly written with one ſemibreve in a bar, by dividing thoſe of the alla breve into halves, as at Ex. 9.

All other meaſures are marked by figures placed one over the other. The figure 2 above the figure 4, in Ex. 10. indicates 2 crotchets or one minim in a bar, and is called half-time.

The moſt uſual meaſures expreſſed by figures placed fraction-wiſe at the beginning, are ſhown at Ex. 11. where the upper figure may be called the numerator, being the number of parts contained in a bar; the lower one the denominator, or how many notes conſtitute a ſemibreve; 2 ſignifies minims, 4, crotchets, 8 quavers, &c. and therefore $\frac{3}{2}$ ſignifies three minims, $\frac{3}{4}$ three crotchets, $\frac{3}{8}$ three quavers, &c. Theſe are the three ſpecies of *triple time;* namely, three minims in a bar; as at A; three crotchets, as at B; and three quavers, as at C.

When two bars of three crotchets, or of three quavers, are united in one, by the omiſſion of a bar, the time is called *compound common time: common,* becauſe every meaſure is equally divided; and *compound,* becauſe each half is a ſingle meaſure of triple. Compound common time has three ſpecies in uſe: ſix crotchets in a bar, as at D; ſix quavers, as at E; twelve quavers, as at F.

Compound Triple Time is formed by dividing the meaſures of ſimple triple into nine parts: thus, three minims divided into nine crotchets, as at C; three crotchets divided into nine quavers, as at H; and three quavers divided into nine ſemiquavers, as at I.

A ſpecies of time, containing five crotchets in a bar, has been uſed by Mr. Baumgarten with good effect.

Of Graces.—The old Engliſh graces, as publiſhed by Simpſon, (Diviſion-Viol, 1667.) were divided into two claſſes, the ſmoothed and the ſhaked graces. In the firſt claſs were the beat, backfall, double backfall, elevation, ſpringer, and cadent; in the ſecond, were the ſhaked backfall, cloſe ſhake, ſhaked beat, ſhaked elevation, ſhaked cadent, and double reliſh. But, as theſe are now obſolete, we ſhall proceed to the modern graces, as exemplified on Plate II. ſhowing how they are marked, and how played.

The graces of melody are, the appoggiatura, the ſhake, the turn, the mordente, the beat, the acciaccatura, the ſlide, and the ſpring. The chief ornaments of harmony are, the arpeggio, the tremolo, and the tremando.

The *appoggiatura* is a ſmall note placed before a large one, from which it generally borrows half the value, and always occurs on the accented part of the bar. See Ex. 12. Sometimes, however, the appoggiatura is only one quarter of the note it precedes, as at 13.

When a ſmall note follows a larger, and depends upon that for its time, it is called the *after-note,* and occurs on the unaccented part of the bar. Ex. 14.

The *ſhake* conſiſts of a quick alternate repetition of the note above, with that over which the mark is placed; and commonly ends with a turn from the note below. It begins, according to Handel and Baumgarten, with the lower note. Ex. 15. Some begin the ſhake with the upper note; but this ſeems to be laying the accent on the wrong place.

The *turn* employs the note above, and that below; and is introduced in various ways, according to the time allowed. Ex. 16. The turn on dotted notes is in frequent uſe, and is generally placed over the dot, ſo as to terminate the note. A ſharp placed over the turn requires the introduction of the half-note below. Ex. 17. The inverted turn, Ex. 18. begins with the note below.

The *mordente,* or tranſient ſhake, is marked by Baumgarten like a common ſhake, by Dr. Arnold and other authors thus, 〃. See Ex. 19.

The *beat* is generally made at the diſtance of the ſemitone below. Ex. 20. In the *acciaccatura,* or half-beat, the inferior note is ſtruck only once, and at the ſame time with the principal note, but is immediately quitted. This is frequently uſed on the organ, and particularly in the baſs. It may in ſome few inſtances be found on the ſemitone above, taken as a flat. Ex. 21. The German beat conſiſts of two ſmall notes, which form a ſkip, and deſcend one degree upon the principal note. Ex. 22.

The *ſlide* conſiſts of two ſmall notes, which move by degrees. Ex. 23. The *ſpring* conſiſts of two ſmall notes, like the mordente, but very diſtinct. Ex. 24.

The *tremolo* is the reiteration of one note of the chord; the *tremando,* a general ſhake of the whole chord; and the *arpeggio,* an imitation of the harp, by the ſtriking the notes of the chord in quick and repeated ſucceſſion.

Of Fingering.—As it is our intention to make this treatiſe very uſeful to young practitioners on the organ and piano, we ſhall ſubjoin to theſe rudiments a few directions as to the poſition of the hands on the keys, with ſome examples to facilitate the fingering of different paſſages; for nothing can be of more importance to a beginner than to acquire at the outſet a ſteady and judicious mode of fingering.

Rameau has condeſcended, in his laſt work, "Code de Muſique," to place the young muſician's hands on the keys, and to regulate the fingers; but the buſineſs ſeems to have been better done by Couperin. Rouſſeau excludes the uſe of the right thumb, which is an erroneous precept. Rameau's fingering is the old French method, which has been long abandoned. Couperin was the firſt who treated the ſubject with intelligence, in 1717; and, though his compoſitions, for which the rules were given, have long ſince been thrown aſide and forgotten, moſt of his rules are ſtill good for muſic of a very different kind. He adviſes parents to place their children under an intelligent maſter, at ſix or ſeven years old; and preſcribes not only the manner of placing the hands on the keys, but the carriage of the perſon. The height of the ſeat, if allowed to ſit at ſo early an age, ſhould be ſuch as would place the wriſts on a level with the keys; the fingers ſhould be curved ſo as to be all of the ſame length, ſo as that each ſhould cover a key. Something ſhould be placed under the feet of very young ſtudents, to prevent them from hanging looſe in the air, and to ſupport their frame in a juſt equilibrium; and this ſupport ſhould be diminiſhed in proportion to their growth. The diſtance at which a perſon of maturer age ſhould ſit from the inſtrument ſhould be about nine inches, and leſs in proportion to the ſhort arms of children. They ſhould place themſelves in the middle of the keys, in as natural and eaſy a poſture as poſſible; the knees not too cloſe, and the feet even. Great attention muſt be paid to the countenance of children, that no grimace or appearance of difficulty ſhould be viſible, and become habitual, which would be attended to by ſtanders-by more than the muſic that is performing, however good and well executed. M. Couperin even adviſes a glaſs to be placed on the deſk of the young performers, in danger of becoming ridiculous, that they may correct themſelves. The time or meaſure ſhould never be marked by the head, feet, or the whole perſon, which is unbecoming and conſtrued into affectation. Even in counting the time it ſhould be done in a whiſper, or elſe it tends to prevent the ear from having any ſhare in the performance. The fingers ſhould be ſuſpended as near the keys as poſſible, and all the force ſhould come from the upper joints, not from the weight of the hand, which would be heavy and thumping. Shakes, beats, and trills, in all keys, muſt be early practiſed with both hands extremely ſlow, and quickened by degrees; as muſt be the exerciſes for each hand. See the examples hereafter given. The weak fingers of both hands, that is, the third finger and the little finger, muſt be very much exerciſed, to make them, if poſſible, equally brilliant with the others. Chords, if the hands are well placed on the inſtrument, are perhaps the beſt rules for fingering; for, if the notes can be well and eaſily ſtruck together, there will be no difficulty in breaking them into paſſages. In practiſing quick paſſages, the fingers ſhould be lifted up with a ſpring, and not allowed to hang on the keys till wanted again, unleſs in arpeggioing chords, or in paſſages of expreſſion. In the firſt practice of a ſhake, in order to keep the wriſt quiet, place the thumb on the 5th, 4th, or 3d below, and keep the fingers that are unoccupied as tranquil as poſſible. Couperin was the firſt, we believe, who made it a rule for his ſcholars never to play two notes together with the ſame finger, unleſs in repeating chords.

The art of fingering will be found chiefly to depend on a right management of the thumb. In the natural key, and in every key where there are from one to five ſharps, the right thumb muſt be placed, *in aſcending*, on the key-note, and on the fourth of the key. As pieces of muſic modulate into a variety of keys, the ſcholar may be at a loſs to find the key-note; but attention to the order in which the ſharps occur, will greatly facilitate the knowledge of it. The ſharps proceed by fifths upwards. The following is the ſcale of the ſharps: F. C. G. D. A. Every new ſharp, according to the order of the ſcale, is the ſharp ſeventh, or half a tone below the key-note. Thus F ſharp denotes the key of G. C ſharp the key of D, &c. When an aſcending paſſage is terminated by the key-note, the thumb will be unneceſſary; and this will form almoſt the only exception to the above general rule.

In deſcending, in every key from one to five ſharps, the third finger muſt be placed on the laſt ſharp. Which laſt ſharp, as we have obſerved above, immediately follows the key-note. Our limits will only permit us to give one ſcale of each kind. See Ex. 25.

If a paſſage ſhould terminate on the laſt ſharp, the firſt finger muſt be uſed; if it deſcends one note lower than the laſt ſharp, the ſecond will ſerve.

To *aſcend* with the right hand where there are flats, place the thumb on C and on F. This rule is without exception. In deſcending with the right hand on flat keys, place the third finger on B flat, and the ſecond on E flat. Ex. 26.

In aſcending with the *left hand* in the key of C and F, major and minor, and in every key from one to four ſharps, begin with the little finger; and, after the thumb, place the ſecond finger on the ſixth note of the ſcale, and the third on the ſecond of the ſcale. In deſcending with the left hand in the keys of C and F, major and minor, and in keys from one to four ſharps, place the thumb on the key-note, and the fifth of the key. The fifth in deſcending is the fourth note from the key. Ex. 27.

To aſcend, with the left hand on major keys where there are flats, place the ſecond finger on the key-note, and the third finger on the fourth note. In deſcending, place the thumb after the key-note, and after the fourth note (i. e. on the third of the key). Ex. 28.

When paſſages are interſperſed with turns, inverſions, and zig-zag progreſſions, the regular order of fingering ceaſes, and ſome contrivance is neceſſary, according to the nature of the paſſages. If you are obſtructed by a turn or other variation from the regular progreſſion, place the third finger after the thumb in deſcending repeatedly till you are brought to the right poſition; and vice verſâ for the left hand in aſcending. It is often neceſſary to ſkip a finger in deſcending, and to paſs the firſt finger in aſcending. In paſſages of turns, begin with the ſecond finger and end with the thumb, provided the paſſage aſcends afterwards. If the turn follows a deſcending paſſage, begin with the thumb, and let the third finger follow. Ex. 29.

In paſſages aſcending or deſcending by thirds, we have inſerted, at Ex. 30. the different modes of fingering by Duſſec and Clementi. With the left hand the rules are reverſed. The fingering of the chromatic ſcale, according to the above maſters, will be found at Ex. 31.

Theſe few examples, provided attention be given to the general directions which accompany them, will be found ſufficient to enable the learner to finger moſt paſſages that may occur, and to form, by analogy, additional rules for himſelf; but it is impoſſible to lay down rules ſuited to every caſe in the vaſt variety of modulation from one key to another.

An Iriſh profeſſor has, however, recently undertaken to accompliſh all this, and much more, by a mechanical contrivance. Mr. Logier's patent *chiroplaſt*, or hand-director, includes an apparatus for confining the wriſts, and every ſeparate finger, in their proper places; by means of which a right poſition of the hands muſt be obtained from the firſt, and is not likely to be afterwards loſt. Mr. L. has alſo made ſome other improvements in the method of teaching young beginners; of the excellence of which he is ſo well convinced, that he anticipates the jealouſy of profeſſors againſt them, and replies to their ſuppoſed lamentations: "It has been objected to the ſucceſs of my plan, that the majority of the profeſſion would oppoſe it, becauſe it aimed to do that by infallible mechanical means, which is now done by a long proceſs of inſtruction, and would therefore tend to diminiſh the neceſſary call for their attendance. But no argument can be leſs founded than this; for, though this plan greatly diminiſhes the moſt tedious part of profeſſional labour, it muſt manifeſtly have the effect of enlarging the ſphere of inſtruction, by giving ſo much greater inducement to the public to ſtudy the piano-forte, when the acquirement of execution on that inſtrument is ſo materially facilitated. By the common mode of tuition, how many tedious hours muſt the pupil and maſter wade through, before any thing like a proper diſpoſition of the hand is obtained! and how perpetually muſt the attention of the ſcholar be called from the more important matter of his ſtudies to the irregularities and awkward poſition of his fingers! The impediments ariſing from this cauſe are often ſo great, that children are quite diſheartened, and give up the deſire of playing altogether; or the maſter, for fear of loſing his ſcholar, permits him to run into habits which are fatal to the acquirement of a proper execution. On the other hand, by the method now preſented to the public, the hand and arm of the ſcholar, though in poſſeſſion of full liberty for proper action, are totally reſtrained from all undue motion; the fingers are made to act in a manner ſo as to give a regular force to each note, and the mind is left entirely free to direct its attention excluſively to the muſic. By this means, that inceſſant glancing of the eye from the keys to the book, and from the book to the keys, obſervable in the greater part of performers, is entirely prevented; and, at the ſame time that a perfection of execution is obtained, an unuſual eaſe in reading muſic is acquired. It is plain from this, that, ſo far from being of diſadvantage to teachers, this plan will enable them to advance their pupils much more rapidly, and give them that time for the formation of taſte, and the ſtudy of the more difficult ſpecies of compoſition, which would otherwiſe be unavoidably loſt, both to their pupils and themſelves, in the moſt weariſome drudgery. Can it be for a moment doubted but that manifeſt improvement would be more likely to induce parents to perſevere in obtaining inſtruction for their children, and children to perſevere in their ſtudies, than embarraſſments at every ſtep, and ſcarcely any appearance of progreſs after repeated leſſons? And is it not obvious to experience, that, wherever real facility is held out for improvement in agreeable but difficult accompliſhments, there is an infinitely greater number deſirous of dedicating their time to them, than when the moſt diſpiriting obſtacles lie in their way? Is it not alſo an inſult to the underſtanding and honeſty of a profeſſor, to ſuppoſe him more intereſted in retarding the progreſs of his pupils than in advancing them, when the commoneſt intellect cannot but be aware that fame and conſequent profit depend on ability to produce able ſcholars, and not on throwing hindrances in the way of talent, and totally diſcouraging timidity?”

We are now to deſcribe the Chiroplaſt.—The firſt part of the apparatus is called the *gamut-board.* This is an oblong board, which on one ſide has drawn upon it two ſtaves of five lines each; one for the treble, and the other for the baſs; which being placed over the keys of the piano-forte, each note will be over its correſponding key. The other ſide of the gamut-board repreſents the chromatic and enharmonic ſcales. The ſecond part of the apparatus is the *poſition-frame,* which conſiſts of two parallel rails, extending from one extremity of the keys to the other; to the ends of theſe are fixed two check-pieces, which, by means of a braſs rod and extending-ſcrew, are attached to the inſtrument. The rails muſt be adjuſted ſo as to admit the hands of the pupil paſſing between them nearly as far as the wriſts, being ſo regulated as to prevent any perpendicular motion of the hands, though ſufficiently wide to allow a free horizontal movement when required. The *finger-guides* are two movable braſs plates, with five diviſions, through which the thumb and four fingers are introduced. Theſe diviſions correſpond perpendicularly with the keys of the inſtrument, and may be moved to any ſituation by means of the braſs rods. To each finger-guide will be found attached a braſs wire, called the *wriſt-guide,* the uſe of which is to prevent the wriſt being inclined outwards, which would diſplace the thumb. “By an early and frequent uſe of this apparatus,” ſays the inventor, “it is evident that the learner *muſt* become habituated to a proper poſition of the body, and a graceful motion of the arms; and the fingers *muſt* acquire an independent motion, and equality of power, rarely accompliſhed by other means.”

The above account is from the “Companion to the Chiroplaſt,” publiſhed by Mr. Logier in Dublin and in London about the year 1814. The ſame work contains the ground-work of his method of inſtruction, with ſimple leſſons adapted to the progreſſive improvement of the pupils. The “Sequel to the Companion,” publiſhed in 1816, compriſes a ſeries of leſſons compoſed on thoſe original ſubjects, contrived ſo as to be played either alone as diſtinct leſſons, or in full concert with others, being grounded on the ſame ſucceſſion of harmonies; the variations embracing nearly every deſcription of paſſage. At his muſical academy in Dublin the author “makes uſe, *in one room,* of four ſquare piano-fortes, two grand ditto, two harpſichords, and a ſmall organ, the latter to ſupport the harmony by ſuſtaining the chords.” One or two pupils are placed at the ſame time at each inſtrument. By playing together the different leſſons adapted to their capacities, a complete (Iriſh) band is formed, capable, it is ſaid, of great effect. The original ſubjects in the former work are here written in ſmall notes, with the variations in a larger character underneath. To execute the latter, particularly thoſe with croſs-hands, it ſhould ſeem that the chiroplaſt with all its paraphernalia muſt be taken off.

Mr. Logier, having fully eſtabliſhed his ſyſtem in Ireland, and having been joined by Mr. Webbe, a member of the Philharmonic Society, proceeded to London, and invited the members of that ſociety to an examination of the pupils taught upon the new ſyſtem. After ſome trifling bickerings and diſputes about form, an examination of Mr. Webbe's pupils and his own was entered upon, in the preſence of a committee of fourteen members of that ſociety, and ſeveral other very eminent profeſſors and amateurs, on the 17th of November laſt, (1817.) The committee of the Philharmonic Society had very properly informed Mr. Logier, “that they had agreed not to give any opinion upon the new ſyſtem at the moment, but that after the examination they would meet and conſult together.”

Mr. Logier has juſt publiſhed (Jan. 1818.) “An Authentic Account of the Examination,” from which we ſhall make an extract or two. “Mr. Webbe's pupils, who were entirely beginners upon my ſyſtem of inſtruction, were firſt brought forward. Of theſe children, the longeſt learners were of betwixt four and five months only, the full date of Mr. W's eſtabliſhment; and others of leſs than two. While theſe were engaged in playing the early leſſons in the Chiroplaſt, my own pupils, who were alſo entirely beginners in my academy, from the date of its eſtabliſhment, viz. two years and a half, performed correſponding leſſons of conſiderable advancement and execution. Theſe performances were received by the committee, generally, with every apparent teſtimony of entire ſatisfaction. This diſplay of ſatisfaction, was however, greatly enlarged, when even theſe early ſtudents in Mr. Webbe's academy came to the exhibition of their acquirements in theory; viz. a thorough acquaintance with the properties of all the keys, even to the full extent of the double-ſharp and double-flat mode; a perfect knowledge of the conſtruction of the ſcale, proved by the ready inſertion of all the ſemitones in their proper places; a prompt deciſion upon what ſharps or flats, or double ſharps or flats, were neceſſary to the formation of the major chord upon any given baſs, &c. At the end of this little exhibition of Mr. Webbe's pupils, he received the hearty congratulations of various gentlemen of the committee, for having brought about, by my plan of inſtruction, a degree of attainment in theory quite unprecedented for children ſo young, and who had learned ſo ſhort a time. I received, at the ſame time, many gratifying compliments upon theſe early and extraordinary reſults of my proceſs. The children then reſumed for a while their little concert, in the ſame order as before; Mr. Webbe's pupils playing their moſt advanced leſſons, wherein it appeared that thoſe who had learned longeſt, viz. betwixt four and five months, had already diſmiſſed the chiroplaſt. Here ended the exhibition of Mr. Webbe's pupils.

“I now brought forward my own pupils alone, to diſplay their advancement in the theory of muſic. Their firſt eſſay was to connect together all the major and minor keys, with their beſt arrangement of progreſſion; which having written ſo rapidly and correctly to a certain extent, as to convince the committee that they were equally ready to write them throughout; they proceeded without delay to play them through the whole circle of the twelve keys. I wrote next, for their exerciſe, the aſcending ſcale; requiring them to ſet to it inverted baſſes, and to harmoniſe it throughout. Having done this, firſt, in ſimple chords, they afterwards added fundamental ſevenths, wherever they were admiſſible, and then further varied the harmonies by forming diſſonances in ſuſpenſion. I then ſet for them the deſcending ſcale in the baſs, requiring them to proceed in harmoniſing it through the ſame ſtages as before, of firſt ſetting the ſimple chords, afterwards adding the fundamental ſevenths, and laſtly, introducing diſſonances by ſuſpenſion. Thoſe who have frequently ſeen theſe and other children, in my academy, performing exerciſes upon theoretical propoſitions, will be aware how very far their ability exceeds any thing that was required of them upon this occaſion, time not admitting a further advance. Their readineſs and facility, however, in performing the above exerciſes—their cleverneſs and adroitneſs in correcting accidental errors, pointed out to them either by gentlemen of the committee, or by myſelf—and the introducing, in many inſtances, changes from, and improvements upon, the firſt form in which they had ſet any harmony;—theſe evidences, I ſay, of poſitive knowledge, ſo obviouſly exceeding any anticipation that the committee had formed, drew forth from the great body of them loud and reiterated burſts of the moſt genuine applauſe. For one ſtrong evidence of this fact, I may venture to appeal to one of the committee, Mr. Griffin, who, in the honeſt expreſſion of his admiration, happening to be ſomewhat more vociferous than the reſt, received from his more wary neighbour a gentle jerk of the ſleeve, accompanied by a hint that there was to be no applauſe; to which Mr. Griffin ſuddenly replied, with a warmth highly creditable to his candour, By G—, I can't ſuppreſs my feelings."

But of this applauſe, where it had been agreed "there was to be no applauſe," more was made than the circumſtances would juſtify; and it was rumoured in the newſpapers, that the committee had given an unqualified approbation to the ſyſtem. The Philharmonic Society therefore now thought themſelves called upon to publiſh the opinion which, upon the repreſentation of their committee, they had really formed. This they did in the following terms:

"Saturday, 22d Nov. 1817.

Philharmonic Society.—A report being in circulation that this ſociety have examined into and approved of a new ſyſtem of muſical education; it is judged expedient to appriſe the public, that, though ſeveral members of this body did attend an exhibition of ſome pupils inſtructed by a new method, and that though they were pleaſed with the alacrity and obliging attention of the pupils, and manifeſted that feeling by the uſual mode of applauſe; yet they in no way expreſſed their approbation of any part of the ſyſtem that claims the merit of originality; on the contrary, they almoſt unanimouſly agreed in an opinion by no means favourable to either the principles or practice of the novel mode of inſtruction now attempted to be introduced. By order of the ſociety;

W. Watts, Secretary."

Mr. Logier, however, conſoles himſelf with producing letters of the warmeſt commendation from ſeveral of the moſt eminent of the profeſſion, as Clementi, Cramer, Weſley, and Kalkbrenner, which laſt has ſince joined him; and he informs us, in a note, that "there are now eſtabliſhed, upon this ſyſtem of inſtruction, twenty-eight academies."

We have done Mr. Logier full and ample juſtice, by ſtating the effect of his ſyſtem upon the performance of his pupils in his own words; but, ſhould this Lancaſterian mode of teaching muſic to pupils by dozens, obtain a firm footing in our land, let us hope, at leaſt, that the demand for the fabric may increaſe in proportion to the facility and rapidity of working up the raw material; otherwiſe it muſt appear very impolitic, at a time when ſo many artiſts in every profeſſion are out of employ, to encourage the introduction of freſh *machinery* into any manufacture whatever.

Of the SCALE, its Divisions and Inversions.

Scale in muſic, denotes a *gradual ſucceſſion* of ſounds, either aſcending or deſcending. All modern muſic ariſes from the twelve ſemitones of the diatonic-chromatic ſcale, and their repetitions in the octave above and below.

By the *Scale of Nature*, from which all other ſcales are derived, we underſtand that gradual progreſſion of ſounds, which Nature produces, either from the vibrations of a ſonorous body, or from thoſe of the air. The moſt ſimple ſcale of Nature is that, which ariſes from the tranſverſe vibrations of a long ſtring, or from the longitudinal ones of the air in a long tube.

It has already been noticed, under the article Acoustics, vol. i. p. 87. that a ſound from a ſtring or a tube, as it dies away, will be divided into four different parts, which will be diſtinctly heard in ſucceſſion, namely, the note itſelf, its octave above, its 12th, and its 17th. Now, as the three clefs, F, C, and G, treble, tenor, and baſs, are fifths above each other, their natural harmonies will thus form the regular ſcale of notes. Let a ſtring tuned to F be ſtruck, and it will produce F, *f*, *c*, A; then ſtrike C, and you have C, *e*, *g*, E; next G, and you have G, *g*, D, B.

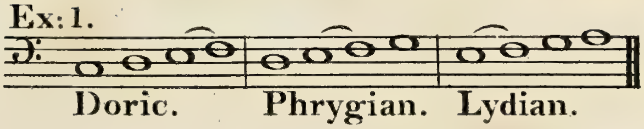
The moſt uſual way of making the experiment is by ſounding the thickeſt ſtring of a violoncello, or of a double-baſs. But ſignor Muſſolini proceeded in a different manner, of which he has given us an account in his Treatiſe of Thorough Baſs, &c. publiſhed in the year 1798.

"To know and to fix the nature of theſe intervals, I made uſe of certain tubes or pipes, which are employed in Ruſſia, for the performance of muſic, in a manner no leſs agreeable than extraordinary. The muſicians are provided with a number of wooden pipes of different lengths, each muſician taking one, which can only give a ſingle note. Of thoſe who are to play the part of the firſt violin, for inſtance, which they do from written notes, each attentively watches every occurrence of the note which belongs to his pipe, and blows it according to its proper length of time; and in this manner they execute, from beginning to end, the parts of the firſt violin, ſecond violin, tenor, and baſs, of any piece of muſic. I got one of thoſe who played the baſs, and whoſe pipe gave the note F, to ſound that note three different times. I went a few paces from him, that the ſound might be perfectly formed, and properly heard; and took with me the three muſicians whoſe pipes gave the octave above; the 12th, or the fifth to the octave; and the 17th, or third to the double octave. We always heard, together with the principal ſound F, the three harmonic ſounds above mentioned, very diſtinctly. I had the further precaution of making one of thoſe with me ſound his octave F very ſoftly, which we found in perfect uniſon with the harmonic joined by Nature to the principal ſound. The ſecond time of ſounding the principal or generating note, we found the 12th perfectly in uniſon with the correſpondent harmonic; and the ſame on the third ſounding, as to the 17th. The four ſounds then, were F, F, C, A. I next made the experiment with C, the 12th of the generating ſound F, being more homogeneous with it than the 17th. The reſult we found to be, C, C, G, E; and, by the ſame reaſoning, the experiment repeated with G produced G, G, D, B. And it will be found that theſe three experiments fill up the extent of the octave, and contain the intervals required.

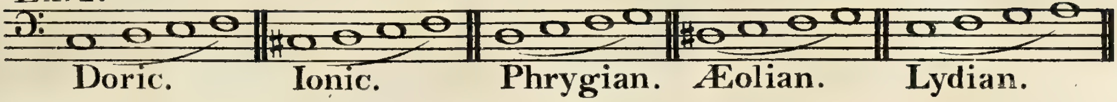
"If we examine theſe three fundamental ſounds, F, C, G, we ſhall find, that the ſound C is generated by the ſound F, and generates G; and conſequently that it holds the place of the greateſt relation in the ſeries, and ought to be particularly attended to. We may therefore conſider this ſound, or note, as the centre of the ſyſtem, or, as it is commonly called, the *key*. F, being a note a fifth graver, and by which C is generated, we ſhall denominate the *ſubdominant;* and G, which is acute fifth to, and generated by, C, we ſhall call the *dominant*. Thus, when any note whatever is taken and conſidered in this double relation, it will ſtand as the key. We have ſaid that our three experiments produced the three ſeries of intervals, F, *f*, *c*, A; C, *c*, *g*, E; and G, *g*, D, B. Let the repetitions, as diſtinguiſhed by the ſmall letters, be ſuppreſſed, and the octaves inverted; there will remain the ſeven intervals required, a ſyſtem known by the name of *gamut*, or *diatonic ſcale*, C, D, E, F, G, A, B=C."

GREEK MODES.

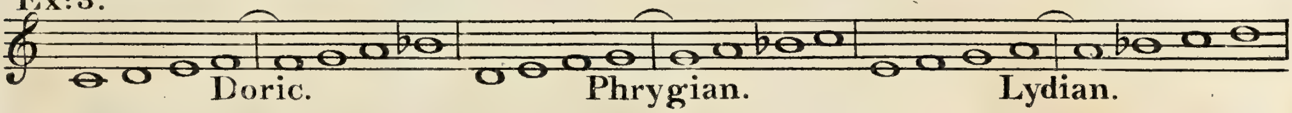
Ex: 1.



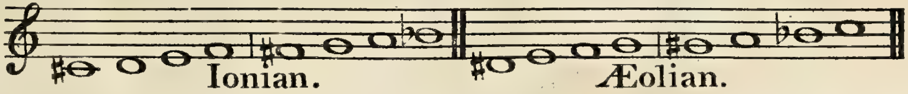
Ex: 2.

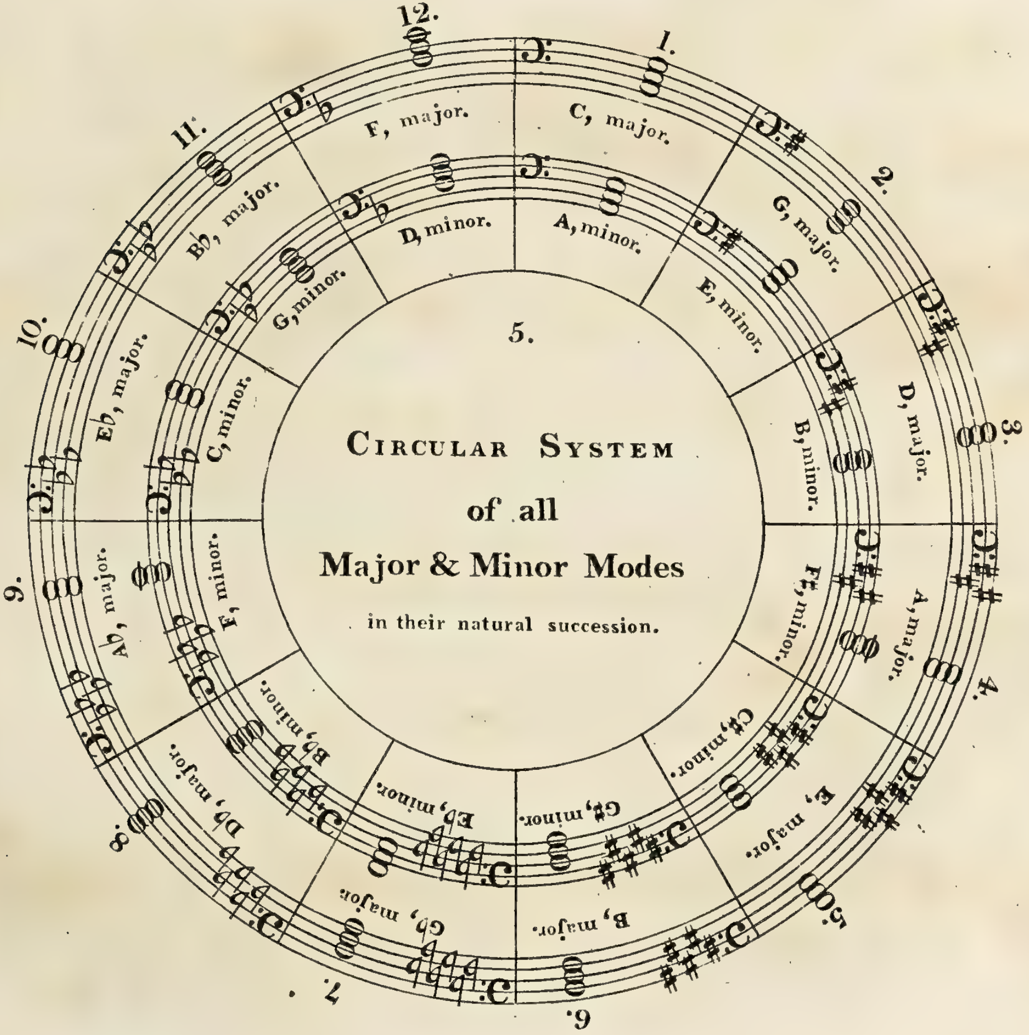


Ex: 3.



Ex: 4.



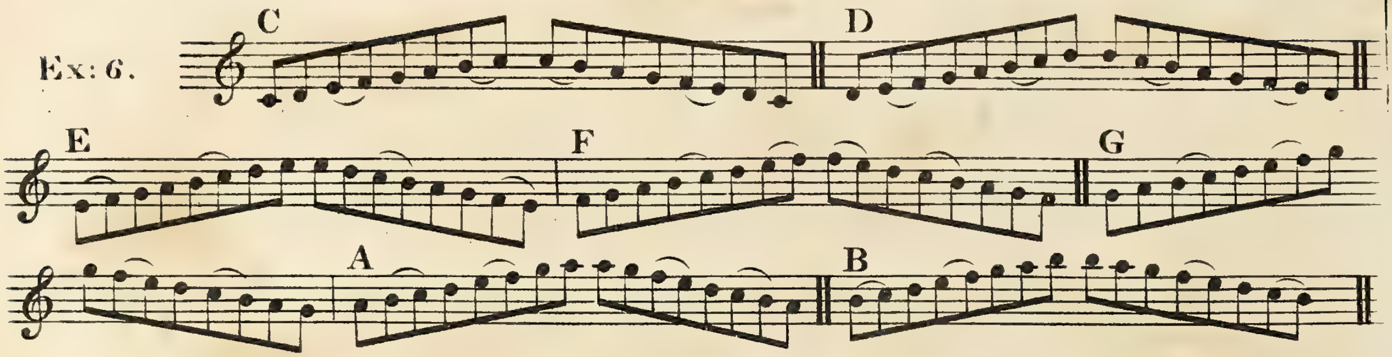


Circular System of all Major & Minor Modes in their natural succession.

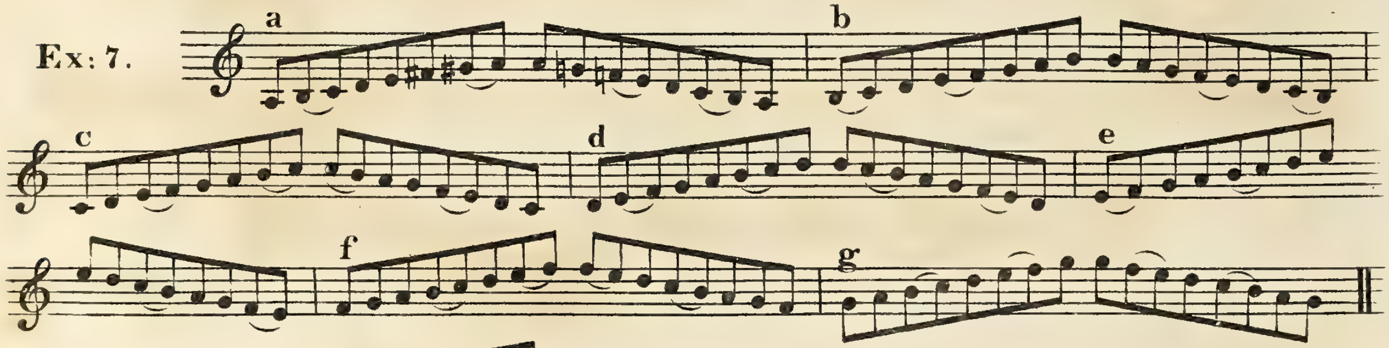
(Engd by Skarratt.)

ECCLESIASTICAL MODES, etc.

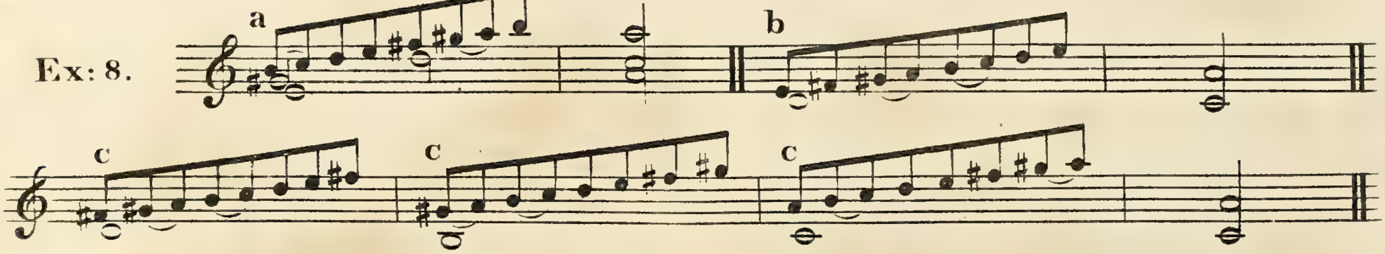
Ex: 6.



Ex: 7.



Ex: 8.



Ex: 9.

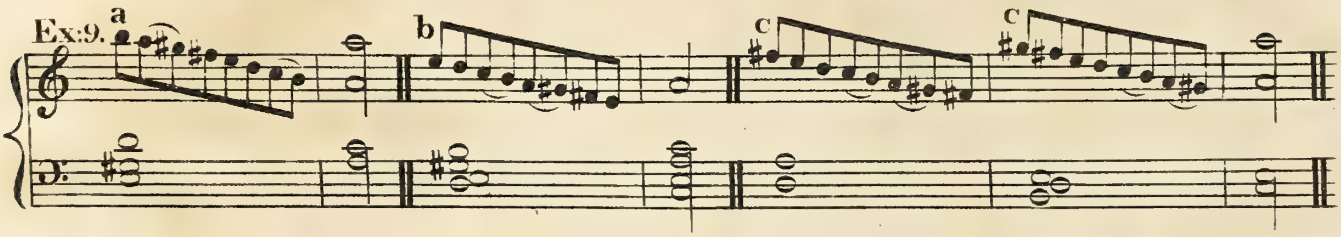
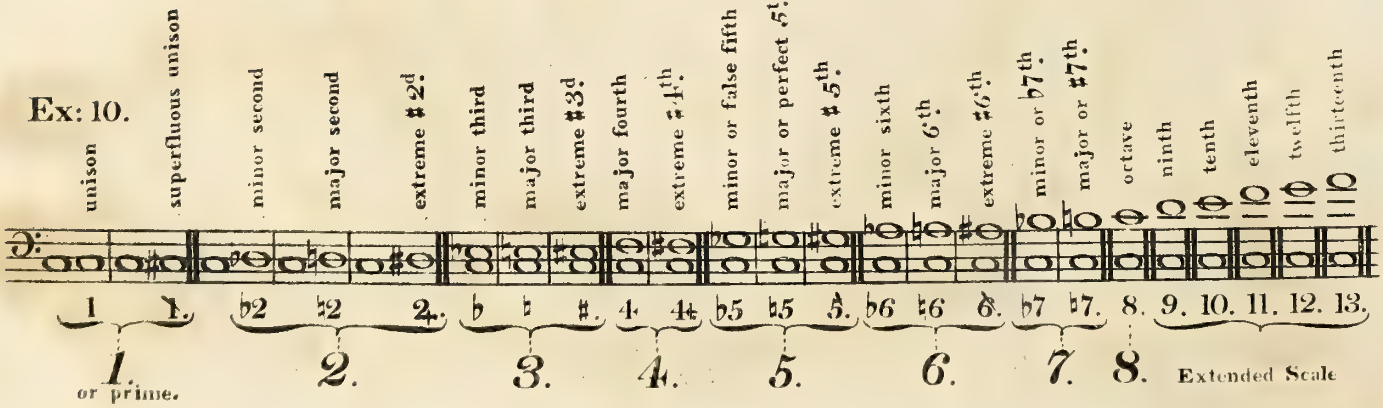


TABLE OF INTERVALS.

Ex: 10.



Engraved for the Encyclopaedia Londinensis 1818.

In theſe natural harmonies, the 17th, that is, the third to the double octave, is always ſharp; and hence it has been affirmed, that minor mode, in which the third of the key is flat, is entirely the work of art, not of nature.

In whatever mode the above experiments may be made, it is to be obſerved, that the additional ſounds are always generated *above* the key-note. But, if two different ſounds be made at the ſame time, a perſon ſtanding between them will hear a third, which is *lower* than either of the notes that have been ſounded. This curious diſcovery was made by ſignor Tartini, of which the reader may accept the following compendious account. If two ſounds be produced at the ſame time properly tuned and with due force, from their conjunction a third ſound is generated, ſo much more diſtinctly to be perceived by delicate ears as the relation between the generating ſounds is more ſimple; yet from this rule we muſt except the uniſon and octave. From the fifth is produced a ſound in uniſon with its loweſt generator; from the fourth, one which is an octave lower than higheſt of its generators; from the third major, one which is an octave lower than its loweſt; and from the ſixth minor (whoſe higheſt note forms an octave with the loweſt in the third formerly mentioned) will be produced a ſound lower by a double octave than the higheſt of the minor ſixth; from the third minor, one which is double the diſtance of a greater third from its loweſt; but from the ſixth major (whoſe higheſt note makes an octave to the loweſt in the third minor) will be produced a ſound only lower by double the quantity of a greater third than the higheſt; from the ſecond major, a ſound lower by a double octave than the loweſt; from a ſecond minor, a ſound lower by triple the quantity of a third major than the higheſt; from the interval of a diatonic or greater ſemitone, a ſound lower by a triple octave than the higheſt; from that of a minor or chromatic ſemitone, a ſound lower by the quantity of a fifth four times multiplied than the loweſt, &c. &c. In order that theſe muſical phenomena may be tried by experiments proper to aſcertain them, two hautboys tuned with ſcrupulous exactneſs muſt be procured, whilſt the muſicians are placed at the diſtance of ſome paces one from the other, and the hearers in the middle. The violin will likewiſe give the ſame chords, but they will be leſs diſtinctly perceived, and the experiment more fallacious, becauſe the vibrations of other ſtrings may be ſuppoſed to enter into it. If the Engliſh reader ſhould be curious to examine theſe experiments, and the deductions made from them in the theory of muſic, he will find them clearly explained and illuſtrated in Stillingfleet's Principles and Power of Harmony, printed at London in the year 1771.

We now proceed to the *diviſion* of the monochord.—When the open ſtring of a large bow-inſtrument, ſuch as the trumpet-marine, the double-baſs, or the violoncello, is acted upon with the bow, its whole length, between the two bridges, vibrates in one undivided motion, and produces its fundamental or graveſt ſound, called its ratio 1. A ſtring, whoſe ratio 1 is C on the ſecond leger line below in the baſs, when thus divided into aliquot parts, according to arithmetical progreſſion, produces the following ſucceſſion of ſounds, whoſe ratios (or the length of ſtring they require) are expreſſed under each letter, viz.

C	C	G	C	E	G	(B^{b})	C	D	E	(F)	G	(A)	(B^{b})	B	C,	&c.
1	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{7}$	$\frac{1}{8}$	$\frac{1}{9}$	$\frac{1}{10}$	$\frac{1}{11}$	$\frac{1}{12}$	$\frac{1}{13}$	$\frac{1}{14}$	$\frac{1}{15}$	$\frac{1}{16}$.	

The ſounds expreſſed by the letters in parentheſes, viz. B^{b}, F, and A, are thoſe whoſe exact natural ratios have not been preſerved in our modern ſcale. Perfectly correſponding with the ſcale that ariſes from the vibrations of a ſtring, is that ariſing from the vibrations of the air in a long tube that is open at both ends, ſuch as a trumpet or a French horn.

The ſcale of Nature divides itſelf as follows: Firſt, into a fundamental note and its repetition in the octave, or the ratios 1, 2, being the compaſs in which all the other notes are contained; ſecondly, into the harmonic diviſion of the octave, or ratios 2, 3, 4, which is important in the explanation of modern muſic; thirdly, into all the *harmonics* collected in an octave, or ratios 4, 5, 6, 7, 8, being the only eſſential notes in modern harmony; fourthly, into the ſaid harmonics and their *diatonic means*, or ratios 9, 10, 11, 12, 13, 14, 15, 16; and fifthly, into the former and their *chromatic means*, or ratios 17, 18, 19, 20, &c. to 32.

OF THE ANCIENT GREEK MODES.

It appears, in general, as if the organ of the human voice had been calculated to give two full intervals, and then half a one, as C, D, E, F. Three full intervals, as F, G, A, B, may therefore be conſidered as unnatural; although they are brought in artificially with great effect, and conſtitute the upper part of the modern diapaſon. Some modern writers have pretended, upon their interpretation of ancient documents, that the Greek melodiſts conſtantly played in the minor key, admitting only one full interval and half a one, as D, E F. But this notion appears unfounded; and, we think, not probable.

The original tetrachord of the ancients was compoſed, as it appears to us, of two full intervals and half a one, or three full tones and a ſemitone; and, in the relative poſition of the ſemitone with the three full tones, or the half with the two full intervals, we are perſuaded that the difference of their famous modes conſiſted. The ſucceſſion of notes at Ex. 1. Plate III. will be eaſily underſtood.

Farther than theſe three different poſitions of the ſemitone with reſpect to the full tones, or ſemi-interval with regard to the full intervals in a tetrachord, we cannot conceive any other combination in the generation of ſounds. Therefore, and in all probability, theſe three tetrachords conſtituted the three principal modes of the ancients. Let us obſerve, however, that we ought not to conſider the *major* and *minor* modulations or keys, as we have them, to have been the only modes upon which the Greeks have pitched the various ſyſtems of their melody. We know that the major third is in general bolder than the minor, and that the intonation of the one has much more majeſty than the other: but both have often interchanged their miniſtration, and we have ſpecimens of very impreſſive compoſitions in both theſe modes, although their particular characteriſtics be ſo diſtinct, that the major has been often ſtyled the *male*, and the minor the *female*, modulation.

As to the notes in the foregoing example, the reader has already found, that the firſt tetrachord, according to our opinion, anſwers to the *Doric* mode, and is equivalent to C, D, E, F; the ſecond, which we call *Phrygian*, is compoſed of D, E, F, G: the Doric being the *major*, and the Phrygian the *minor*. The next, the *Lydian*, has not been adopted or preſerved in modern muſic; ſince we have no ſemi-interval, or ſemitone, for a key-note. It is here the minor third inverted, E, F, G, A; but it is uſed in the plain chant for the intonation of pſalms, the ſinging of anthems, hymns, &c. the piece ending generally with a ſemitone.

Such was, and ſuch long remained, the ſimple baſis of ancient muſic; but, in lapſe of time, a new tetrachord was invented, and obtained the name of *Ionian*. It is almoſt impoſſible to gueſs how the intervals were placed in this combination, unleſs we ſuppoſe two full intervals and two ſemitones, or two ſemi-intervals and a full one. But this is mere matter of conjecture: the only point which appears indiſputable is, that every one of theſe four modes or modulations, with its acceſſaries, had a character, the features of which were ſo diſtinct, that to a Greek ear the difference was as perceptible as that between *major* and *minor* is with reſpect to our auditory faculty. Lucian makes Harmonides ſay to his maſter of muſic Timotheus, that he learnt from him how to keep the various characters of the various modes: the nearly divine breathing, *illum quaſi divinum afflatum*, of the Phrygian, our *minor*; the Bacchic raptures of the Lydian, *Bacchicum furorem*; the ſolemn gravity, *honeſtam gravitatem*,

tatem, of the Doric, our *major*; and the ſoftneſs and beauty, *venuſtatem*, of the Ionian. The known effeminacy of the long-robed Ionians delighted in the mildneſs of the notes which they had adopted as national; whilſt the gravity and warlike character of the Dorians, ***Dorica caſtra***, marched to battle at the ſound of the maſculine harmony of the major mode. On the other hand, the polite and well-cultivated people of Phrygia mounted their lyre to the delightful and heavenly ſweetneſs of the minor key, leaving to the Lydians the dithyrambic enthuſiaſm of Bacchanalians and Orgies.

The progreſs of cultivation in the art ſoon ſuggeſted the addition of a new tretrachord, and the inhabitants of *Æolia* had the credit of the invention. Inſtead of the original three, the tetrachords were now five, and moſt probably diſpoſed as in Ex. 2.

The divine art did not long remain there, it went a ſtep farther towards perfection; for we cannot ſuppoſe that the confined ſpace of the above-noted tetrachords could in any manner (known to us at leaſt) produce much effect as to melody or ſymphony. (N.B. Among the Greeks the words melody and harmony were ſynonymous, and what we call now counterpoint and accompaniment was expreſſed by the word *ſymphony*.) We ought alſo to take notice of the inſtruments, eſpecially the flute, which was particularly uſed to accompany the voice: and it is not improbable that, whilſt the flute or lyre were tied to the four notes of the tetrachord, the voice had the liberty of expatiating upon all the ſounds which thoſe baſſes admitted as ſymphonical below or generated above. What thoſe ſounds were, we have already ſhown in ſpeaking of the harmonics of the monochord.

Joining now to the firſt tetrachord one of the ſame power, by taking F as a fulcrum, we find in this union the ſeven tones of the gamut. Ex. 3. And then the lyre, inſtead of four ſtrings, and the flute, inſtead of four holes, admitted the complete and myſteriouſly-harmonical number of ſeven. This conjunction of the tetrachords could not be performed but upon the three fundamental ones; viz. the Dorian, the Phrygian, and the Lydian; the intermixed ones, wanting a ſemi-interval, were obliged to have recourſe to the help of the ſharp for the lower of the adſcititious notes above them, in order to echo the lower tetrachord in perfect melody; and thence the neceſſity of tuning the lyre again, or modulating, by ſome means, the ſettled tones of wind-inſtruments, as mentioned in ſeveral authors. See Ex. 4.

In the ſame manner may the tetrachords be placed one above another to the higheſt pitch; with this difference, that the two firſt are conjoined; the third does not join with the ſecond, but with the fourth; and thus the ſame ſyſtem of modulation, or key, is kept up through the whole diapaſon.

Let us remark here, that, in the accidental alterations which the intermediate tetrachords are obliged to undergo, we find, in an inverted poſition, the generation of the *dieze*, or ſharp: for, according to the rules of modern tablature, the firſt ſharp alights upon F fa; the ſecond upon C ſol ut; the third upon G re ſol; the fourth upon D la re; the fifth upon A mi la; an indubitable probability that the tetrachords, called ***Ionic*** and ***Æolian***, were, though perhaps obſcurely, the origin of the modern *nuances*, or changes of keys from C to G, from G to D, &c. in the common way. The ſame rules will apply to the flat, if the tetrachords are carried on to the higheſt pitch. Were this curious affinity deeply and ſcientifically entered into, perhaps we might find a much greater analogy between ancient and modern melody. No one can doubt that the Greeks, owing perhaps to the liquidity of their vocal organs, were more nice in the ſplitting of intervals between ſounds than we are. A ſemitone with us is the interval of either four or five commas; but the ancients uſed to divide a tone, or interval, in four parts, according to ſome intelligent writers on the ſubject: for they mention the *fourth* of a tone. We are aware that what is called in French *note ſenſible*, the immediate one below the final, or key-note, is much leſs than a ſemitone, principally when, as in the fourth tone of the Gregorian chant, the ſecond, or note above the final, is a ſemi-tone; (ſee the Lydian tetrachord;) but we have no wind-inſtruments that can repreſent it. The human voice is the only organ properly fit to give an idea of it; and, next, the ſhifting of the fingers upon the violin, violoncello, and other inſtruments of a ſimilar nature.

In the courſe of time new modes which drew their denominations from the original ones, with the addition of the prepoſitions ὑπερ and ὑπὸ, were inſerted to complete the diapaſon. Thus the Lydian mode was ſurmounted above by the Hyper-Dorian, Hyper-Ionian, Hyper-Phrygian, Hyper-Æolian, and Hyper-Lydian; and below the plain Dorian mode deſcended the Hypo-Lydian, Hypo-Æolian, Hypo-Phrygian, Hypo-Ionian, and Hypo-Dorian: thus forming fifteen modes in the whole.

Theſe fifteen different modes, or keys, are mentioned and enumerated by Alypius, a Greek muſician; but Ariſtoxenus, according to Euclid, admitted only thirteen, leaving out the higher ones, namely, the Hyper-Æolian and Hyper-Lydian. Ptolemy admitted but ſeven, viz. the Hypo-Dorian, Hypo-Phrygian, Hypo-Lydian; then the Dorian, the Phrygian, and Lydian; and, to complete the ſet, the Mixo-Lydian or Hyper-Dorian. The diſtances between theſe ſeven modes were as follows; from the Hypo-Dorian, the loweſt of all, to the Hypo-Phrygian, one full interval, or tone, as from C to D; from the Hypo-Phrygian to the Hypo-Lydian, another tone, as from D to E; from the Hypo-Lydian to the Dorian, a ſemitone, as from E to F; from the Dorian to the Phrygian, a tone, as from F to G; from the Phrygian to the Lydian, a tone, as from G to A; and from the Lydian to the Mixo-Lydian, a ſemitone, as from A to B♭; which conſtitutes the whole extent of the ſeven muſical tones, or two tetrachords conjoined. And now we come to this intereſting concluſion; namely, that the ſeven keys, or modes, of the Greeks, according to Ptolemy, with the addition of the Hypo-mixo-Lydian, are preſerved, as a moſt curious and precious relic of ancient melody, down to this moment, in the eccleſiaſtical plain chant uſed in all Roman-catholic churches.

But of the effect of theſe ancient modes, or indeed of the nature of them, we at preſent really know nothing. Butler, however, in his "Principles of Muſic," publiſhed 1636, ſpeaking of the ***Lydian mood*** of the ancients, which he ſeems to have perſuaded himſelf he underſtood, ſays, "Of this mood is that paſſionate lamentation of the muſical king for the death of his ſon Abſolom, compoſed in five parts by Mr. Thomas Tomkins, now organiſt of his majeſty's chapel; the melodious harmony of which, when I heard it in the muſic ſchool (Oxon.), whether I ſhould more admire the ſweet well-governed voices, with conſonant inſtruments, of the fingers, or the exquiſite invention, *wit*, and art, of the compoſer, it was hard to determine."

Mr. Kolman derives our modern ſcale from the Greeks by the following train of reaſoning; which, though in ſome degree it may appear like a repetition, yet it places the matter in a new light, and will prove a help to the reader in underſtanding this obſcure ſubject.

That moſt ancient tetrachord (or ſcale of four notes) of the Greeks, called the *diatonic ſyntone*, conſiſts of four notes, equal to our B, C, D, E, the loweſt on the violin. If we examine that tetrachord, we find it conſiſt of the beſt part of the diatonic octave in the ſcale of nature; as thus, C 8, D $\frac{8}{9}$, E $\frac{8}{10}$, and the lower octave of B $\frac{8}{11}$. For the C is evidently the principal note, as octave of a key-note; and the E is its major third, which conſtitutes the beſt part of a fundamental *major concord*. The B is the leading note, or major third of the fundamental leading chord to the C; and the D is the fifth of that chord, as well as a diatonic minor between C and E for the uſe of *melody*. The characteriſtics of that tetrachord, therefore, are: a diatonic major third; and a ſemitone below it, as leading note to the principal one.

Now the *completion* of our whole diatonic as well as chromatic ſcale, ſeems to have taken place in the mere occaſional tranſpoſition of the explained tetrachord. For when it was tranſpoſed a fourth higher, as thus, B, C, D, E E, F, G, A; or a fifth lower, as thus, E, F, G, A; B, C, D, E; it produced the ſeven notes of our modern diatonic octave. The former tranſpoſition produced what the Greeks called the tetrachord *conjoined*, becauſe the higher and lower four notes united in the one note in the middle, as the double letter E E ſhows; and the latter the tetrachord *disjoined*, becauſe the tranſpoſition did not unite the twice four notes in one note in the middle: but in both tranſpoſitions the chief conſideration remained, the two tetrachords; and no real conſideration ſeems to have been paid at firſt to the diatonic octave which they produced.

The next tranſpoſition of the tetrachord in queſtion, attempted by the ancient Greeks, was that of a ſeventh higher, or ſo as to begin a new tetrachord conjoined, in the higheſt note of the former one, as thus: B, C, D; E E F G, A A B, C D. But there it was impoſſible to produce the true tetrachord, of a diatonic major third, and a ſemitone below it, with the octaves of the former, B, C, D, except by introducing between the A and B a new note, which was a ſemitone above it, and a tone below C. This being done, it produced our B flat, and with it the true tetrachord A, B♭, C, D; and at the ſame time it ſhowed that the tetrachord might be tranſpoſed on any note of the diatonic octave (or rather ancient tetrachord conjoined) by a ſimilar diviſion of the other four whole tones, C D, D E, F G, and G A, into ſemitones, as found in the ancient diagram (or ſcale) of Ariſtoxenus, and preſerved in our modern chromatic octave. From the above it follows: that, though our modern ſcale is generally conſidered as a diatonic or chromatic octave, with its repetitions, it is nothing more than a diatonic or chromatic major third, and its tranſpoſition a fifth higher, with an equal fourth to the key-note, as the octave of the key-note is to the fifth of the ſcale; as thus:

Diatonic Major Scale.

$$\underbrace{C\quad D\quad E}_{\text{major 3d.}}\qquad \underset{\frac{1}{4}\text{ of C}}{F}\ \text{———}\ \underbrace{G\quad A\quad B}_{\text{major 3d.}}\qquad \underset{\frac{1}{4}\text{ of G.}}{C}$$

The chromatic ſcale depends on the ſame principle, with the mere addition of the ſemitones between the tones.

A modern diatonic ſcale is that, which proceeds by whole tones, and ſuch interſperſed ſemitones as make a whole degree of modern notation. It may be either major or minor, according to the greater or leſs *third* of the key note, which it contains. A major ſcale is that, whoſe third of the key note conſiſts of two whole tones; as in C minor. And a minor ſcale that, whoſe third of the key-note conſiſts but of a tone and a ſemitone; as in A minor. A modern chromatic ſcale is that, which proceeds by ſemitones throughout, though in every octave two of them make whole degrees in modern notation.

Of the Modes at present in use.

The chief of the modes at preſent in uſe are the major and the minor. The major mode is that which depends on the modern diatonic ſcale with the major third, as that of C major. The minor mode depends on the modern diatonic ſcale with the minor third, as that of A minor. The major and minor ſcale can be tranſpoſed on all the other eleven notes of the diatonic chromatic ſcale. This is called the *harmonic circle*, as given at Plate III. fig. 5. with the ſharps or flats that are required for every ſuch tranſpoſition.

Both the major and minor mode, may be either ſtrictly diatonic; or diatonic chromatic. To play or compoſe ſtrictly in the diatonic major or minor mode of any key, requires the obſervance of the two following rules.

1. No other notes muſt be introduced but thoſe contained in the diatonic ſcale, on which the modulation depends.

2. Every degree of the diatonic ſcale muſt be allowed to carry the ſame chords in harmony, and take the ſame progreſſions in melody, as that of the key-note, or its octave. In regard to this ſecond rule it muſt be obſerved, that, though every degree of the diatonic ſcale is allowed to be treated like all the other degrees; yet, according to their different perfection, it is natural that ſome chords, intervals, and progreſſions, ſhould be introduced leſs frequently than others.

From the above two rules follow the different diſpoſitions of the diatonic octave; as when the ſecond, third, fourth, &c. degree of the ſcale, is ſubſtituted as a fundamental note, inſtead of the key-note. See the following examples. In C major, both aſcending, and deſcending at the back of Plate III. Ex. 6. C, D, E, F, G, A, B; and in A minor at Ex. 7. *a, b, c, d, e, f, g*. The ſlur in the preceding examples ſhows the different poſitions of the two diatonic ſemitones between the five tones in an octave.

Concerning the minor mode in particular, it muſt be obſerved, that it chiefly depends upon the notes of the deſcending ſcale of the key-note, as in the 7th example, *a, b, c, d, e, f, g*. For the ſixth and ſeventh of the key-note are made accidentally ſharp, merely in thoſe caſes where the melody proceeds to a cloſe on the octave of the key-note; or where the harmony is a leading chord to a perfect cadence on the key-note, or ſome inverſion of it. See Ex. 8. *a, b, c*, which are aſcending examples: and the application of the ſame rules to a deſcending ſeries at Ex. 9. *a, b, c*.

All thoſe diſpoſitions of the diatonic octave, with the paſſages that depend on them, may take place in the baſs, or in a middle part, as well as in the higheſt. But, though the accidentally-ſharp ſeventh of the key-note in minor becomes neceſſary in the caſes here ſhown, the accidentally-ſharp ſixth is introduced merely for the ſake of avoiding the progreſſion of an extreme-ſharp ſecond to and from that ſeventh; as in all other reſpects the ſixth of the key-note in minor ought to be natural.

Though the modulations of ſome of our modern muſicians ſeem to ſet all rules at defiance, yet we conſider the major and minor modes, as we have given them in all keys on Plate III. as the only legitimate ſcales for modern muſic. We ſhall therefore ſay a few words more upon that head. A very obvious diſtinction between theſe modes, and eaſily remembered by a learner, in this: In the major, you have firſt a ſharp third, then a flat third; in the minor, you have a flat third from the key, followed by a ſharp third; the fifth being the ſame in both.

Signior Muſſolini's remarks and explanations on this ſubject are ſomewhat ſingular, but, we think, not unworthy of attention; as will appear from the following extract: "All writers on muſic have found themſelves embarraſſed when they come to treat of the *minor mode*. Unacquainted with its origin, or with its fundamental or generating ſound, they have advanced different opinions, in order to give it a more ſuitable progreſſion and ſcale; but, in recurring to the principles I have eſtabliſhed, every difficulty will vaniſh. Of what do the harmonics of the key C conſiſt? of a greater third C E, and of a minor third E G: now it is evident that, if the harmonic E G is inverted into A C, which is preciſely of the ſame dimenſions and nature, we ſhall have the two thirds, A C minor, and C E major, which preſerve the ſame relation and the ſame nature with the two former, C E and E G, and conſequently muſt equally produce the ſame natural and pleaſing effect. Moreover, if we proceed diatonically from A to its octave, without altering any of the intervals which fill up that extenſion, is it not the ſame progreſſion as is made uſe of from C to its octave? We repeat individually the very ſame notes, without any difference. Now, to make uſe of the ſame progreſſion, the ſame harmonics and relations, or to be in the ſame key, is not this one and the ſame thing? Conſequently to be in the key of A minor, or that of C major, will be perfectly the ſame thing: and therefore both are marked in the ſame manner, without any alteration of ſharps or flats on the clef. The whole difference is this; that in the major key the fundamental is C, and in the minor it is A; and conſequently the cloſe, or cadence, in the firſt caſe will be on C, and in the ſecond on A. And we may add, that the harmonics in C are both given and *combined* by nature; and in the key of A, they are given by nature, but *combined* by art. Or, ſtill keeping in the key of C, you have only to reverſe the two thirds, making the firſt minor, i. e. C to E♭, and the ſecond ſharp, as E♭ to G, the fifth and octave remaining the ſame. Thus it is evident, that each *major* key has its relative *minor;* and, there being twelve major keys, there will be alſo twelve correſponding minor keys; and therefore the number of keys derived from the progreſſion of the ſcale, will be twenty-four."

A third mode, differing from both the major and minor, was propoſed by a Monſ. Blainville, in France, under the name of the *mixed mode*, the generation and properties of which he explains in his Hiſtory of Muſic. This, however, was nothing more than the eccleſiaſtical mode of E, (ſee Ex. 6. C.) with a minor ſecond, as well as third. And it is extraordinary that this pretenſion ſhould have had any abettors in a Roman-catholic country, where old compoſitions in this mode are daily performed in cathedrals and collegiate churches. However, it was a matter of wonder and debate, during ſome time, in France. See the Mercure de France for 1751.

Modern muſic has its *genera* as well as the ancient. The *diatonic* is the moſt common, and is that moſt agreeable to what is pointed out by nature; but the moderns have their *chromatic* alſo, and even in certain reſpects their *enharmonic*, though in a ſenſe ſomewhat different from that aſſigned to theſe words by the ancients.

Thus, the modulation is *chromatic* when ſeveral ſemitones are paſſed over in ſucceſſion, as if we ſhould ſay F, E, E♭, D, or G, F♯, F, E. It is very rare to have more than three or four ſemitones following each other in this manner; yet, in an air of the ſecond act of *la Zingara*, or the Gypſey, an Italian interlude, there is a whole deſcending octave almoſt from C to D in conſecutive ſemitones. It is the longeſt chromatic paſſage with which we are acquainted.

Rameau finds the origin of this progreſſion in the nature of the fundamental baſs, which, inſtead of proceeding from fifth to fifth, (its natural movement,) proceeds from third to third. But it muſt here be remarked, that in the firſt paſſage from E to E♭, there ought ſtrictly to be only a ſemitone minor, and from E♭ to D a ſemitone major; but the temperament and conſtitution of moſt inſtruments, by confounding the D♯ with E♭, divide into equal parts the interval from D to E; and the ear is affected by them exactly in the ſame manner, eſpecially by means of the accompaniment.

There are two enharmonic genera, the one called the *diatonic enharmonic*, and the other the *chromatic enharmonic;* but they are very rarely employed by muſicians. Theſe genera are not ſo called becauſe quarters of a tone are employed in them, as in the ancient enharmonic; but becauſe, from the progreſs of the fundamental baſs, there reſult ſounds, which, though taken one from the other, really differ a quarter of a tone, called by the ancients enharmonic, or are in the ratio of 125 to 128. In the diatonic enharmonic, the fundamental baſs goes on alternately by fifths and thirds, and in the chromatic enharmonic it goes on alternately by thirds major and minor. This progreſſion introduces, both into the melody and the harmony, ſounds which, belonging neither to the principal tone nor its relatives, convey aſtoniſhment to the ear, and affect it in a harſh and extraordinary manner; but are proper for certain terrible and violent expreſſions. It was for this reaſon that Rameau employed the diatonic enharmonic in the trio of the Fates, in his opera of Hippolitus and Aricia; and, though *he was not able to get it executed*, he was firmly perſuaded that it would have produced a powerful effect had he found performers diſpoſed to fall into his ideas, ſo that he ſuffered it to remain in the part which was printed. He mentions, as a piece of the enharmonic kind, a ſcene of the Italian opera of Coriolano, beginning with theſe words, *O iniqui marmi!* which he ſays is admirable. Specimens of this genus are to be found alſo in two of his own pieces for the harpſichord, the *Triumphante* and the *Enharmonique;* and he did not deſpair of being able to employ the chromatic enharmonic at leaſt in ſymphonies. And why indeed might he not have done ſo, ſince Locatelli, in his firſt concertos, employed this genus, leaving the flats and ſharps to exiſt, and diſtinguiſhing for example the D♯ from E♭. This, ſays M. de Blainville, is a piece truly infernal, which throws the ſoul into a violent ſtate of apprehenſion and terror.

Of the Eccleſiaſtical Modes.

Under this denomination are comprehended thoſe ancient modes, derived from the Greeks, which depend on the different diſpoſitions of the diatonic octave, already ſhown, when every ſuch diſpoſition is conſidered as the diatonic ſcale of a key-note; and they are called *eccleſiaſtical*, becauſe they have been chiefly attended to in compoſitions of the ancient church. See p. 324.

The two principal things, on which the doctrine of the modes in queſtion depends, are: the *diſpoſition* of the diatonic octave; and the authentic or plagal diviſion of it. Concerning the *diſpoſition* of the diatonic octave, the ancients did not confine themſelves to one major or minor ſcale and mode, with its tranſpoſitions, like modern compoſers; but they made every diſpoſition of the diatonic octave, as ſhown on the back of Plate III. at Ex. 6. C, D, E, F, G, A, a diatonic ſcale of a key-note, which had its own peculiar mode. And the reaſon why they did not do the ſame with that of B, was becauſe it has no perfect fifth to the key-note, and conſequently no perfect fundamental concord to the principal note. Each of theſe modes had ſome *characteriſtics* which were peculiar to that mode alone, according to the deſcribed diſpoſition of its diatonic octave; viz. The mode of D with the minor third, admitted of natural digreſſions to its fourth with the major third; and to its ſecond with the minor third, and perfect fifth. That of E with the minor third,—to its ſecond with the major third; and to its ſeventh with the minor third. That of F with the major third,—to its ſecond with the major third; and to its ſeventh with the minor third, and perfect fifth. That of G with the major third,—to its ſeventh with the major third; and to its fifth with the minor third. The one of A was nearly like our modern A minor, and that of C like the modern C major.

The *ſecond* object, eſſential in the doctrine of the ancient eccleſiaſtical modes, is the authentic or plagal diviſion of the diatonic octave. This is the diviſion which nature propoſes in the ratios 2, 3, 4; and which has been particularly attended to in thoſe antiphonies (or anthems) of the ancient church from which our fugues have ariſen. For, at the time when the ſaid antiphonies were firſt compoſed, the ſubjects of their melodies were in general of ſo ſmall a compaſs, that they did not exceed half an octave, according to the diviſion in queſtion. When therefore a ſhort ſentence had been ſung in the lower part of the octave, i. e. from the key-note to its fifth, an imitative reply to it was made in the higher part, or from the fifth of the ſcale to the octave, or the contrary. A melody or modulation in the lower part of the diatonic octave was then called *authentic*, or "principal," becauſe it depended on the key-note itſelf, and admitted of the authentic or perfect cadence from the fifth of the ſcale to the key-note; as thus, G—C. But a melody or modulation in the higher part of the octave was called *plagal*, or "ſubſtituted;" becauſe it depended on the fifth of the real key-note, on which it admitted of a cloſe with the mere imperfect or plagal cadence from the fourth to the ſubſtituted key-note; as thus, C—G. And, though ſubjects and modulations are at preſent allowed a greater compaſs than that of half an octave, the authentic and plagal diviſion of the octave is ſtill attended to in the anſwer of fugues; for, when a ſubject is in the authentic mode, or mode of the key-note itſelf, and makes a cadence or cæſura on the fifth of the ſcale, the anſwer muſt make that cadence on the fourth of its ſubſtituted ſcale, being on the principal key-note, or its octave; and the contrary.

Hence follows the difference between the ſame diatonic octave when uſed as *authentic* or as *plagal*. For that of C, when uſed as authentic, is divided on the fifth thus; C, D, E, F, G; G, A, B, C; and when uſed as plagal it is divided on the fourth, thus: C, D, E, F; F, G, A, B, C. And the ſame with all the other ſcales and modes.

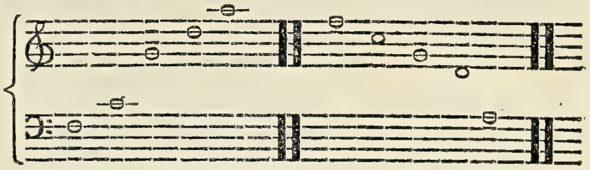
It will appear, from the imperfection of the ſcales in moſt of theſe modes, that they are only capable of melody; and in the common ſervice of Roman-catholic churches, when the prieſts perform the duty without the aſſiſtance of profeſſed muſicians, no harmony is attempted to be given to mere canto fermo. In cathedrals, the motets and parts of the maſs are ſung by choirmen and children, as the anthems and ſervices are in our cathedrals.

Notwithſtanding the imperfection of the ſcales, and little variety of keys in the eccleſiaſtical chants, ſecular muſic ſeems for many ages to have had no other rules, but to have been ſtrictly confined to a few keys in the diatonic genus, without the liberty of tranſpoſitions. Hence came the timorous pedantry of excluding all other keys and ſcales but thoſe uſed in the church; which kept every kind of melody meagre and inſipid, and in ſubjection to the rules of eccleſiaſtical chanting. For it appears, that the only major keys uſed in canto fermo are C, F, and G; and the only minor keys A, E, and D. And in four of theſe keys the ſcale is deficient, as there is no ſeventh, or *note-ſenſible*, to G, A, E, or D. This accounts for ſo ſmall a number of the twenty-four keys which the general ſyſtem and ſcale of modern muſic furniſhes, having been uſed by the old compoſers; as well as for the temperament of the organs by which theſe modes were afterwards accompanied. And as all muſic in parts ſeems, for many ages after the firſt attempts at counterpoint, to have been compoſed for the ſervice of religion upon canto fermo and its principles; it likewiſe accounts for the long infancy and childhood of the art, till it broke looſe from the trammels of the church, by which it was bound in Gothic times: and by the cultivation of the muſical drama ſacred and ſecular, the ideas of compoſers were enlarged, and the talents of performers improved by new exertions, which brought the art nearer perfection during the two laſt centuries than it had attained in ſeven hundred years from the time of Guido.

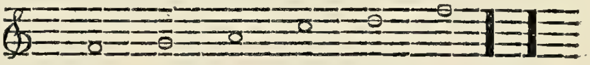
In implicit and religious obedience to the laws of canto fermo, no accidental flat or ſharp was ever to appear; all the eight tones being rigidly in the diatonic genus in the keys of C and A natural, with no other ſemitones than from E to F, and B to C. When the ſcales of theſe tones are drawn out at full length, they ſeem nothing more than different ſpecies of octave. As to making theſe ſcales perfect by adding a flat or ſharp at the clef; this was a licence which no one thought of, or at leaſt had the courage to practiſe, till counterpoint began to gain ground. And even then, the *muſica ficta*, or "falſe muſic," as that in tranſpoſed keys was called, no one dared to write till lately. Even the orthodox and good Padre Martini, at length vanquiſhed his fears of the impiety of uſing an accidental flat or ſharp in the inward parts of canto fermo. See Burney's Hiſt. of Muſic.

Of the Modes, or Scales, of the Chineſe and Singaleſe.

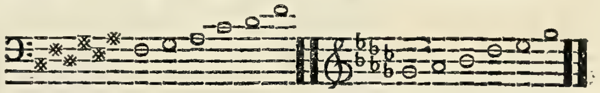
All the ſpecimens which we have been able to procure of genuine Chineſe muſic are without ſemitones; and ſeem to confirm the idea of of père Amiot, and the abbé Rouſſier, that it has been formed by a ſeries of perfect fifths, produced by the triple progreſſion of Pythagoras. Of this ſeries of perfect fifths, however, the ancient Chineſe uſed only five, beginning at F, the fundamental or loweſt ſound of their ſyſtem, which produced the following treble ſcales either way, by beginning at the top or bottom of their great *Lu*, as each diſtinct arrangement of ſounds is called:



And, by giving to theſe ſounds a regular diatonic progreſſion, they furniſh the following ſcale without ſemitones:



and which is, in fact, the preciſe Scottiſh ſcale, that may be played on the ſhort keys of a harpſichord, or piano-forte, in G$^{\sharp}$ or F$^{\flat}$. For example:



We had long been trying, (ſays Dr. Burney,) to aſcertain the fact concerning the want of ſemitones in the Chineſe muſic, and had ſent enquiries into different parts of the empire, among which one was, Whether the Chineſe had any ſemitones in their muſic? or whether their octave only conſiſted of five tones, inſtead of ſeven with which the ſcale of Guido is furniſhed? Which queſtion was anſwered by an Italian who had been thirty years at Pekin, and was a good muſician; whoſe anſwer was: *La Cineſi nella loro muſica non hanno ſemituoni*; "The Chineſe have no ſemitones in their muſic." This confirmed the conjecture to which the melodies which we had ſeen gave birth; but did not aſſign a reaſon for the deficiency. But, after peruſing the 6th volume of "Memoires concernant l'Hiſtoire des Sciences, &c. des Chinois," by the miſſionaries of Pekin, publiſhed in 1780, and the Memoir concerning Chineſe Muſic ancient and modern, by père Amiot, one of the Pekin miſſionaries, of which the abbé Rouſſier was the editor, we ſaw no difficulty in aſſigning a reaſon for the deficiency in the Chineſe ſcale according to European ideas. For if, inſtead of ſtopping at A, the fifth of D, they had proceeded two fifths further, they would have had an E and a B, which would have furniſhed materials for completing the diatonic octave of five tones and two ſemitones: their ſcale would then have been F, C, G, D, A, E, B; which, arranged diatonically, furniſhes every ſound in the natural ſcales of C and A.

Sir George Staunton, when at Pekin with the embaſſy in 1793, remarked the ſimilarity between the Chineſe muſic and the Scotch. "The muſicians (ſays he) affected moſtly ſlow and plaintive airs, not unlike thoſe of the Highlanders of Scotland; which they played in exact and meaſured time. To Mr. Huttner, a good judge of muſic, it appeared, that their gamut was ſuch as Europeans would call imperfect, their keys being inconſiſtent; that is, wandering from flats to ſharps, and inverſely, except when directed by a bell ſtruck to ſound the proper notes. Mr. Huttner farther obſerved, that the Chineſe, in playing on inſtruments, diſcovered no knowledge of ſemitones, nor did they ſeem to have any idea of counterpoint, or parts in muſic. There was always one melody, however great the number of performers; though, in a few inſtances, ſome of the inſtruments played in the lower octave, while the reſt continued in the upper; and thus approached to harmony." Authentic Account of the Embaſſy, &c. vol. ii. p. 262. 4to. For farther particulars relative to the Chineſe muſic, ſee the article CHINA, vol. iv. p. 466.

A ſhort account of the ſtate of muſic among the Cingaleſe, or Singaleſe, (for ſo the inhabitants of Ceylon are called,) has been furniſhed by M. Joinville, ſurveyor-general to the government; and forms part of an eſſay On the Religion and Manners of the People of Ceylon, publiſhed in the viith vol. of the Aſiatic Reſearches. "Muſic appears to have been formerly cultivated at Singala, or Ceylon, and reduced into principles. There are pieces of muſic to be ſeen in regular notes, in ſome of the old books in the Pali tongue. The ancients had ſeven notes, called ***Sa, Ri, Ga, Me, Pa, De, Ni.*** The gamut was termed ***Septa Sonere.*** There was no particular ſign for theſe notes; each of them being formed of as many letters as were neceſſary for their pronunciation. It is very probable that this gamut anſwers exactly to our's; and conſequently, that the beginning of a tune known to all the world, would be written in Singaleſe muſic thus: Sa ſa ri ni ſa ri, Ga ga me ga ri ſa, Ri ſa ni ſa. But, as their muſic in notes has been almoſt entirely forgotten, I have not been able to diſcover how they uſed to diſtinguiſh the half-tones, the crotchets, meaſures, bars, &c. &c. The ancient muſic of the Singaleſe is in all probability the ſame as that of the Indians of the continent. Nothing, however, can be more unpleaſant than the Singaleſe airs, whether ſung or played on either kind of their guitars. Their trumpet produces the moſt annoying ſound I ever heard; yet they are fond of it to diſtraction. They conſecrate it to the temples and to the king. Its name is *hoveneve.* Their horn, called *kombove,* is as unpleaſant as the former. They have a kind of hautboy that is not quite ſo inſupportable as their other inſtruments, and which might perhaps, in the hands of an able player, be made to give ſome pleaſing tones; it is termed *nalavé.* They have four ſpecies of drums. The firſt, *daoul,* is long and narrow. They beat it with a curved ſtick, called *daoul kadipoue,* and uſe only their left hand to it. The *tammetam* is a kind of kettle covered with a ſkin on the top, and beat with an inſtrument called *kaddipow.* The *rabani* is nearly ſimilar to our timbrel; but it has no bells. They ſlide the fingers of the right hand on it, and hold it with the left: women play on it alſo. They place it on the ground, and three or four at once beat it for many hours together, without regard to time. The *odikie* is the beſt of all their drums, and is certainly capable of producing a good effect in a piece of muſic. It is very narrow conſidering its length. The two extremities of it are tied by catgut-ſtrings to the belt, on which the inſtrument hangs; this belt goes over the ſhoulder. They ſqueeze the drum occaſionally with the left elbow, and ſtrike it with their right hand. The preſſure on the inſtrument, by ſtretching it more or leſs, makes it produce different tones. The *tammetam* is uſed in the feaſts of the great, and always precedes them in their journeys. It is a neceſſary part of the muſic to be played before the temple morning and evening. In fine, it is an eſſentially-neceſſary inſtrument upon all occaſions that can attract the attention and conſideration of the public. The *rabani* is more adapted for the feaſts of friends; the *daoul* is uſed at all times. But the *odikie* is the inſtrument of the men of taſte. A player on it is, conſequently, paid more liberally than thoſe on the *daoul* or *tammetam.*

"The Singaleſe are very fond of hearing ſongs. A great man (when travelling) has often one ſinger before and another behind his palanquin. They each in their turn ſing ſtanzas of an indeterminate length; as it happens at times that the ſinger, animated by his ſubject, gives ſome verſes extempore. The ſongs are either religious, in which caſe they extol the virtues of Boudhou, and other gods; or they are hiſtorical, and then they praiſe the virtuous actions of ſome of their kings, or relate a love-adventure. In all caſes the air of the ſongs is mournful. I have never heard what can be called gay muſic among the Singaleſe; and I think it would be very difficult to put any into note; for the meaſure is inceſſantly changing, and the movement remaining the ſame, always ſlow. It is what is generally called the *andante.*"

Of Intervals.

A ſound uttered by itſelf, and without any relation to others, is not a tone or a ſemitone in muſic: it is not a note or any part of melody, much leſs of ſymphony, as long as it dies ſingle with the vibration of the air that produces it. It may be referred to a part of an agreed diapaſon; it may be C, D, E, or any one of the ſeven tones of the gamut upon the piano-forte, and any other inſtrument tuned to the pitch-pipe; but in itſelf it is a mere ſound without, as yet, any correlation or name.

Intervals are known in nature relating to the extenſion of matter and time; between a foot and a yard; an inch and a foot; between a minute and an hour. A third ſpecies of interval has been found between natural ſounds: hence the diſtinction between a tone and a ſemitone. When two ſounds are emitted ſucceſſively, it may be gueſſed at what diſtance the one is from the other; whether the diſtance be a full tone or a ſemitone, a third, a fourth, a fifth, &c. and the ſame if the ſounds are uttered ſimultaneouſly.

An interval then, in muſic, ſignifies the diſtance or ſpace between two fixed ſounds; which is meaſured and determined by the proportions of thoſe ſounds in the ſcale. Harmony ſuppoſes the ſcale to be extended as far as a ninth, tenth, eleventh, twelfth, and thirteenth, ſounds; which in fact are but repetitions of the ſecond, third, fourth, fifth, and ſixth, parts of the ſcale, although the laws of harmony do not conſider them as ſuch.

Having aſcertained the preciſe diſtance between any two fixed ſounds; whatever it may be, the following figures will ſhow how it ſhould be expreſſed.

1	regular	2	3	4	5	6	7	8	9
2	sharp	$\not{2}$	※	$\not{4}$	$\not{5}$	$\not{6}$	$\not{7}$		10
3	flat	$2^{\flat}$	$\flat$	$4^{\flat}$	$5^{\flat}$	$6^{\flat}$	$7^{\flat}$		11
4	natural	$2^{\natural}$	$\natural$	$4^{\natural}$	$5^{\natural}$	$6^{\natural}$	$7^{\natural}$		12
5	imperfect			$\overset{\frown}{5}$					13

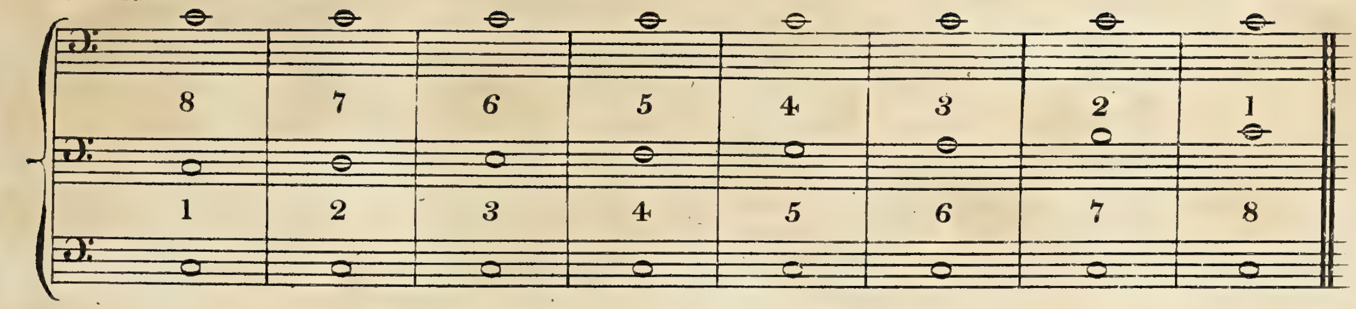
If ſounds are regular, as in the diatonic ſcale, they are expreſſed by the figures in the firſt line, at 1. When the ſounds become accidentally ſharp, flat, or natural, they are expreſſed as in the ſecond, third, or fourth, line, at 2, 3, 4. As the fifth tone from the ſeventh of a major or ſecond of a minor ſcale is always imperfect, it is expreſſed as it ſtands on the fifth line thus, $\overset{\frown}{5}$. The interval of the third, if ſharp, flat, or natural, by an excluſive privilege is expreſſed by the characters ※, $\flat$, or $\natural$, and not thus, $3^{※}$, $3^{\flat}$, $3^{\natural}$, as very often improperly written. The figures 10, 11, 12, 13, name rather than expreſs thoſe intervals. Horizontal lines drawn after any of the above figures thus 3—, or $\begin{matrix}5\text{—}\\3\text{—}\end{matrix}$, or $\begin{matrix}8\text{—}\\5\text{—}\\3\text{—}\end{matrix}$, &c. denote a continuation of the reſpective intervals, or chords.

The

MUSIC.

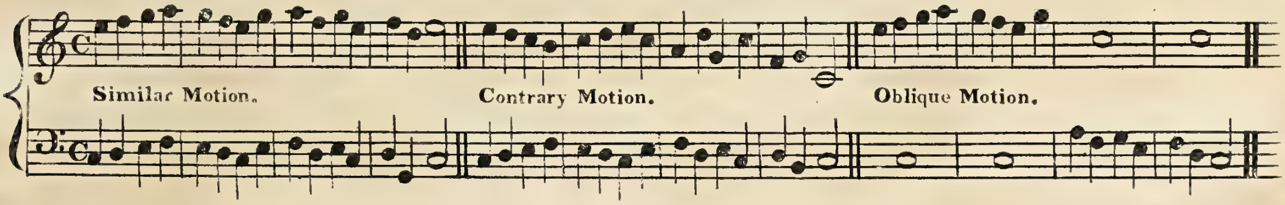
Inversion of the Scale.

Ex: 11.

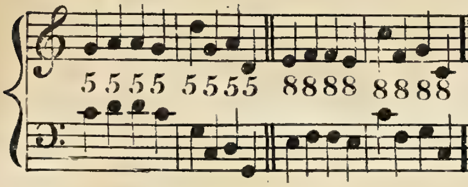


PROGRESSIONS.

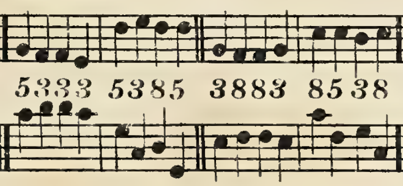
Ex: 12.



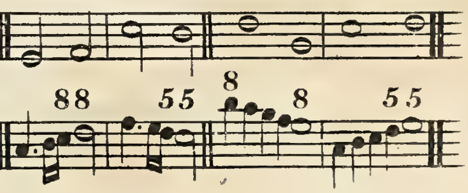
Ex: 13.



Ex: 14.

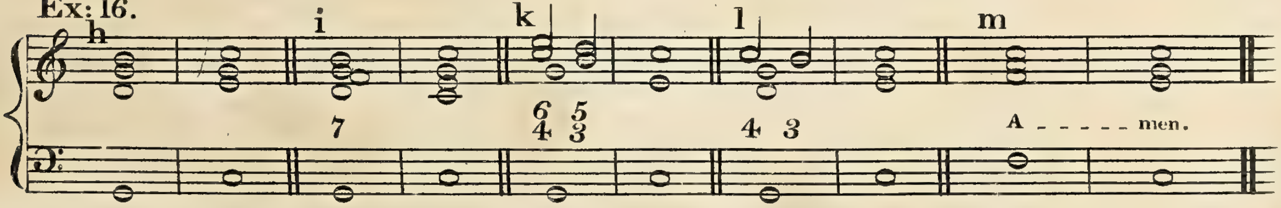


Ex: 15.

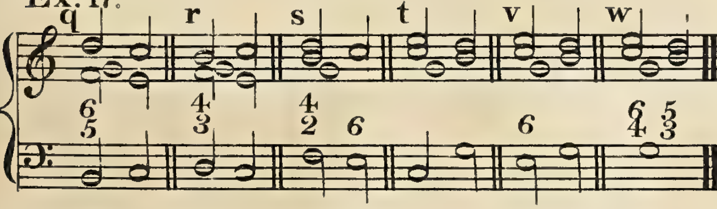


CADENCES

Ex: 16.



Ex: 17.



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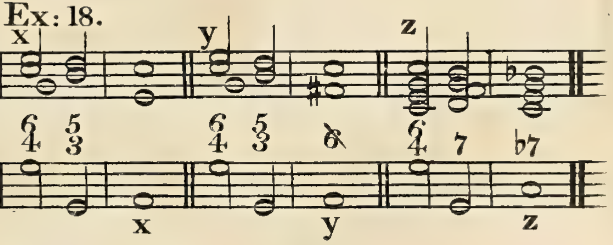
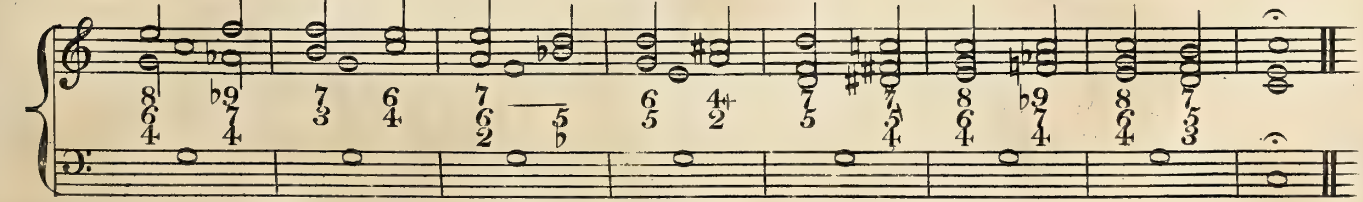


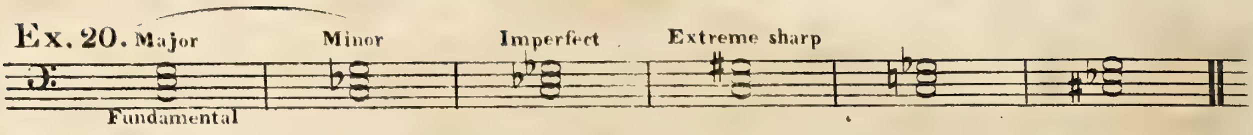
Ex: 19.



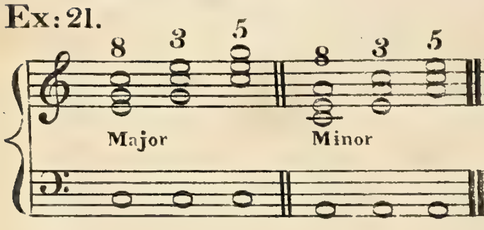
(Eng.^d by Skarratt)

Common Chord.

Ex. 20.



Ex: 21.



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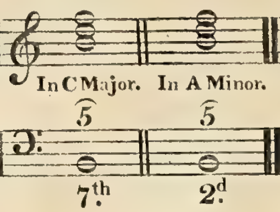
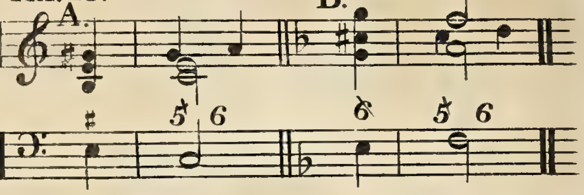
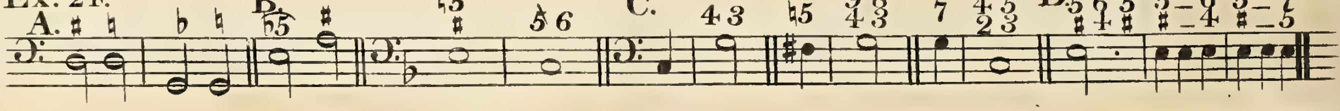


Ex: 23.

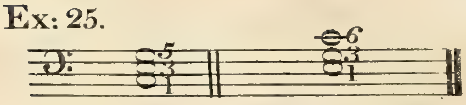


Ex: 24.



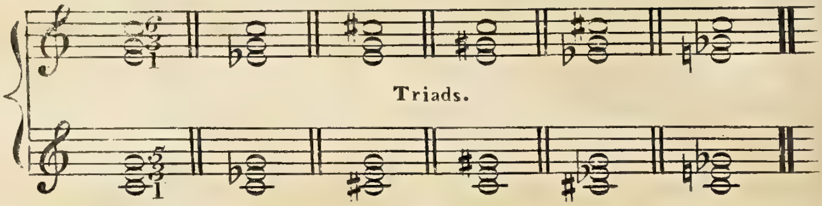
Chords of the Sixth.

Ex: 25.

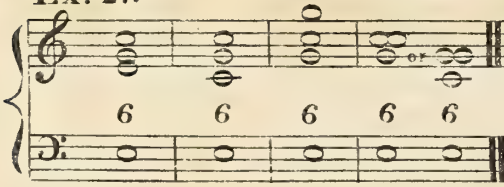


Triad. Chord of the Sixth.

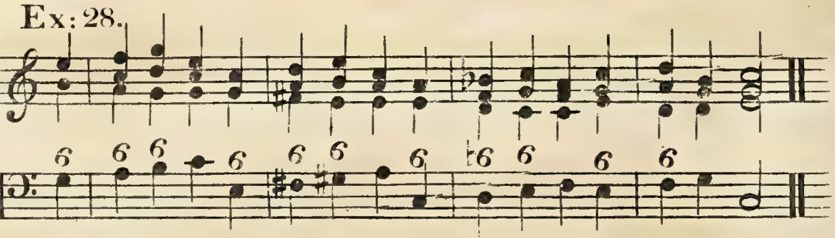
Ex: 26.



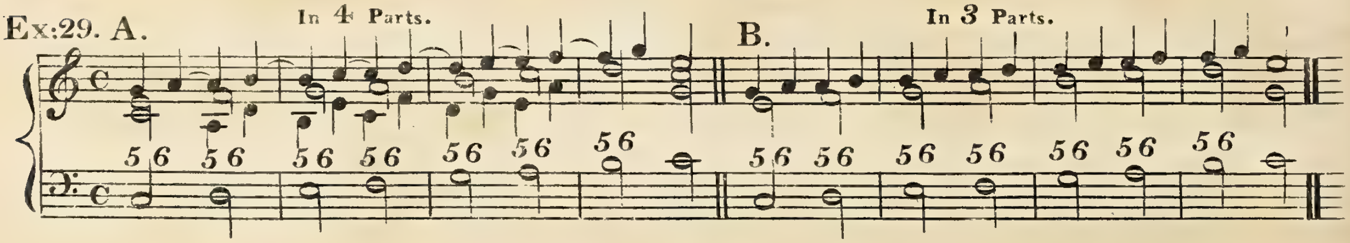
Ex: 27.



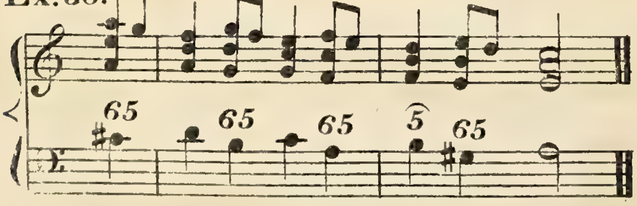
Ex: 28.



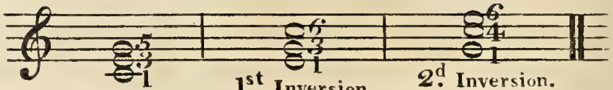
Ex: 29. A.



Ex: 30.

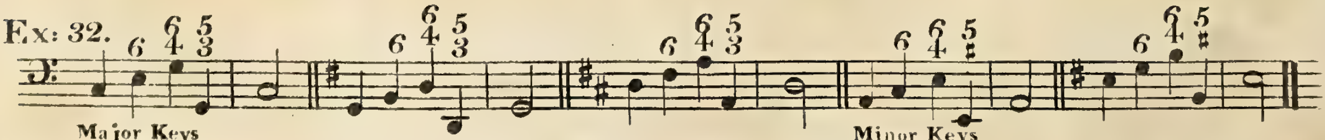


Ex: 31.



Triad. 1st Inversion. 2d Inversion.

Ex: 32.



Major Keys Minor Keys

Engraved for the Encyclopaedia Londinensis 1818.

The table at the bottom of the preceding Plate, marked Ex. 10. contains an exact meaſurement of all the diſtances of ſounds in the natural and extended ſcale; and alſo ſhows the method of expreſſing the ſame by the above figures.

OF THOROUGH BASS AND COMPOSITION.

Intervals may be divided into Concords and Diſcords.

Concords are
The perfect Prime and its Replicates the perfect Octave.
The perfect Fifth ———— the perfect Fourth.
The major Third ———— the minor Sixth.
The minor Third ———— the major Sixth.

Diſcords are
The Second, Seventh, and Ninth, alſo the extreme-ſharp and extreme-flat intervals.

But, through the different combinations of intervals in harmony, concords may occaſionally be treated like diſcords.

OF INVERSION.

Changing an interval ſo that its lower part is placed uppermoſt, or its upper part lowermoſt; or if, inſtead of the regular way of counting them upwards, we count them backwards; this is called *inverſion.* The two following rows of figures placed under each other will ſhow what intervals are produced by inverſion; and it will appear that a ſecond becomes a ſeventh, a third a ſixth, and a fifth a fourth, and vice verſâ.

1 2 3 4 5 6 7 8
8 7 6 5 4 3 2 1

Thoſe intervals that exceed the compaſs of the eighth, or octave, as ninths, &c. bear no inverſion, as thereby no new harmony can be produced. By knowing the replicates of each kind and different ſpecies, the more diſtant intervals, ſuch as ſixths and ſevenths, may be more eaſily found on the inſtrument; ſince it is eaſier to count a ſecond or third backwards, than a ſixth or ſeventh upwards. Ex. 11. at the top of Plate IV. will ſhow the nature of the inverted ſcale at one view, and will prepare the ſtudent for other inverſions and changes.

OF PROGRESSION.

All progreſſions whatever, may be made in the following three different motions: 1. By regular or ſimilar motion, when two parts aſcend or deſcend together. 2. By contrary motion, when one part aſcends while the other deſcends. 3. By oblique motion, when one part continues on the ſame degree, whilſt the other aſcends or deſcends. All theſe are ſhown at Ex. 12.

The rules for applying theſe different motions in reſpect to the progreſſion of concords are as follow:

From one perfect concord to another, i. e. from an eighth to a fifth, or from a fifth to an eighth, you muſt proceed either by the contrary or oblique motion. From this principle of compoſition ariſes the eſtabliſhed rule, that two eighths or two fifths of the ſame ſpecies are not allowed to follow each other progreſſively in a regular or ſimilar motion, either gradually or by ſkips. It may eaſily be imagined, that eighths that follow by parallel motion cannot fall under this rule, as not being progreſſive; nor can it be applied to ſuch a caſe when in a piece of muſic all the parts proceeded by eighths, or by uniſons; becauſe then all the parts are conſidered as one. According to the above rule, it is allowed to paſs from a perfect fifth to an imperfect, though only in deſcending in ſimilar motion, provided the imperfect deſcends or reſolves afterwards: all which ſhows that, this caſe only excepted, no concords are allowed in compoſition to follow in ſimilar or regular motion, but thirds and ſixths. An example of wrong progreſſion of eighths and fifths, in ſimilar motion, is given at Ex. 13. and the ſame rectified by contrary and oblique motion, at Ex. 14.

From an imperfect concord to a perfect one, i. e. from a third or ſixth to an eighth or fifth, you are only to proceed by contrary or oblique motion. By this rule the conſecution of two hidden eighths and fifths is forbidden, as the latter will become viſible on filling up the ſpace of theſe intervals by its intermediate note. See Ex. 15.

OF CADENCES.

The termination of any progreſſion is called a *Cadence.* The word ſeems as it were a metaphor drawn from the dancing-ſchool, where it properly ſignifies a pauſe, or fall from motion to reſt. A cadence is properly when the parts fall, and terminate on a chord, or note, the ear ſeeming naturally to expect it; and on the proper management of cadences a great part of the muſician's ſkill depends.

Dr. Pepuſch's definition of cadences in muſic is, perhaps, the moſt ſhort, clear, and comprehenſive, to be found in any elementary book. "Cadences in muſic are the ſame as ſtops in ſpeaking or writing; that is to ſay, they are endings or terminations either of a part or of the whole piece of muſic, as ſtops are of a part or of the whole ſpeech. For which reaſon they are diſtinguiſhed into full cadences and middle cadences; theſe laſt are like commas and ſemicolons, after which more is expected to follow, they not making ſo full a ſtop as the others; whereas after a full cadence we are ſenſible that we are come to a concluſion." Treatiſe on Harmony, p. 4.

The proper cadences are—the perfect, the imperfect, the interrupted, and the ſuſpended.

1. *Of the Perfect Cadence.*—As the dominant governs the key, the perfect cadence can only be made by the former tone preceding the latter, with the perfect concord as at *h*, or the diſcord at *i*, Ex. 16. The common chord of the fifth of the key may likewiſe be preceded by the $\frac{6}{4}$ as at *k*; or by the 4 only as at *l.* The cadence at *k* is moſtly uſed in muſic of a cheerful nature; that at *i*, when ſerious. The perfect cadence may alſo be made by the ſubdominant and key, as at *m.* This cadence is much uſed at the concluſion of ſolemn and ſacred muſic. Some authors treat this as an imperfect cadence, which it certainly is, when not uſed as final: it may therefore be conſidered perfect in a concluſion, and imperfect in a progreſſion.

2. *Imperfect Cadence.*—The imperfect cadence is made by the key-note preceded by its fifth, as at Ex. 17. *q, r;* or, by the key-note appearing only in an upper part, as at *s.* Or by a retrograde motion of the perfect cadence, as at *t*, and its inverſions, *v, w.*

3. *Interrupted Cadence.*—The interrupted cadence, is occaſioned by the fifth of the ſcale not paſſing immediately to the key-note, as at Ex. 18. *x, y;* or by the key-note bearing a diſcord, as at *z.*

4. *Suſpended Cadence,* or *point d'orgue.*—The ſuſpended cadence is a withholding of the key by the dominant, on which various chords may paſs and repaſs; and is called (by the French) *point d'orgue,* or organ-point, from its being much uſed on, and peculiar to, that inſtrument; and conſequently to church-muſic. Ex. 19.

The reſolution of a diſcord, according to Rouſſeau, is a kind of cadence: "And, as all harmonic phraſes are neceſſarily connected by diſcords, expreſſed or underſtood, it follows, that all muſic may be ſaid to conſiſt of a ſucceſſion of cadences." The *regle de l'octave* ſeems to favour this idea; as every other ſound carries a diſcord.

Padre Martini's cadences, in his Saggio di Contrappunto, being ſuch as are peculiar to the eccleſiaſtical modes, will be of little uſe in ſecular muſic. The cloſes of Haydn, Mozart, and Paeſiello, however new, elegant, and ingenious, the treble may be, are all built on the baſſes and harmony of the old cloſes of a hundred years ago; for in a full cloſe, as the baſs *muſt* fall a fifth or riſe a fourth, the treble muſt either fall from the ninth to the eighth, or riſe from the ſeventh to the eighth.

In early days of counterpoint, the great ſtudy of compoſers was cadences. A Studio of Paleſtrina being found at Rome in the year 1770, it was chiefly filled with cadences and chants, in his own hand-writing.

In melody, the preparation for cloſes in the principal part are infinite; in harmony they are numerous, but may be numbered. In Gaſparini there is an ample collection, chap. vi. *per far le cadenze d'ogni ſorte.* From theſe, Walther has cited many, but more correctly; for Gaſparini's book is miſerably printed. The cadences in Walther are good, as far as harmony is concerned, which is not ſo changeable as melody; and to theſe, chiefly from Gaſparini, we have all the Italian names: as *cadenza maggiore, minore, maggiore ſminuita, cadenza ſfuggita, finta, fiorita, perfetta, imperfetta, irregulare, d'inganno,* &c.

In ancient muſic, cadence is nearly ſynonymous with rhythm. The French make uſe of the term cadence for a trill or ſhake.

OF CONCORDS.

The whole ſyſtem of harmony is founded on two chords; viz. a fundamental concord, and a fundamental diſcord: and from theſe two chords, or roots, ariſe all others. In a word, the two fundamental chords are the chords of nature; and thoſe derived from them, the chords of art. The fundamental concord may, however, be conſidered as the real baſis of harmony, ſince to that alone the fundamental diſcord owes three fourth parts of its exiſtence. But, nevertheleſs, the two fundamental chords are always conſidered as diſtinct, and will be treated accordingly.

Of the fundamental Concord, called the Common Chord, or Triad.

Any ſound may be aſſumed at pleaſure for the primitive or ſtandard note of a piece of muſic, and is then denominated the *key-note:* and the idea of this note is perpetually impreſſed on the mind in all ſimple compoſitions, both from its frequent recurrence, and from the relation that all the other ſounds bear to it. C being the key-note of the ſcale called *natural,* we ſhall conſider it as the foundation of the ſcale. The next in importance is the fifth, G, which is intimately connected with the key-note, as it conſtitutes the moſt perfect melody and harmony with C, ſince every alternate vibration of C coincides with every third of G. The fifth, therefore, or G, is called the *dominant,* or governing note. The interval between C and G is moſt naturally divided by the note E, which anſwers to the number 5, when C and G are repreſented by 4 and 6, and which is found among the natural harmonics both of chords and pipes. Theſe three notes, the key-note (or prime), its third and fifth, conſtitute the harmonic triad, or common chord, in the major ſcale, which is the *moſt perfect,* or rather the *only perfect,* harmony; and, in compoſitions of four, five, ſix, or more, parts, it can receive no other addition but from the duplicates of its parts. This chord or triad may be either major or minor. The major fundamental triad conſiſts of the prime, major third, and perfect fifth; and conſtitutes the major mode. The minor conſiſts of the prime, minor third, and perfect fifth; and conſtitutes the minor mode. This fundamental triad, ſtrictly ſpeaking, is applied as ſuch only on the key-note, or prime; for on any other note of the ſcale it would at the ſame time bear a diſcord joined to it. The different ſpecies of triads are ſhown together at Ex. 20. on the back of Plate IV.

By accompanying this chord in four parts, we add to it the eighth. Its prime, or fundamental, thus becomes the baſs, and the third, fifth, eighth, the ſoprano, alto, or tenor, part. Hence it follows, that the chord may be taken in three different ways by placing either the eighth, fifth, or third, at top, in the middle, or at the bottom. When the eighth is at top, the chord, conſidered ſeparately from the baſs, muſt be a compound of a third below and a fourth above. When the third is at top, then the reverſe will appear; viz. a compound of a third above and a fourth below. And, when the fifth is at top, the chord is equally divided by two thirds, and the parts are of equal diſtances on keyed inſtruments. Theſe different poſitions, in the major and minor keys, are ſhown at Ex. 21.

The *imperfect triad* conſiſts of a minor third and extreme flat or imperfect fifth, which latter muſt regularly reſolve by deſcending to the next degree. It is applied only on the ſeventh note in the ſcale of the major mode, and on the ſecond in the minor; this chord is figured thus $\widehat{5}$. as at Ex. 22.

Of the different poſitions of this chord, that is moſt pleaſing in accompaniment where the third lies above. Obſerve alſo, when the baſs is ſharp, the eighth is to be left out.

The *extreme-ſharp triad* conſiſts of the prime, a major third, and an extreme-ſharp fifth. It is applied only on the third of the minor mode, and always aſcends a ſemitone to the next note. The extreme-ſharp fifth is generally prepared on a progreſſive baſs, reſolving afterwards to the ſixth above it, as in Ex. 23. at A and B.

The two laſt triads, whereof one conſiſts of a prime, extreme-flat fifth, and major third, and the other of a prime, extreme-flat or imperfect fifth, and an extreme-flat third, never occur in their fundamental poſition, but are ſpecified among the reſt only as being the foundation of ſome other chords uſed by inverſion, as that of the extreme-ſharp ſixth, accompanied by $^{4}_{3}$, which is derived from the former, and that of an extreme-ſharp ſixth, accompanied by $^{5}_{3}$, which is derived from the latter; of which more when we come to ſpeak of inverſion.

The common chord in thorough baſs is never figured or marked, unleſs its third or fifth requires an accidental ſharp or flat, in which caſe it is ſignified thus: ※, ♭, ♮, ×, 5, $5^{\flat}$, $5^{\natural}$. See Ex. 24. at A and B. or when the diſcord reſolves into a common chord, as at C. or when on the ſame baſs note it is placed between different harmonics, as at D.

Any note not figured in thorough baſs, and that is not conſidered as a paſſing note, is to be accompanied with a common chord.

Hitherto every common chord has been treated of ſingly, but now we proceed to the accompaniment of a ſucceſſion of common chords, the rules relating to the ſame, as well as to accompaniment in general, are as follows:

1. Two conſecutive eighth and fifths in the ſimilar motion, whether gradual or by ſkips, are to be avoided, chiefly by the uſe of contrary motion, or now and then by the doubling of a third.
2. Inharmonic relations are likewiſe to be avoided. By doubling either the uniſon or third, thoſe unmelodious progreſſions may be prevented.
3. Of the progreſſions between the different parts; thoſe between the extremes ought to be the moſt regular of any.
4. The uppermoſt part ought to be the moſt melodious of any; a third is more melodious than a fifth, and a fifth more ſo than an eighth.
5. Major thirds, whether naturally or accidentally ſo, generally aſcend.
6. The finiſhing chord, whether it be at the end of a cadence, or at the final concluſion of a piece, ſhould end with an eighth or a third in the upper part, rather than with a fifth.
7. The chords in general are to be taken as near to each other as poſſible, and not too much ſpace muſt be left between the hands.

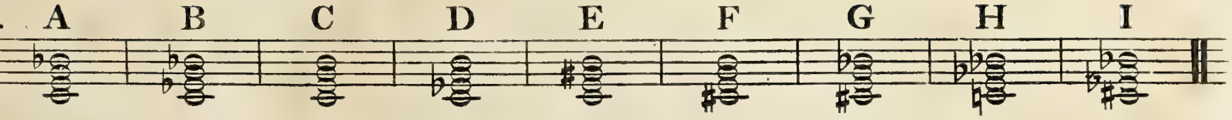
Of the Chord of the Sixth.

This chord ariſes from the triad by inverſion; for, by ſubſtituting the third of the latter for the baſis of the former, the fundamental note of the triad is changed to a ſixth, and its fifth to a third, as in Ex. 25.

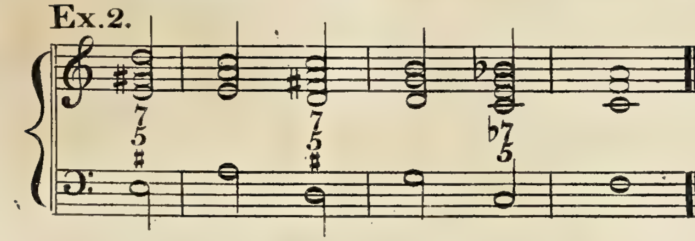
Both chords are but one harmony, as being a combination of the ſame notes; with this difference only; that the baſs note of the triad is a fundamental, and that of the ſixth a ſuppoſed note only. The ſixth in general is accompanied by a third and eighth. Its ſignature is that of

Chords of the SEVENTH.

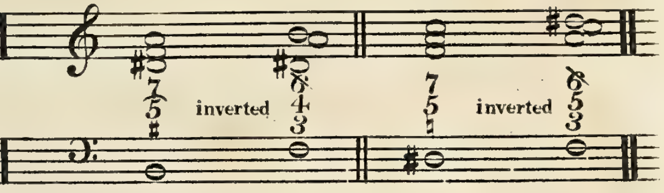
Ex.1.



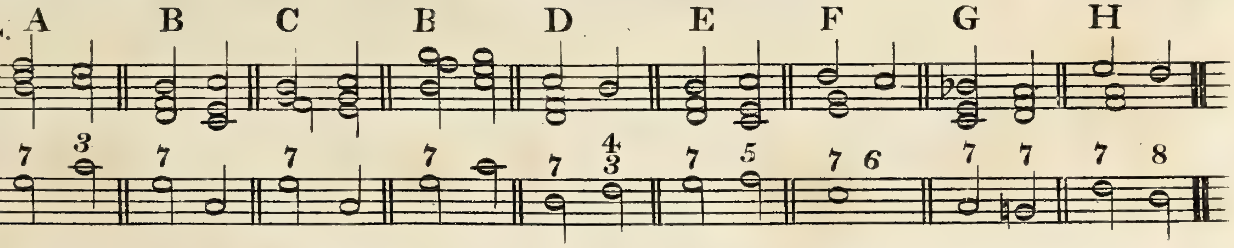
Ex.2.



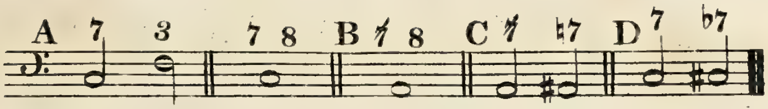
Ex.3.



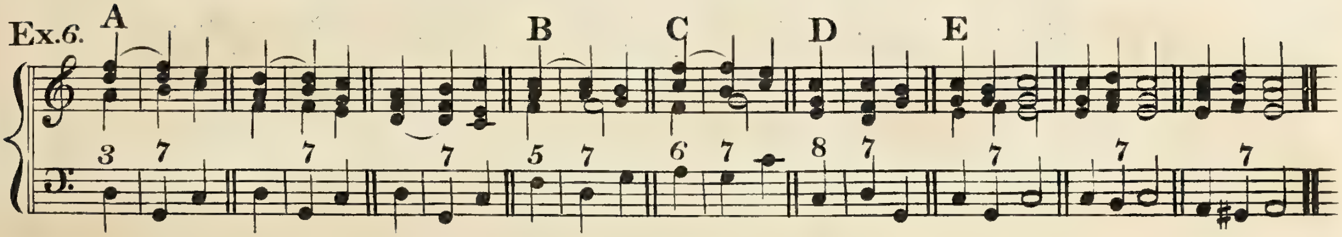
Ex.4.



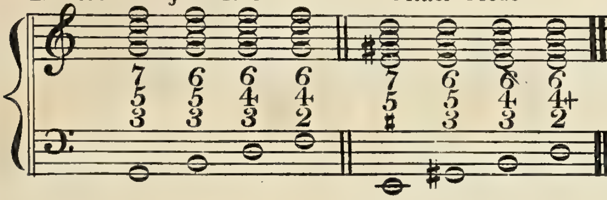
Ex. 5.



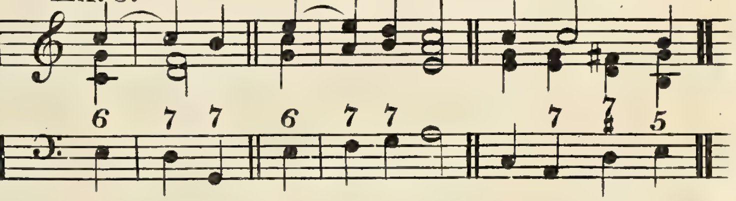
Ex.6.



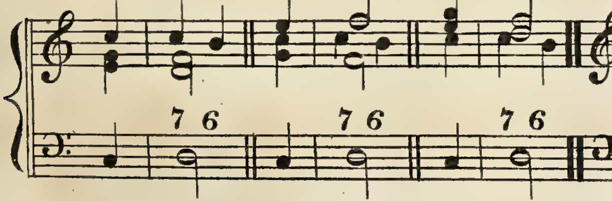
Ex.7.



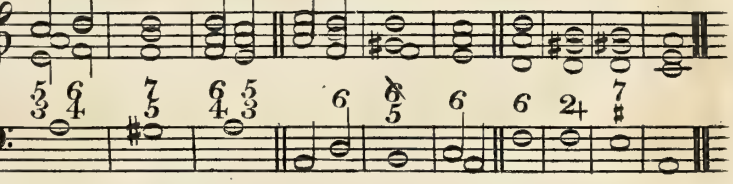
Ex. 8.



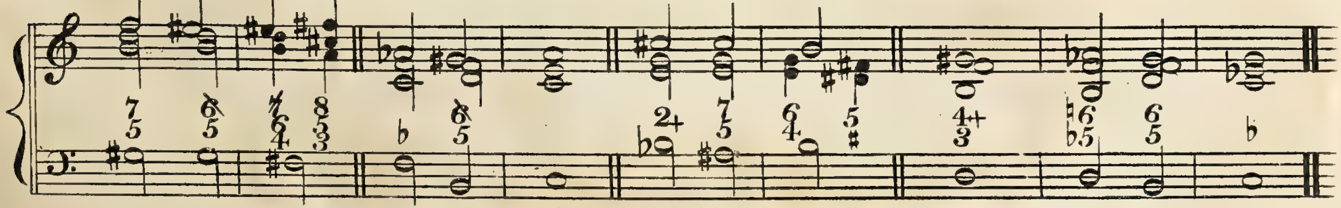
Ex.9.



Ex. 10.



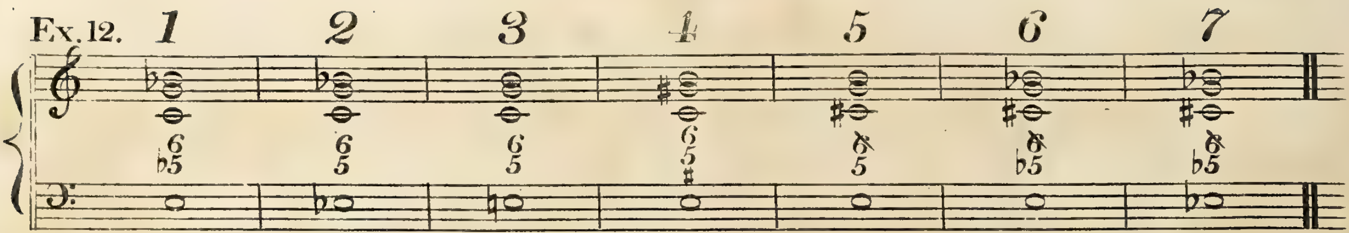
Ex. 11.



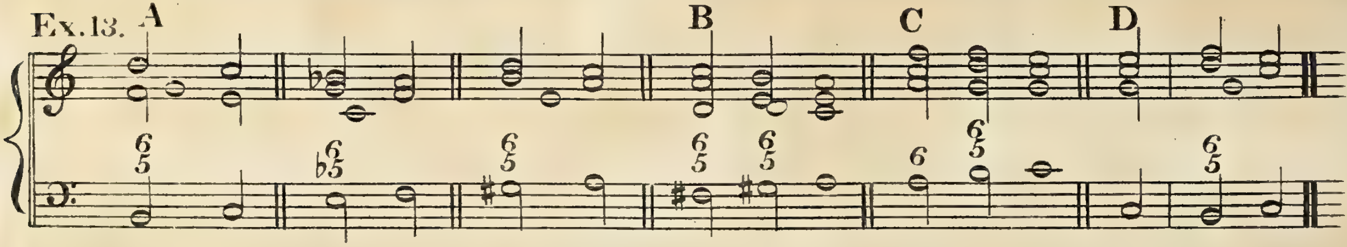
(Engd by Skarratt)

Chords of the FIFTH & SIXTH.

Ex. 12.

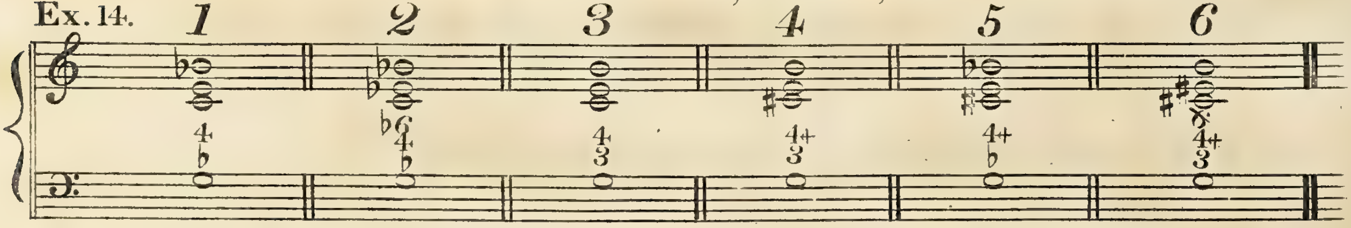


Ex. 13.

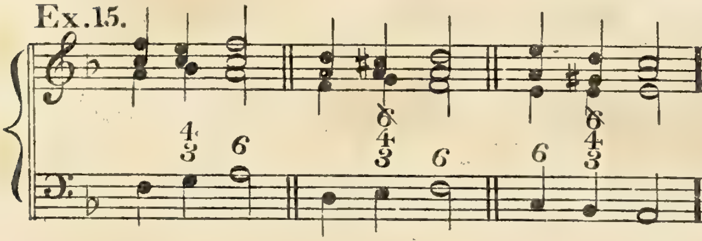


Chords of the THIRD, FOURTH, & SIXTH.

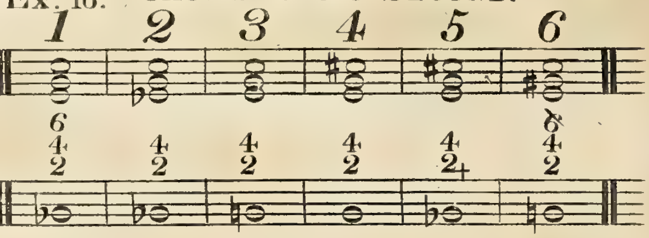
Ex. 14.



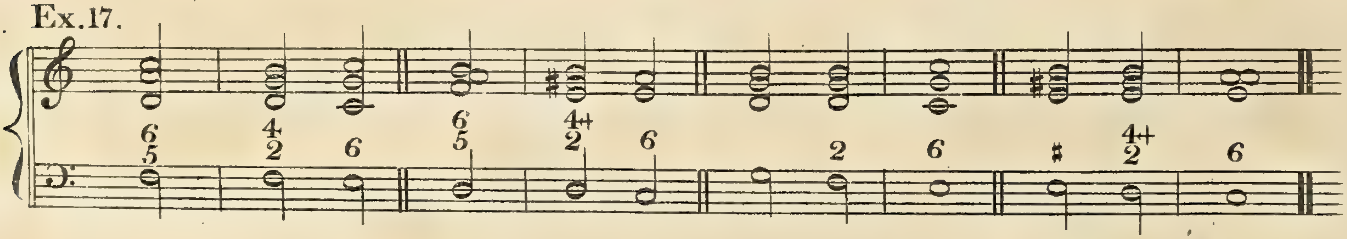
Ex. 15.



Ex. 16. Chords of the SECOND.

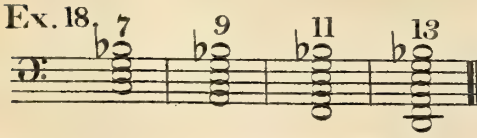


Ex. 17.

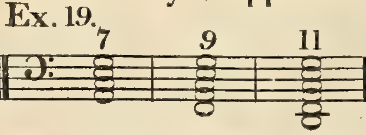


Chords by Supposition.

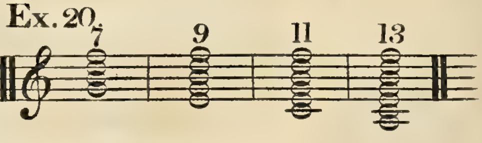
Ex. 18.



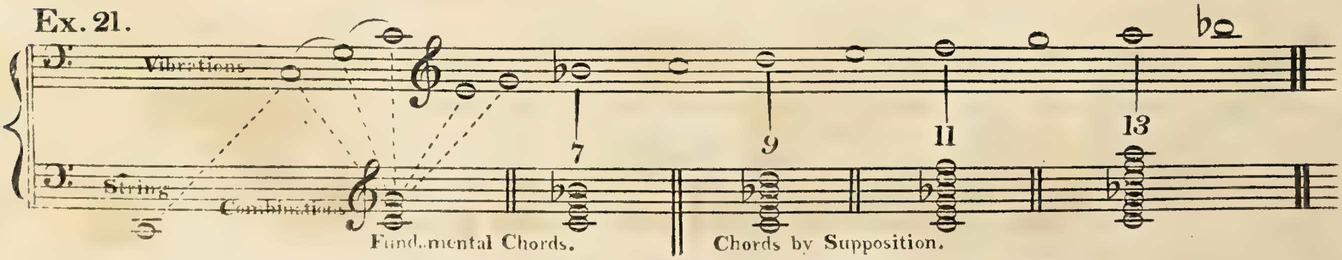
Ex. 19.



Ex. 20.



Ex. 21.



Pl. V.
Engraved for the Encyclopædia Londinensis 1818.

a ſingle 6 only, which occaſionally, as modulation requires, has the uſual marks annexed to it, thus 6̸, 6 , 6♮. According to the obſervation as above, a ſixth in thorough baſs always implies the common chord of a third below it; and hence we may eaſily conclude, that there muſt be as many different ſpecies of ſixth chords as there are common chords. See Ex. 26.

There are various ways of accompanying ſixes: 1. with a third and eighth; 2. with a third and a double ſixth; 3. with a double third; and, 4. with a third only, or a uniſon doubled. See Ex. 27. The accompaniment with the eighth, like the common chord, has three different poſitions; for either the ſixth, third, or eighth, may be placed at the top, in the middle, or at the bottom. That ſituation where the ſixth is uppermoſt is the moſt pleaſing, and that with the eighth at top the leaſt ſo.

The ſixes in the chord of the ſixth are either major, minor, or extreme ſharp; and the thirds, major and minor; and therefore may be divided into the following different claſſes: 1. The minor ſixth accompanied with a minor third. 2. The major ſixth accompanied with a major third. 3. The major ſixth accompanied with a minor third. 4. The minor ſixth accompanied with a major third. 5. The extreme ſharp ſixth accompanied with a major third.

The minor ſixth with a minor third has its place on every major third; that is, on the third, ſixth, and ſeventh, of the major mode, and on the prime, ſecond, fifth, and aſcending ſixth and ſeventh, of the minor. Its original harmony is that of the major triad, or fundamental common chord. The major ſixth with a major third may be applied to any note that is a third to the minor triad; that is, on the key-note, the fourth and fifth in the major mode; and on the third, the natural or deſcending ſeventh and ſixth of the minor. Its fundamental harmony is that of the minor triad. The major ſixth with a minor third has its place only on the ſecond of the major, and on the fourth of the minor mode. Its original is the imperfect triad. The minor ſixth with a major third (the latter being the leading notes in the minor mode) is introduced only on the fifth of that mode, and on that but ſparingly. Its original is the extreme ſharp triad. The extreme-ſharp ſixth with a major third is introduced only on the deſcending ſixth of the minor mode, and always aſcends to the next note above it. This chord properly ariſes from a triad that is compoſed of an imperfect fifth and extreme-flat third. The different manner of accompanying ſixes is exhibited in one view at Ex. 28.

Of ſucceſſive Fifths and Sixes, marked thus, 5 6.

This ſignature implies two different chords ſtruck to the ſame baſs note; the 5 implies a common, and the 6 a ſixth chord. In compoſitions in four parts, either the 5th, 6th, or 3d, occaſionally may be doubled, as at A. Ex. 29. but in three parts, the 3d only is added, which is the eaſieſt, and, in quick time, the moſt proper, as at B.

Of ſucceſſive Sixes and Fifths, marked thus, 6 5.

The manner of accompanying the chord ſignified by theſe figures, is much the ſame as that of 5 6, the former being only the reverſe of the latter; and therefore the ſucceeding fifth is conſidered as a paſſing note, and muſt deſcend to the next note below it; but the ſixth may be accompanied in all its different ways, as exemplified above. See Ex. 30.

Of the Chords of the Sixth and Fourth accompanied by the Eighth; figured thus, $^{6}_{4}$.

As the chord of the ſixth aroſe from the firſt inverſion of the triad, called the common chord, by the ſubſtitution of the third of the latter for the baſis of the former; ſo in the ſame manner that of the ſixth and fourth ariſes from the ſecond inverſion of the triad, by ſubſtituting the fifth of the latter for its baſs note. Therefore, whenever we find a baſs note figured with $^{6}_{4}$, it always implies a triad to the fourth above or fifth below it. The common chord and its two inverſions are ſhown at Ex. 31.

The following are all the different ſpecies of the chord of the $^{6}_{4}$ that are uſed in harmony:

1. That which ariſes from the major triad, conſiſts of a perfect fourth, a major ſixth, with its prime or octave; and may be introduced on the key-note, but more particularly on the fifth of the major mode, where it generally implies a cadence.

2. The ſixth and fourth that proceeds from the minor triad, conſiſts of a perfect fourth and minor ſixth, and is properly applied to the minor mode in the ſame manner.

3. The chord of the ſixth and fourth that ariſes from the imperfect triad, conſiſts of an extreme-ſharp fourth and a major ſixth: it is introduced on the fourth of the major and the deſcending ſixth of the minor mode. This fourth frequently reſolves into a third on the ſame baſs note when it is accompanied by a 6 doubled, but more frequently in three parts by a ſingle 6 only.

4. That which proceeds from the extreme-ſharp triad, conſiſts of an extreme-flat fourth and a minor ſixth; and is applied only on the ſeventh of the minor mode, where it is uſed by way of tranſition in the accompaniment of three parts only.

Ex. 32. is calculated for practiſing the ſixth and fourth, as uſed on cadence-notes on the fifth of the mode, by way of a ſhort prelude to any key.

Of the Chord of the Seventh.

The chord of the ſeventh ariſes from the addition of a third to its common chord, and therefore is compounded of three thirds. According to the different ſpecies of intervals contained in the major and minor modes, it may be divided into all different kinds expreſſed on Plate V. Ex. 1. A, B, C, &c.

1. The minor ſeventh accompanied by a major third and perfect fifth, is applied on the fifth of either mode, the baſs riſing a fourth or falling a fifth, and is conſidered the principal harmony next to that of the fundamental chord of the mode, and decides the key, and whether it is major or minor. See Ex. 2.

2. The minor ſeventh with a minor third and perfect fifth, is applied on the ſecond, third, and ſixth, of the major, and on the prime, fourth, and fifth, of the minor, mode.

3. The minor ſeventh with a major third and perfect fifth, is introduced on the prime and fourth of the major, and on the third and ſixth of the minor, mode.

4. The accidental major ſeventh with a minor third and perfect fifth, is uſed only on the prime of the minor mode.

5. The major ſeventh with a major third and extreme-ſharp fifth, is introduced only on the third of the minor mode.

6. The minor ſeventh with a minor third and imperfect fifth, is applied on the ſeventh of the major, and on the ſecond and aſcending ſixth of the minor mode.

7. The extreme-flat ſeventh with a minor third and imperfect fifth, is uſed only on the aſcending ſeventh of the minor mode, and conſequently its baſs note always requires a ſharp mark.

Theſe are all the different ſevenths uſed in thorough baſs. The two laſt, marked H and I, are uſeleſs in their fundamental poſition, but are introduced among the reſt, as being the foundation of the following chords uſed in harmony, ariſing from the inverſion thereof. See Ex. 3.

The ſeventh, like all diſcords in general, muſt reſolve in the ſame part of the chord where it happens to be placed, by deſcending one degree to the next individual; which, according to the different progreſſions of the baſs, may be either a third, fourth, fifth, ſixth, ſeventh, or eighth. It reſolves, 1. By a third, when the baſs riſes a fourth or falls a fifth, as in Ex. 4. where at A, it reſolves in the upper part, at B in the middle, and at C in the lower part of the chord. 2. By a fourth, when the baſs riſes a third or falls a ſixth, as at D. 3. By a fifth, when the baſs riſes a ſecond or falls a ſeventh, as at E. 4. By a ſixth, when the baſs reſts on the ſame degree, as at F. 5. Into a ſeventh, when the baſs falls a ſecond, as at G. 6. By an eighth, when the baſs falls a third or riſes a ſixth, as at H.

The major ſeventh on the prime of the major mode, deſcends not only by reſolution, but alſo frequently aſcends a ſemitone to the eighth. See Ex. 5. A. But the accidental major ſeventh in the minor mode conſtantly reſolves by aſcending to the eighth, as at B, except when the baſs riſes a minor ſemitone, in which caſe it deſcends to an extreme-flat ſeventh, as at C; which is alſo to be underſtood with reſpect to the major ſeventh in the major mode, as at D.

The ſeventh is either prepared or unprepared, but in either caſe it muſt reſolve. When it is prepared, it muſt remain on the ſame degree with the note whereby it was prepared in the preceding chord. In Ex. 6. it is prepared either by a third, the baſs riſing a fourth or falling a fifth, as at A; by a fifth, the baſs falling a third or riſing a ſixth, as at B; by a ſixth, the baſs falling a ſecond, as at C; or by an eighth, the baſs riſing a ſecond or falling a ſeventh, as at D. But ſevenths on the fifth and ſeventh of the key, in either mode, may be taken unprepared; as at E.

Chords ariſing from the Seventh by Inverſion.

By inverting the chord of the ſeventh, ſo that any other part of the ſame harmony may be ſubſtituted for a baſs, inſtead of its fundamental note, three different chords are produced, as that of $\genfrac{}{}{0pt}{}{6}{5}$, $\genfrac{}{}{0pt}{}{4}{3}$, and $\genfrac{}{}{0pt}{}{4}{2}$; where it may be obſerved, that the ſame note, which is diſcord to the fundamental, remains as ſuch in thoſe inverted.

1. By ſubſtituting the third out of the chord of the ſeventh for the baſs-note inſtead of its fundamental to the ſame harmony, it will be changed to that of the ſyncopated fifth, accompanied by a third and ſixth; figured in thorough-baſs thus, $\genfrac{}{}{0pt}{}{6}{5}$. 2. By ſubſtituting its fifth for the baſs, the chord will be that of the ſyncopated chord, accompanied by a ſixth and fourth; figured thus, $\genfrac{}{}{0pt}{}{4}{3}$. 3. Laſtly, by ſubſtituting its ſeventh for the baſs, the chord will be that of the ſyncopated ſecond, accompanied by a ſixth and fourth; figured thus 2, $\genfrac{}{}{0pt}{}{4}{2}$, or $\not{4}$. Theſe chords are filled up, both for the major and minor modes, at Ex. 7.

Rules and Remarks concerning the Accompaniment of Sevenths.

1. The ſeventh may be accompanied either by $\genfrac{}{}{0pt}{}{5}{3}$ or $\genfrac{}{}{0pt}{}{8}{3}$, or by a third doubled, according as the regularity of the progreſſion between the different parts may require.

2. Two or more baſs-notes figured by ſevenths, are accompanied alternately by $\genfrac{}{}{0pt}{}{5}{3}$ and $\genfrac{}{}{0pt}{}{8}{3}$. See Ex. 8.

3. Sevenths reſolving by ſixes, are moſt commonly accompanied by a third and an eighth, or by a double third, as in Ex. 9.

4. The extreme-flat ſeventh, with its derivatives, are diſtinguiſhed by the denomination of chromatics. In the regular ſtyle every chromatic chord muſt be qualified by due proportion; but the free or elegant ſtyle is not confined to this rule. See Ex. 10.

5. It is chiefly by means of thoſe chords and the changing of the genus; as, for inſtance, when A♭ is changed to G♯, or E♭ to D♯; that all thoſe ſudden changes of harmony or digreſſions to the moſt diſtant keys, generally made uſe of in the recitative ſtyle, and that of voluntary-playing, are effected. See Ex. 11.

Of the Chord of the Fifth and Sixth, figured thus, $\genfrac{}{}{0pt}{}{6}{5}$.

The fifth in the preſent chord, being the ſame note with its original, the ſeventh, from which it proceeds by inverſion, muſt reſolve like all other diſcords. Its different ſpecies are ſhown at the back of Plate V. at Ex. 12. fig. 1, 2, 3, &c.

1. The firſt ſpecies conſiſts of an imperfect fifth, a minor ſixth, and a minor third, and is chiefly applied on the aſcending ſeventh of either mode. See Ex. 13. A; and ſometimes on the aſcending ſixth of minor, as at B. The fifth is either prepared, as at C; or unprepared, as at D.

2. The ſecond conſiſts of a perfect fifth, and a major ſixth and third; and is applied on the aſcending fourth of the major mode. The fifth is always prepared.

3. The third conſiſts of a perfect fifth, and a minor ſixth and third; and is introduced on the third and ſixth of the major, and on the key-note and fifth of the minor, mode.

4. The fourth conſiſts of a perfect fifth, a minor ſixth, and an accidental-ſharp third; and is applied only on the fifth of the minor mode.

5. The fifth conſiſts of a perfect fifth, a major ſixth, and a minor third; and is introduced on the aſcending fourth of the minor mode.

6. The ſixth conſiſts of an imperfect fifth, an accidental-ſharp ſixth, and minor third; and is applied only on the ſecond of the minor mode.

7. The ſeventh conſiſts of a perfect fifth, an extreme-ſharp ſixth, and a major third; and is uſed only on the deſcending ſixth of the minor mode. The two laſt are chromatic chords. The chord of $\genfrac{}{}{0pt}{}{6}{5}$ in general is uſed on baſs-notes, riſing either a whole or half tone.

Of the Chord of the Third, Fourth, and Sixth; figured $\genfrac{}{}{0pt}{}{4}{3}$, or $\substack{6\\4\\3}$.

The chord ariſes from the ſecond inverſion of that of the ſeventh. Its different ſpecies, as uſed in harmony, are as ſhown at Ex. 14. fig. 1, 2, 3, &c.

1. The firſt conſiſts of a major ſixth, perfect fourth, and minor third, and is applied on the ſecond of either mode, as exemplified in Ex. 15.

2. The ſecond conſiſts of a minor ſixth, perfect fourth, and minor third, and is applied on the third, ſixth, and ſeventh, of the major mode, and on the prime of the minor.

3. The third conſiſts of a major ſixth, perfect fourth, and major third; and is commonly introduced on the prime and fifth of the major mode, and on the third and deſcending ſeventh of the minor.

4. The fourth conſiſts of a major ſixth, an extreme-ſharp fourth, and a major third; and is applied on the deſcending fourth of the major, but chiefly on the deſcending ſixth of the minor, mode.

5. The fifth conſiſts of a major ſixth, an extreme-ſharp fourth, and a minor third; and is applied only on the fourth of the minor mode.

6. The ſixth conſiſts of an extreme-ſharp ſixth, fourth, and major third; and is introduced on the deſcending ſixth of the minor mode.

Of the Chord of the Second, accompanied by 6 *and* 4; *marked* $\genfrac{}{}{0pt}{}{4}{2}$ $\substack{6\\4\\2}$ $\not{4}$ 2.

In this chord, the baſs-note is the diſcord, it being the ſame note as that which was a ſeventh to the fundamental note of the chord it proceeds from, being the third inverſion; for which reaſon, the baſs muſt regularly reſolve by deſcending one degree. The ſecond is uſed in two different ways; by tranſition and ſyncopation. The baſs-note figured with a ſecond, deſcends to the next note below it. The different ſpecies of ſeconds are ſhown at Ex. 16. fig. 1, 2, 3, &c.

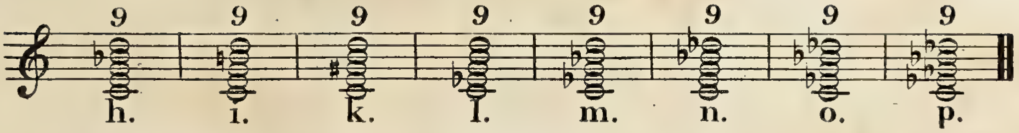
1. The firſt ſpecies conſiſts of a major ſecond, an extreme-ſharp fourth, and a major ſixth; and is applied only on the deſcending fourth of either mode. This chord, excluſive of the baſs, is a perfect common chord, taken at the diſtance of a major ſecond from the baſs. This will be made clear by inſpecting Ex. 17.

2. The ſecond conſiſts of a major ſecond, a perfect fourth, and a major ſixth; and is a minor common chord, at the diſtance of a major ſecond from the baſs.

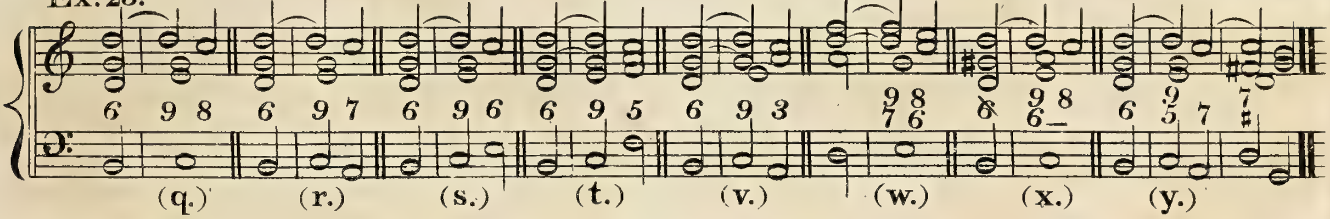
3. The third conſiſts of a minor ſecond, a minor ſixth, and a perfect fourth; and is a perfect common chord, taken

Chords of the NINTH.

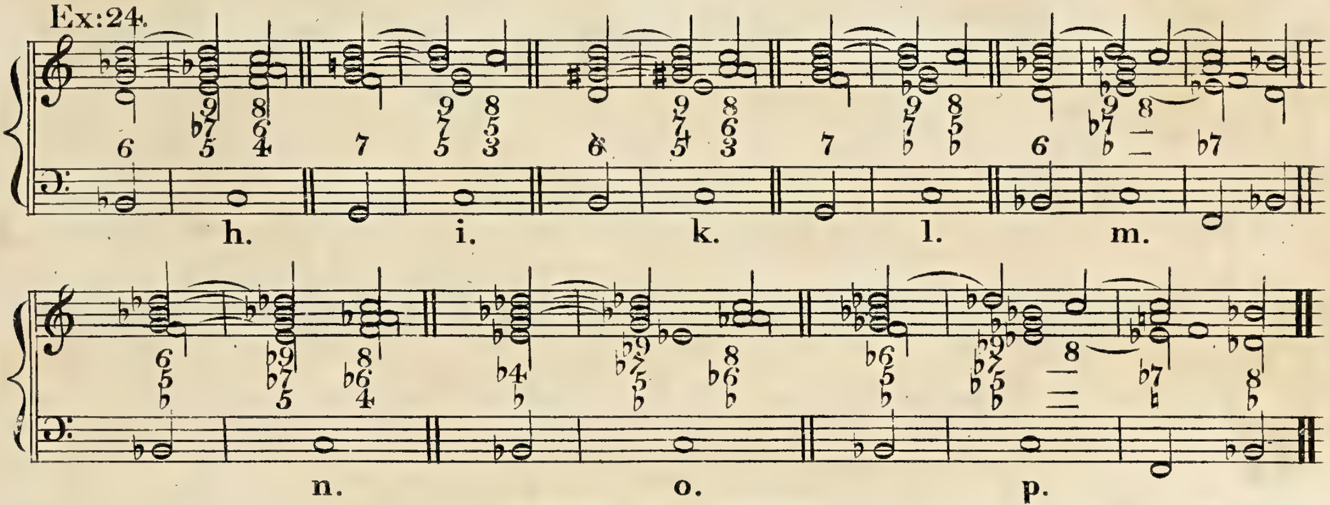
Ex:22.



Ex:23.

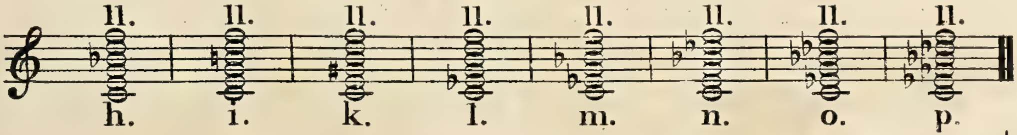


Ex:24.

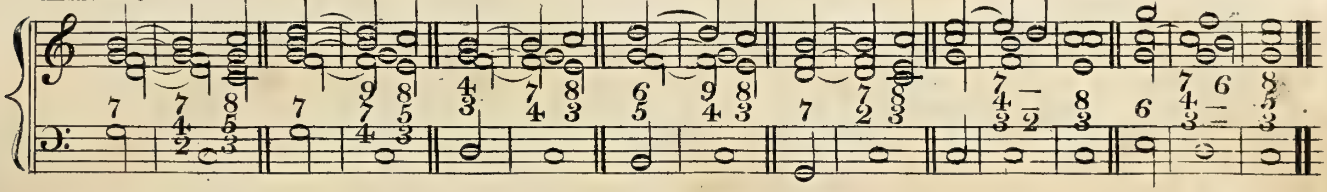


Chords of the ELEVENTH.

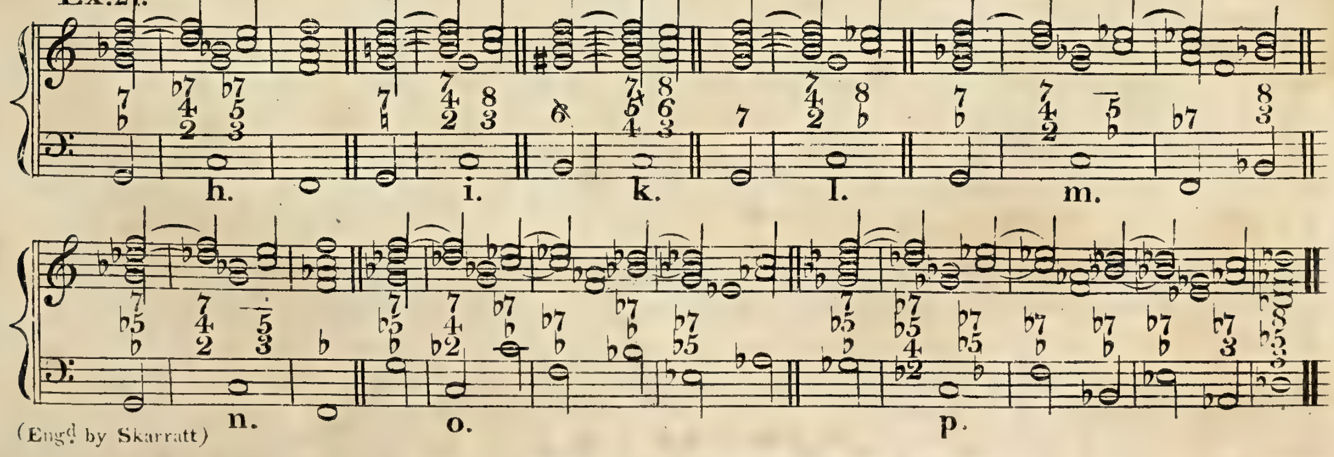
Ex:25.



Ex:26.



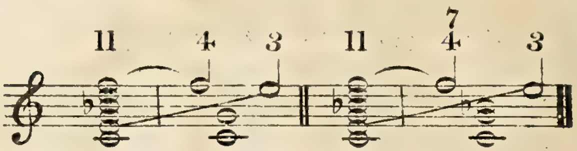
Ex:27.



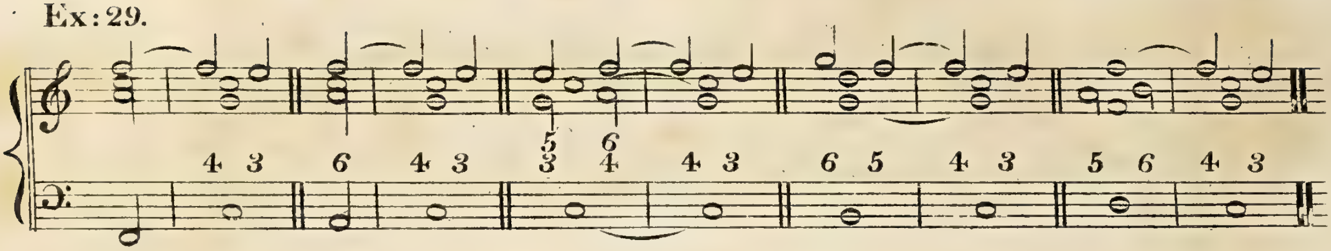
(Engd. by Skarratt)

Chords derived from the ELEVENTH.

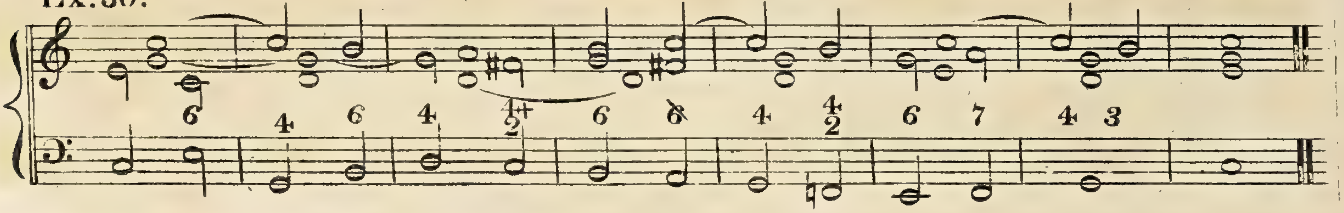
Ex: 28.



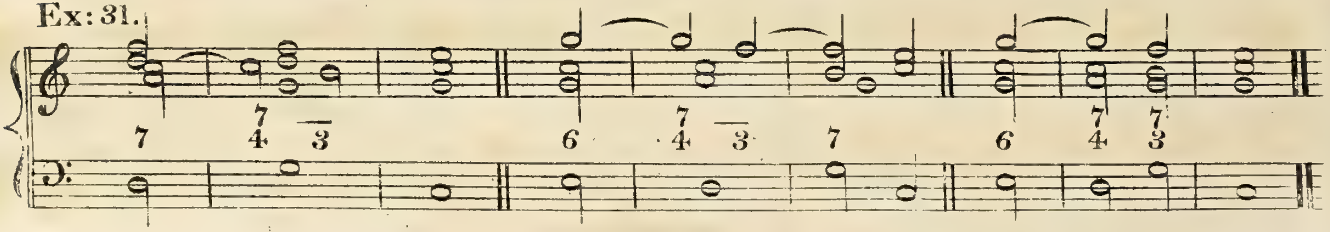
Ex: 29.



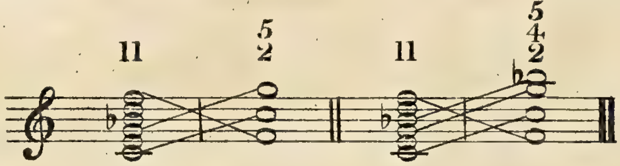
Ex: 30.



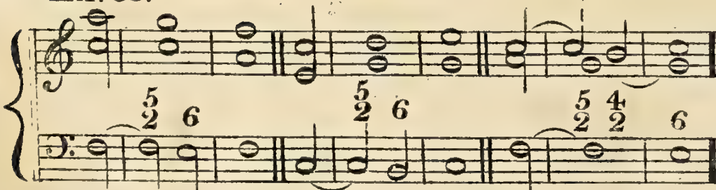
Ex: 31.



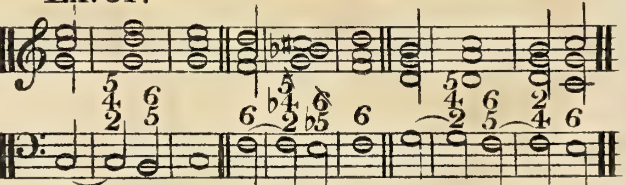
Ex: 32.



Ex: 33.

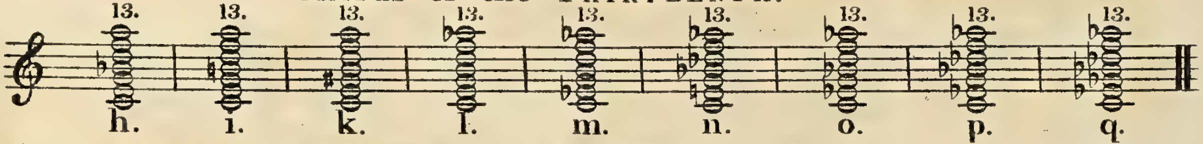


Ex: 34.

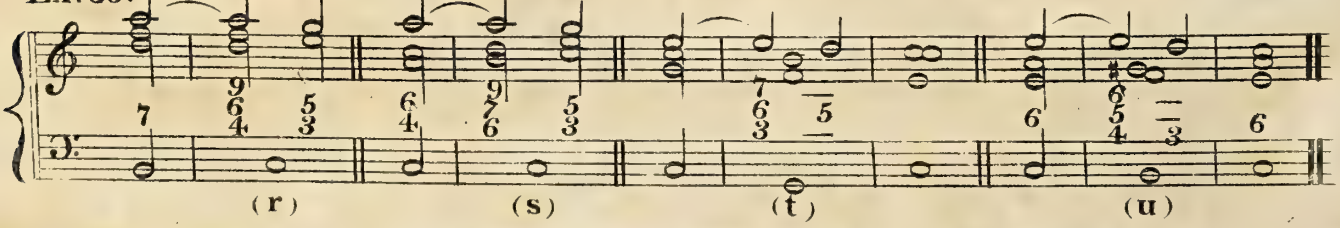


Chords of the THIRTEENTH.

Ex: 35.



Ex: 36.



Engraved for the Encyclopaedia Londinensis 1818.

taken a minor ſecond above the baſs; and is applied on the lower part of the major ſemitone.

4. The fourth conſiſts of a major ſecond, a perfect fourth, and a minor ſixth; being an imperfect common chord, taken a major ſecond above the baſs.

5. The fifth conſiſts of an extreme-ſharp ſecond, an extreme ſharp fourth, and major ſixth; and is properly the chord of the ſeventh, on the fifth of the minor mode.

6. The ſixth conſiſts of a minor ſecond, a perfect fourth, and an accidental-ſharp ſixth; and is a common chord with an extreme-ſharp fifth, a minor ſecond above the baſs; and is peculiar only to the minor mode.

Of Chords by Supposition.

The chords yet remaining for conſideration, are the ninth, eleventh, and thirteenth, which, from their extending beyond the limits of an octave, are called *chords by ſuppoſition.* Theſe chords, Mr. King obſerves, are uſually conſtructed by placing one, two, and three, thirds, *underneath* the chord of the ſeventh. See Ex. 18. As placing ſounds *under* one chord to produce another, is inconſiſtent with the natural principles of ſound, which can never gravitate, and alſo againſt the direct principles of harmony, which, after eſtabliſhing a given baſs, admits of no lower ſound; a particular enquiry will now be made, firſt, into the preſent theory, and afterwards into the more probable and natural conſtruction of the chords in queſtion. Theſe objections would not have been conſidered ſufficient to juſtify any deviation from the theory uſually followed, had not the greateſt authorities themſelves (while they agree in principle) been divided as to the particular conſtruction of theſe chords.

Rameau, in his "Principles of Muſic," places two thirds ſucceſſively under the chord of the ſeventh on the *ſixth* part of the ſcale, as at Ex. 19. But he goes no farther, perhaps, becauſe he found the chord of the thirteenth would have taken place in the ſeventh of the ſcale. If this was his reaſon, it was quite ſufficient. Marpurg and moſt other harmoniſts place three thirds ſucceſſively under the chord of the ſeventh on the *fifth* part of the ſcale; as at Ex. 20. Now, the firſt of theſe two general ſyſtems appears to be the beſt as far as it goes; becauſe here the ninth is major; but in the ſecond ſyſtem it is minor, which is not its real character; for, as the ſecond part of the ſcale ſtands a whole tone from the firſt, ſo the ninth, the true repreſentative of the ſecond, ſhould be alſo one tone from the octave of the firſt part of the ſcale. To this may be added, that Rameau makes uſe of the wrong fundamental ſeventh, but produces a true ninth; while Marpurg, who uſes the real fundamental ſeventh, produces an imperfect ninth. The conſequence of the diſagreement of theſe two celebrated authorities is, that, as moſt harmoniſts follow the opinion of one or the other, two different and indeterminate characters are given to chords which it were to be wiſhed had an unalterable and eſtabliſhed theory.

Another ſyſtem is now preſumed to be advanced, entirely different from either of the former, and wholly founded on the principles of Vibration, or the natural ſucceſſion of ſounds. See Ex. 21. Here, by adding the vibrations of a given ſound regularly as they ariſe, it directly appears, that the chords, of the ninth, eleventh, and thirteenth, are naturally ſelf-conſtructed; and that by one, two, and three, thirds, being ſucceſſively added *over*, and not *under*, the fundamental chord of the ſeventh. If the ſeventh of each chord, being flat, ſhould be conſidered as an objection to this theory, it muſt be recollected that flat-ſeventh exiſts in Nature; and, ſince the above order of conſtructing theſe chords is wholly founded on the analogy of Nature, that very objection becomes an argument in favour of the preſent ſyſtem.

Of the Chord of the Ninth.

To the ninth belong 3, 5, 7. Plate VI. Ex. 22. ſhows the different ſpecies of ninths. The ninth followed by any other figure, as 9 8, 9 7, 9 6, 9 5, or 9 3, is accompanied by $\begin{smallmatrix}5\\3\end{smallmatrix}$; joined to any other figure, as $\begin{smallmatrix}9\\7\end{smallmatrix}$, $\begin{smallmatrix}9\\6\end{smallmatrix}$, or $\begin{smallmatrix}9\\5\end{smallmatrix}$, it is accompanied with 3. Ex. 23. ſhows the preparation and reſolution of both theſe kinds. At Ex. 24. all the foregoing chords are prepared and reſolved.

Of the Chord of the Eleventh, and its Derivatives.

The eleventh, or chord of the fourth, is figured by $\begin{smallmatrix}7\\2\\4\end{smallmatrix}$, to which belongs 5. The different ſpecies are exhibited at Ex. 25. The chord of the eleventh figured thus, $\begin{smallmatrix}9\\7\\4\end{smallmatrix}$, $\begin{smallmatrix}7\\4\end{smallmatrix}$, or $\begin{smallmatrix}9\\4\end{smallmatrix}$, is accompanied by the fifth. Figured thus, $\begin{smallmatrix}7\\2\end{smallmatrix}$, it is accompanied by the fourth. Figured thus, $\begin{smallmatrix}7\\4\\3\end{smallmatrix}$, it is complete in itſelf. Ex. 26. deſcribes its preparation and reſolution. Ex. 27. gives the chords at *h, i, k, l, m, n, o, p,* prepared and reſolved. The third from the baſs of the eleventh, is uſed in its firſt reſolution. The ninth from the baſs may be figured by a 9, when that interval is uppermoſt, as *q, s;* but in other caſes it is figured by a 2. To diſtinguiſh the chord of the eleventh, when in part figured by a 9, from the chord of the ninth itſelf; it is only neceſſary to obſerve, that the former chord muſt contain a fourth, which the latter chord can never do.

The chords 4 3, and $\begin{smallmatrix}7&-\\4&3\end{smallmatrix}$, are taken out of the eleventh, as at Ex. 28. To the 43 belongs $\begin{smallmatrix}8\\5\end{smallmatrix}$; to the $\begin{smallmatrix}7&-\\4&3\end{smallmatrix}$, belongs 5. The chord 4 3 uſually takes place on a holding-baſs. See Ex. 29. The fourth may reſolve by an inverſion of the third, or paſs into another diſcord; in either caſe, the fourth is accompanied by $\begin{smallmatrix}8\\5\end{smallmatrix}$. See Ex. 30.

The $\begin{smallmatrix}7&-\\4&3\end{smallmatrix}$ generally takes place on the ſame baſs; but the $\begin{smallmatrix}7\\4\end{smallmatrix}$ may ſtand alone, and be reſolved into another diſcord: in either caſe, $\begin{smallmatrix}7\\4\end{smallmatrix}$ is accompanied by 5; as in Ex. 31. The 4 3 is often uſed in the perfect cadence.

The chords $\begin{smallmatrix}5\\2\end{smallmatrix}$ and $\begin{smallmatrix}5\\4\\2\end{smallmatrix}$ require no addition, but are complete in themſelves, and are derived by inverſion from the chord of the eleventh. See Ex. 32. The chord $\begin{smallmatrix}5\\2\end{smallmatrix}$ is generally ſucceeded by 6, but may be followed by $\begin{smallmatrix}4\\2\end{smallmatrix}$; as at Ex. 33. The $\begin{smallmatrix}5\\4\\2\end{smallmatrix}$ is uſually followed by $\begin{smallmatrix}6\\5\end{smallmatrix}$. See Ex. 34. The $\begin{smallmatrix}5\\2\end{smallmatrix}$ reſolving into 6 is an inverſion of 43; and the $\begin{smallmatrix}5\\4\\2\end{smallmatrix}$ reſolving into $\begin{smallmatrix}6\\5\end{smallmatrix}$ is an inverſion of $\begin{smallmatrix}7&-\\4&3\end{smallmatrix}$.

Of the Chord of the Thirteenth.

The chord of the thirteenth, or diſcord of $\begin{smallmatrix}7\\6\end{smallmatrix}$, is figured by $\begin{smallmatrix}7\\6\\4\end{smallmatrix}$, to which belongs 2. See the different ſpecies at Ex. 35. The chord figured thus, $\begin{smallmatrix}9\\6\\4\end{smallmatrix}$, $\begin{smallmatrix}9\\7\\6\end{smallmatrix}$, $\begin{smallmatrix}7\\6\\3\end{smallmatrix}$, $\begin{smallmatrix}6\\5\\4\end{smallmatrix}$, is complete in itſelf: at Ex. 36. are their preparation and reſolution.

Progression of the Fundamental Bass.

The progreſſion of the fundamental baſs is of ſuch importance, that, without a proper knowledge of its uſe, it is impoſſible to be either a correct harmoniſt or a good compoſer: for, as the fundamental concord and diſcord are the foundation of all the derived chords, ſo the progreſſion and intermixture of the latter chords are entirely ruled and governed by that of the former.

The fundamental baſs carries either the perfect concord or the diſcord of the ſeventh; which chords may take place in any part of the ſcale; but in what manner they ſhall ſucceed each other is to be determined by poſitive rules, ſuch rules being abſolutely neceſſary to regulate the uſe of the derived chords, which are all reducible to the two fundamental chords: for, if the progreſſion of the fundamental baſs be regular, the harmony ariſing from it will be regular alſo; but, if harmony be reduced to its fundamental baſs, and an irregular progreſſion appears, it is then a proof that the harmony has been improperly uſed.

Progreſſions of the Fundamental Concord.

Theſe progreſſions are ſhown on Plate VII. at Ex. 1. from which it appears, that to aſcend a third and deſcend a ſixth, or to aſcend a fourth and deſcend a fifth, and ſo on, is preciſely the ſame thing. It is irregular for a baſs carrying the fundamental concord to aſcend or deſcend *immediately* a ſecond or a ſeventh, except by licenſe or omiſſion. But this rule does not imply, that the ſecond or ſeventh of the ſcale may not be uſed as a baſs carrying the fundamental concord: on the contrary, they may at all times be uſed, provided they are regularly introduced and diſmiſſed by one of the progreſſions in the laſt Example; and, when other chords intervene, ſee Ex. 2. Thus, the ſecond of the ſcale *k k k*, and the ſeventh *l l*, being required as fundamental baſſes, the progreſſions *i i i* and *m m* ſhow how they ſhould be introduced and diſmiſſed. The two fundamental baſſes in queſtion, meet at *k l*, but the progreſſion from one to the other is ſtrictly fundamental. The baſs *h n* is both leading and concluſive, and determines the key. Laſtly, the baſs may aſcend one degree, if the ſecond baſs carries the fundamental diſcord, as at *n o*, *p q*; but, as each chord contains a fifth, the fifth in the ſecond chord muſt deſcend on the third of the firſt baſs, to avoid two ſucceſſive fifths.

Progreſſions of the Fundamental Diſcord.

The fundamental diſcord may either aſcend a fourth or deſcend a fifth into the perfect concord, or elſe continue that progreſſion with ſucceſſive chords of the ſeventh. See Ex. 3. The fundamental diſcord in progreſſions muſt always commence and conclude with the perfect concord, or one of its inverſions.

Progreſſions by Licence, or Omiſſion.

If the fundamental baſs, carrying the perfect concord, aſcend or deſcend one degree, it is by *licence;* becauſe there is always ſuppoſed to be an *omitted* fundamental baſs between two ſuch chords. See Ex. 4. where, by ſuppoſing the baſs at *t*, *v*, or *w*, to be between *r s*, the progreſſion at *r s* is allowable. If the fundamental baſs, carrying the diſcord of the ſeventh, aſcends one degree into the perfect concord, as at *x y*, the baſs at *z*, which reſolves the preceding chord, muſt be ſuppoſed, though omitted. The progreſſions *r s*, and *x y*, are often uſed; particularly in the interrupted cadence. The fundamental diſcord on the ſeventh of the major ſcale is permitted to aſcend one degree into the perfect concord, as at *h h*, *i i*, ſince the ſeventh at *h h* muſt not be treated as a real ſeventh, but as an apparent or diminiſhed ſeventh, which ſuſpends its own fundamental baſs. Therefore the ſeventh at *h h* is conſidered as a ſuſpenſion of the $^{6}_{5}$ at *k k;* the fundamental baſs of which is that at *l l*. Conſequently the progreſſion at *h h*, *i i*, is nothing more than that at *mm*, *nn*.

Natural Harmony of the Scale.

Each part of the diatonic ſcale, taken as a baſs, has ſome particular chord naturally belonging to it: which conſtitutes the natural harmony of the ſcale; for no ſooner is any baſs determined, than its natural chord, according to this ſcale, preſents itſelf to the imagination; and upon this principle any determined melody alſo implies its own baſs. Any deviation from the natural harmony of the ſcale is regulated by the progreſſions of the fundamental baſs. Three parts of the ſcale are naturally fundamental, viz. the key-note, the fourth, and the fifth. See Ex. 5. The fifth may carry the perfect concord, or the diſcord of the ſeventh, according to circumſtances. Of the above three fundamental parts of the ſcale, the chords of all the others, with ſome few exceptions, are inverſions. Although the fourth is a fundamental part of the ſcale, yet it cannot properly aſcend to or deſcend from the fifth by the perfect concord, that not being a fundamental progreſſion. If then the fourth aſcends to the fifth by the perfect concord, as at *k k*, in Ex. 6. or deſcends from it as, at *k m*, it muſt be by licence, or by ſuppoſition that the notes *i l* are omitted fundamental baſſes. Therefore, in order to make a proper progreſſion from the fourth to the fifth, another fundamental baſs is called into the natural harmony, viz. the diſcord of the ſeventh on the ſecond part of the ſcale, as at *n*. This diſcord gives the $^{6}_{5}$ (or its firſt inverſion) to the fourth of the ſcale at *o*, and conſequently produces a regular progreſſion between the fourth and fifth at *o p*. Yet when, according to the received progreſſion of the natural harmony of the ſcale, the fifth with the perfect concord aſcends to the ſixth, with the chord of the 6th, as at *q r;* then the fourth of the ſcale at *v* becomes poſitively fundamental of the chord at *r*. Therefore the progreſſion *s v*, which is fundamental of *q r*, muſt be admitted; but this, as before obſerved, can only be under the ſuppoſition of the intermediate baſs at *t*. The introduction of a fourth fundamental baſs muſt be conſidered as temporary, ſo far as it relates to the natural harmony of the ſcale; for, when the fourth and fifth parts of the ſcale do not ſucceed each other, as at *w x*, the fourth may be regularly uſed as a fundamental baſs. The uſual conſtruction of the natural harmony of the major and minor ſcales, with the fundamental baſs of each chord, is ſhown at Ex. 7. In the progreſſion of either ſcale deſcending, the fundamental baſs at *w x* leads out of the original key, but which is returned to by the baſs *y z*. The natural harmony of the major and minor ſcales aſcending is preciſely the ſame; but in deſcending their harmonies differ, and the fourth of the ſcale as a fundamental baſs is wholly ſet aſide.

Of SUSPENSION, ANTICIPATION, and TRANSITION.

Deviations from the natural harmony of the ſcale take place by means of fundamental progreſſions, or their inverſions; by chords by ſuppoſition; or by ſuſpenſion, anticipation, or tranſition.

A chord is *ſuſpended*, when one or more parts of a preceding chord are introduced on the baſs of one ſucceeding. Suſpenſions take place on the accented part of a bar, and are reſolved on the unaccented part. See Ex. 8. In the above inſtances the ſuſpenſions were in the upper parts only; but Ex. 6. will exhibit ſuſpenſions in the baſs.

A chord is *anticipated*, when one part or more of a ſucceeding chord is introduced on the baſs of the preceding one. Anticipations take place on the accented part of a bar, and their reſolutions on the unaccented part. See Ex. 10.

Had not the ſecond chord on each baſs been anticipated by notes at *h*, *i*, *k*, *l*, the above progreſſion would have run as in Ex. 11.

If, in paſſing from any chord to another, one or more intermediate notes are introduced which do not belong to the fundamental harmony, ſuch introduced notes are called *tranſitions*. Tranſition is either regular or irregular. Regular tranſition takes place on the part of the bar or baſs to which it belongs. See Ex. 12. The regular tranſient notes are thoſe at *h*, *i*, *k*, *l*, *m*, *n*, *o*, *p*, *q*, *r*, *s*, *t*. More than one, and even all the upper parts of a chord, may be tranſient, as at *v w*, and *z y*, in Ex. 13. If all the chords in the example *x y* are lengthened, as at *z*, then the chords themſelves become tranſient.

Irregular tranſition takes place on the accented part of the bar or baſs to which it belongs, and differs from ſuſpenſion in not being prepared. See Ex. 14. The ſingle irregular tranſitions are thoſe at *h*, *i*, *k*, *l;* the double irregular tranſitions, thoſe at *m*, *n*, *o*, *p;* and the tranſient chords thoſe at *q*, *r*. From what has been ſaid of unaccented and accented tranſitions, it muſt be obvious that in ſuch a progreſſion, as at Ex. 15, the notes marked thus ′ are tranſient; and thoſe marked thus ″, or thus ‴, are mixtures of regular and irregular tranſitions.

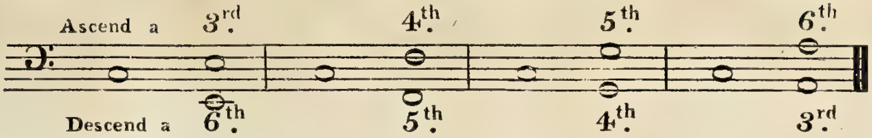
Other deviations from the natural ſcale may be found in great variety in the works of Sebaſtian Bach, of which we have ſelected as many as occupy the front of Plate VIII.

OF MODULATION.

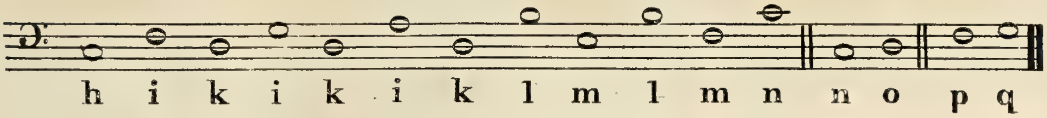
MODULATION, during the ſixteenth century, implied nothing more than a change of voice from one ſound to another; but the ingenious citizen of Geneva, more conſonant

Progression of the Fundamental Bass.

Ex: 1.



Ex: 2.



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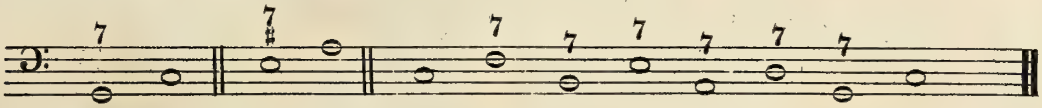

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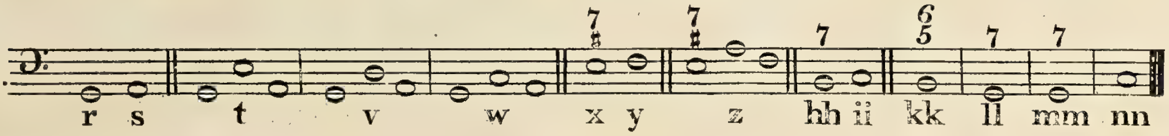

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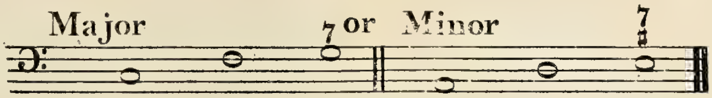

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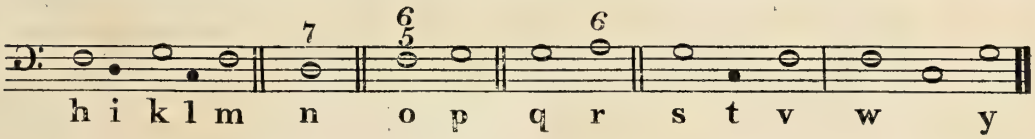

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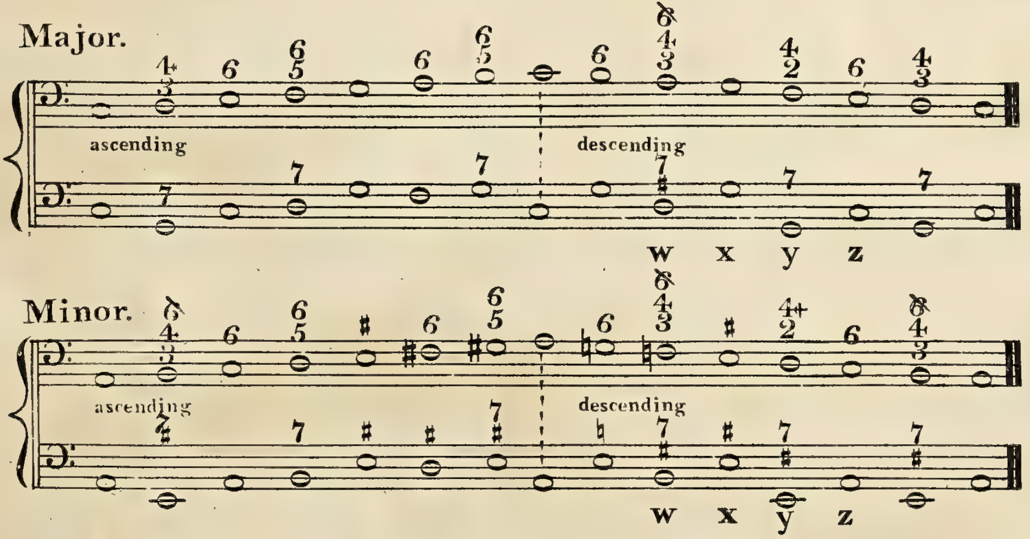
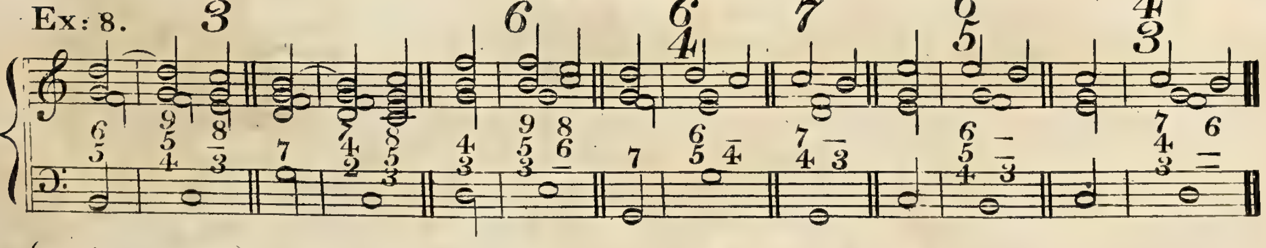


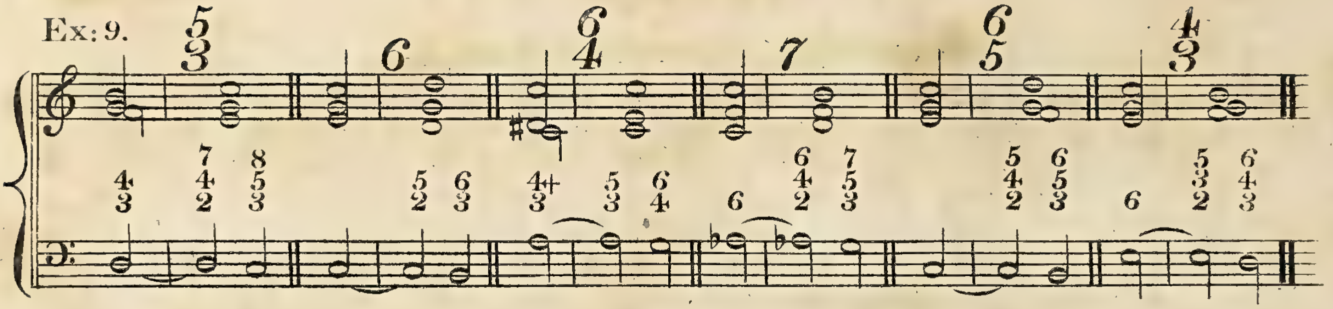
SUSPENSION.

Ex: 8.



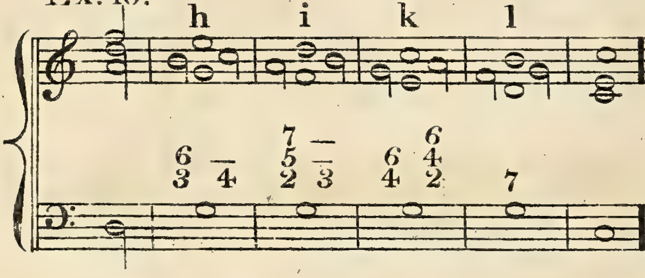
(Engd by Skarratt)

Ex: 9.

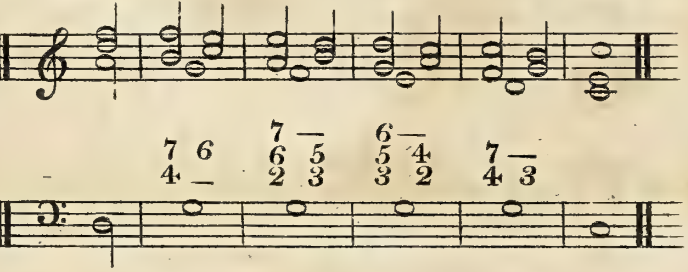


ANTICIPATION.

Ex: 10.

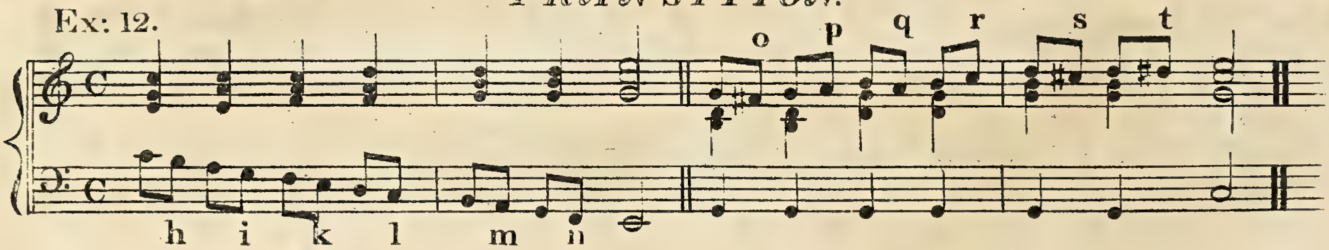


Ex: 11.



TRANSITION.

Ex: 12.



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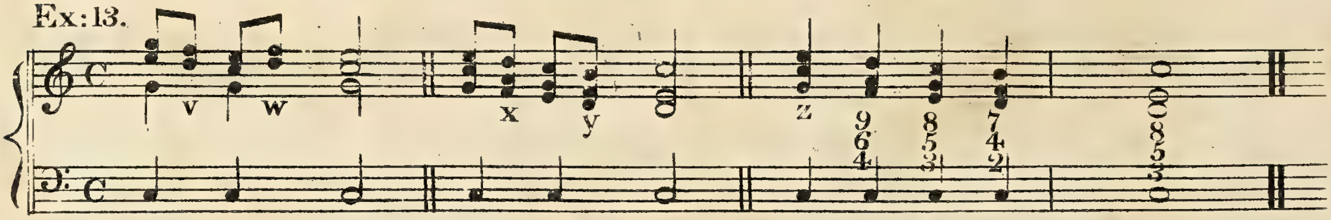

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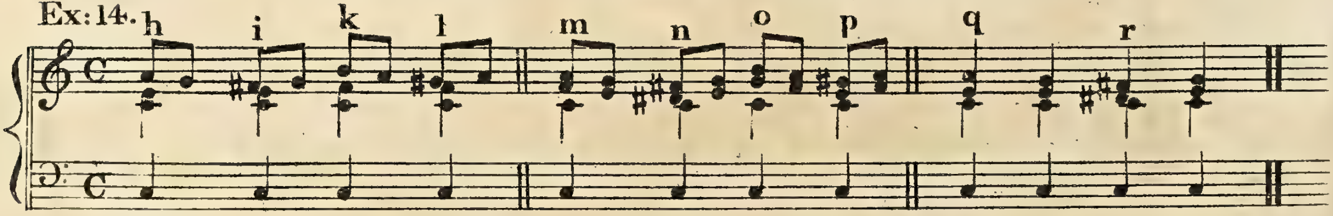

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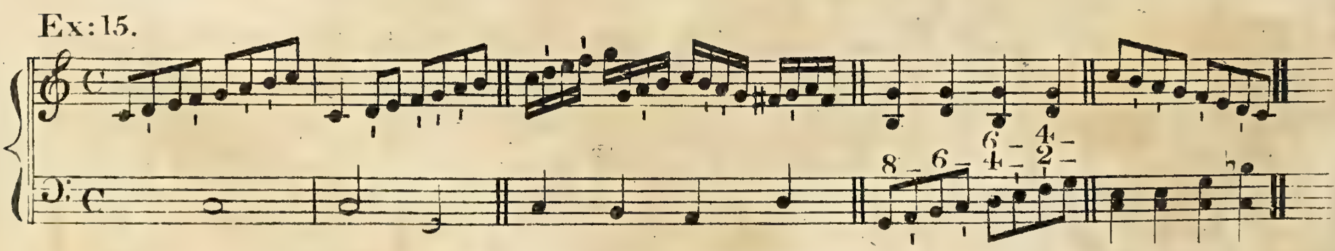
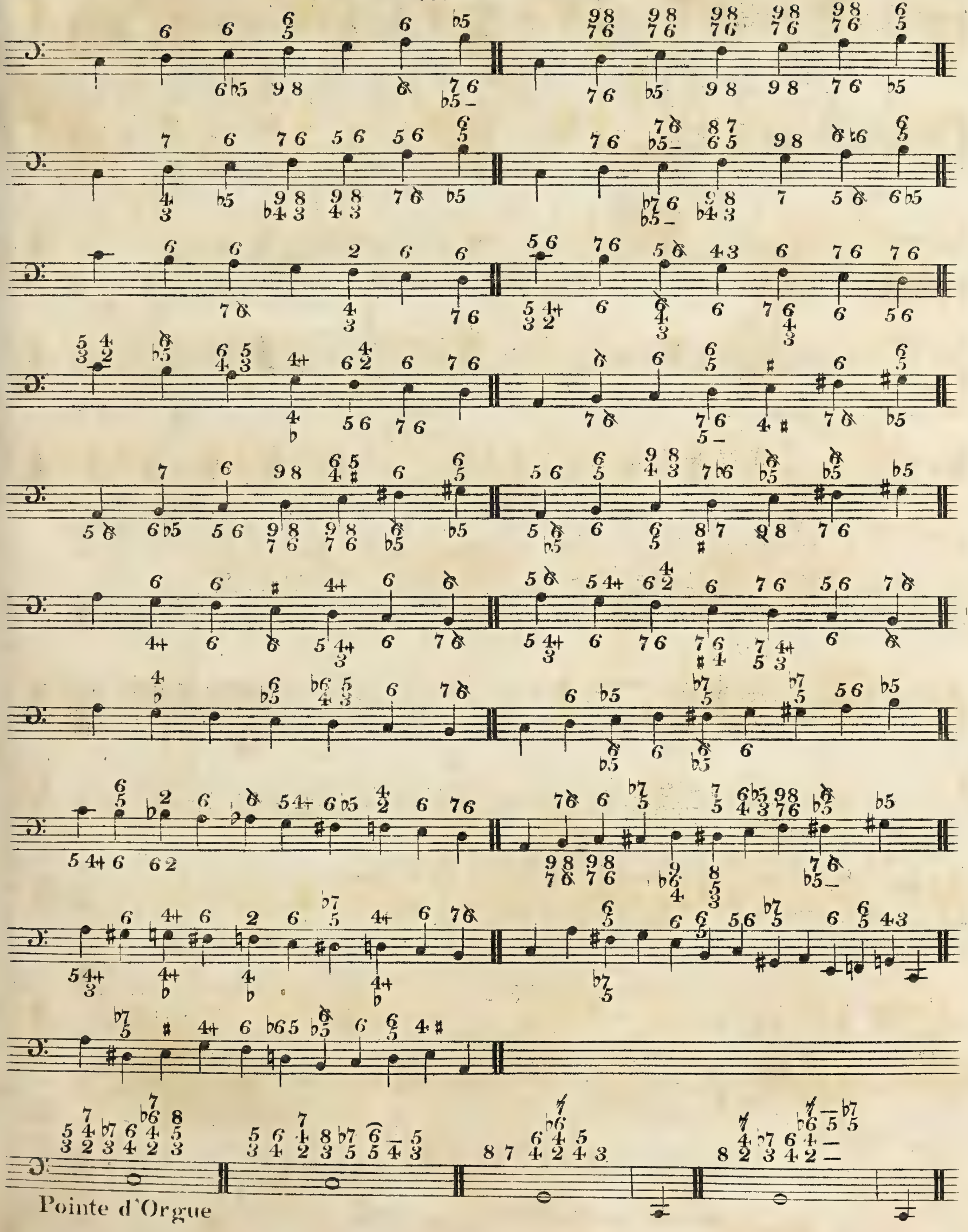


Engraved for the Encyclopadia Londinensis 1818.

MUSIC.

Scales by Sebastian Bach.



MODULATION.

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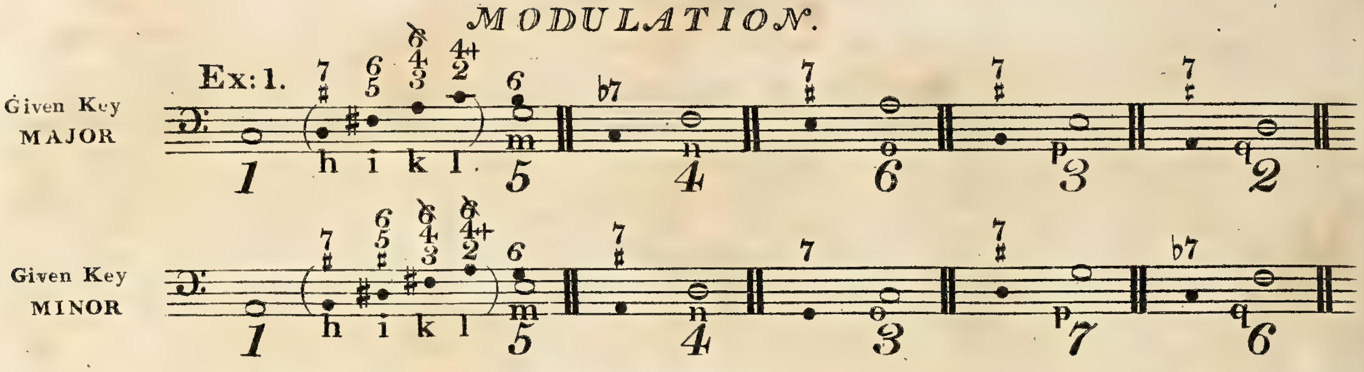
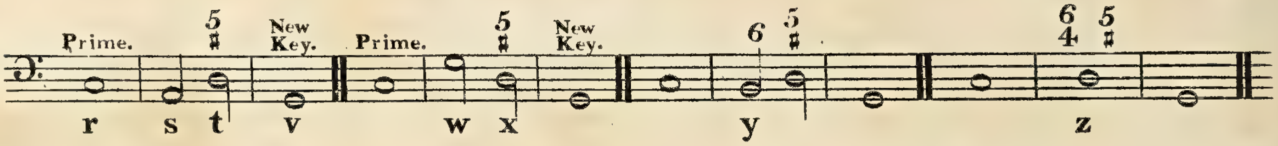
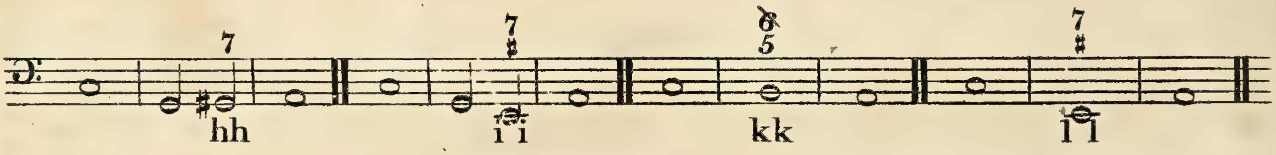


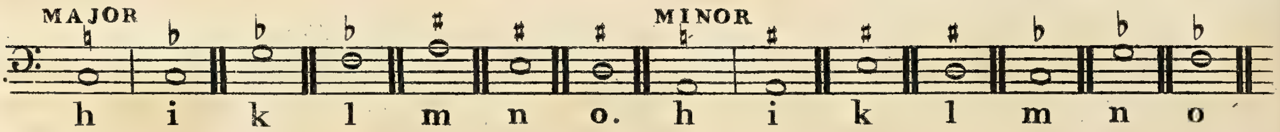
Ex:2.



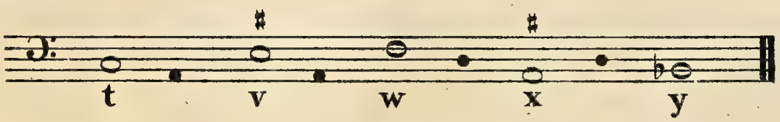
Ex:3.



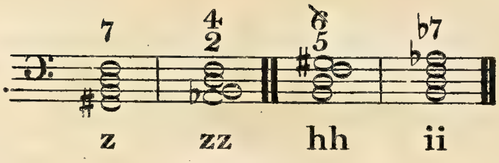
Ex:4.



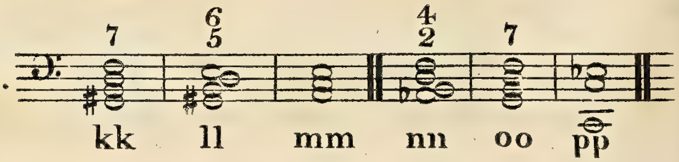
Ex: 5.



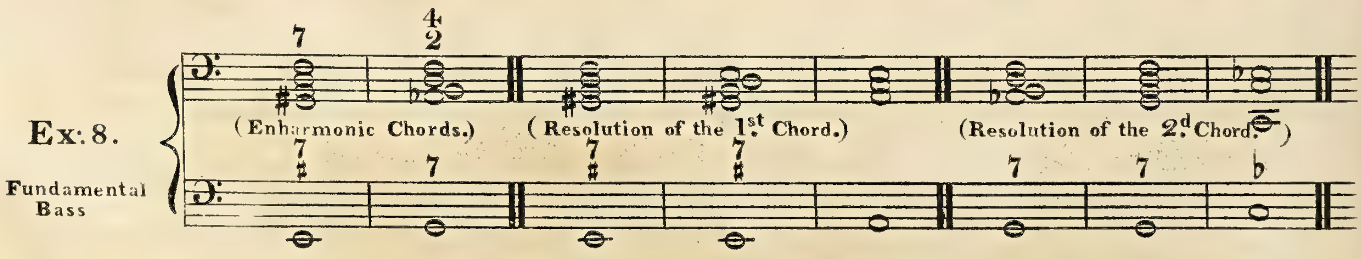
Ex:6.



Ex: 7.

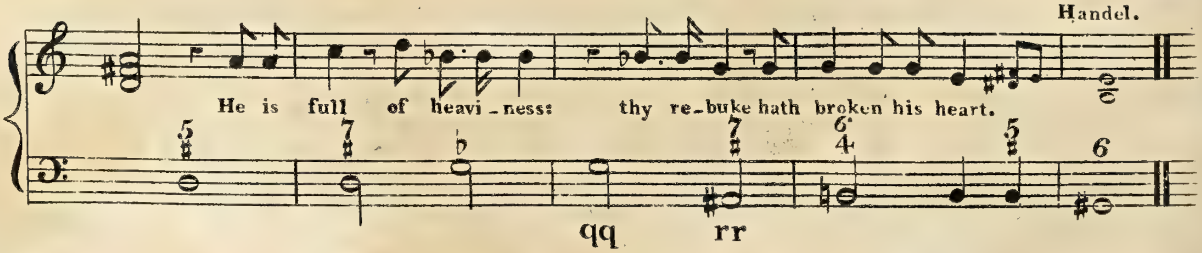


Ex: 8.



Recit:

Ex:9.


Handel.
He is full of heavi-ness: thy re-buke hath broken his heart.
qq rr

Engraved for the Encyclopædia Londinensis 1818.

ſonant to preſent practice in muſic, defines modulation, "the manner of eſtabliſhing and treating a key;" but adds, that the word, at preſent, generally implies the art of conducting melody and harmony, ſucceſſively, into many keys, in a manner agreeable to the ear, and according to rule. If the key is announced by harmony, it is from harmony that the laws of modulation ariſe.

Modulation is either natural or abrupt. *Natural modulation* is that which takes place between any key and another directly related to it. *Abrupt modulation*, is a ſudden change from one key to another not directly related to it.

Of Natural Modulation.

The leading principles of natural modulation may be comprehended under the following heads: A compoſition ſhould finiſh in the ſame key in which it begins; and, if it conſiſt of two or more independent movements, each ſhould do the ſame. A compoſition may nevertheleſs begin in one mode and end in another; that is, it may begin in a minor key and conclude in the major of the ſame name, or vice verſâ; this, however, ſhould be conſidered as a licenſe, not to be taken without ſome evident reaſon. In a ſhort compoſition, modulation is not inſiſted on, nor even neceſſary; but then it is proper that the matter be ſufficiently intereſting to prevent the encroachment of monotony.

Every key has five others related to it, and into either of which it may modulate; thus:

	Major Modulations.						
Any major key can modulate into the	2	3	4	5	6		part of its ſcale.
Any minor key can modulate into the		3	4	5	6	7	
	Minor Modulations.						

Thus the major key cannot modulate into its ſeventh, nor the minor key into its ſecond; as each contains an imperfect or falſe fifth.

The modulation of any given key, into either of the five keys related to it, may be performed in three different ways: by the diſcord of the ſeventh; by the perfect concord; or by the chord of the diminiſhed ſeventh.

1. *By the ſeventh and its inverſions.*—This modulation may be performed either by the chord of the ſeventh, on the fifth of the new key, as at *h*, Ex. 1. (on the back of Plate VIII.) or by either of its inverſions, as at *i*, *k*, *l*. This ſhows all the four different ways of modulating. When the modulation takes place by the chord of the $^{4}_{2}$, as at *l*, the reſolution of that chord muſt be on the third of the new key, with the chord of the ſixth, as the ſmall note at *m* will ſhow. In this Example will be ſeen the five relative modulations of the given key at 1, major and minor. Although the ſeventh only is marked over the keys, at *n*, *o*, *p*, *q*; it muſt nevertheleſs be underſtood, that the modulations into theſe keys may alſo be performed by either of the inverſions of that chord, in the ſame manner as at *h*, *i*, *k*, *l*.

2. *By the perfect Concord.*—When the fifth (*t*, Ex. 2.) of the new key (*v*) is not immediately preceded by the original key (*r*), but by any other note (as at *s*), then the fifth (*t*) may carry the perfect concord; or the fifth of the new key (*x*) may be preceded by the new key-note itſelf (as at *w*), or by either of its two inverted chords, (as at *y* or *z*.)

3. *By the diminiſhed Seventh.*—Modulations into minor keys may take place by the chord of the diminiſhed or extreme-flat ſeventh, as at *h h*, Ex. 3. or by one of its inverſions, as at *k k*; which indeed is almoſt the ſame thing as performing the modulation by the real ſeventh; for, as the diminiſhed ſeventh is a ſuſpenſion of its own fundamental baſs, ſo the fundamental baſs of *h h* and *k k* is that at *i i* and *l l*.

Having ſhown by what means modulation may be performed, it will be now requiſite to ſhow by what rules it is regulated, and how far it may be carried.

The order of modulating from one eſtabliſhed key to another, more or leſs related to it, may be comprehended under the following general heads: The firſt modulation of a major key is into its fifth; this tone being (in the ſcale) next in influence to the key. The firſt modulation of a minor key is into its third major; for this brings the minor key back to the major key on which it is eſtabliſhed. The ſecondary modulations of a major key depend much more on will than on rule; but, before return of the original key, the fourth major and ſixth minor are generally introduced. The ſecondary modulations of a minor key ſtand nearly in the ſame circumſtances; but its neareſt relative keys are always to be preferred. Few pieces, however, of conſiderable length, confine themſelves to relative modulations alone, but go into others apparently extraneous. This happens more eſpecially, when one of the relative keys is conſidered as a principal; by which a ſecond order of keys ariſes, collaterally relative to the primary key; or, when the modulation is carried ſtill further, then by regarding one of thoſe collateral keys as principal, a third order of keys preſents itſelf. But ſuch extraneous modulations ought to be admitted with great caution, on account of their extreme diſtance from the original key; which, if once loſt ſight of, can only be regained in the following manner: either by modulating to one of its relative keys, or by means of an enharmonic change, or abrupt modulation. Extraneous modulations may, however, be uſed with great effect; of this, the works of Haydn, Mozart, and other maſters, contain many fine inſtances.

As every key is naturally related to five others, ſo each of theſe relative keys can only be conſidered as one degree, or remove, from the original; conſequently, keys which are not relative muſt be extraneous. As the relative minor of every major key is on the ſixth tone above, and not that of the ſame name; conſequently, major and minor keys of the ſame name are not relative, but extraneous. Therefore, if any major key changes immediately to the minor of the ſame name, or vice verſâ, the modulation is not natural, but abrupt.

Of Abrupt Modulation.

Abrupt modulation is a ſudden change from one key to another not immediately related. This modulation may take place either by changing the mode, by omiſſion, or by an enharmonic change.

1. *By changing the Mode.*—If any of the major keys contained in the relative modulations of a given key are changed into minor, or the minor keys into major, the modulation is abrupt. See Ex. 4. The primary or leading key at *h* is ſuppoſed to precede the others at *i*, *k*, *l*, *m*, *n*, *o*, immediately; ſo that every ſtep it takes is abrupt, not even excepting that from *h* to *i*, which bears the ſame name.

2. *By Omiſſion.*—This kind of modulation ſuppoſes ſome (omitted) chord between two others to connect them together. See Ex. 5. It muſt be evident that ſuch modulations as thoſe from *t* to *v*, *v* to *w*, *w* to *x*, and from *x* to *y*, can only be admitted by ſuppoſing the chords expreſſed in the ſmall notes to be omitted. This, being the leaſt agreeable of the abrupt modulations, is the leaſt uſed.

3. *By changing the Name of any given Note.*—This ſpecies of abrupt modulation is of the enharmonic ſcale, and is founded on the chord of the diminiſhed ſeventh. See Ex. 6. where, by changing the name of the baſs of the diminiſhed ſeventh at *z*, to the other baſs *z z*, a fourth inverſion of a diminiſhed ſeventh is produced; alſo by changing the name of the upper part of the inverſion of the diminiſhed ſeventh, as at *h h*, a diminiſhed ſeventh itſelf is produced at *i i*. Although the chords at *z*, *z z*, or *h h*, *i i*, are the ſame in ſound, yet they are not ſo in ſenſe. See Ex. 7.

The chord at *hh* may either reſolve into *ll* or *mm;* but that at *nn* muſt firſt reſolve into *oo*, before it can paſs into *pp*. Again, the fundamental baſs of the chord at *hh* is very different from that at *nn*, although the ſame in ſound. See Ex. 8.

Abrupt modulations are much uſed in recitatives. We ſhall conclude the ſubject with a beautiful inſtance from the oratorio of the Meſſiah. See Ex. 9. Here the abrupt modulation takes place by changing the minor third in the chord at *qq* into a new baſs note at *rr*.

We may obſerve in general, that no flats or ſharps are placed at the clef in recitative; theſe are all regarded as accidental; nor is Italian recitative ever confined to any one key. Every note has its ſignature.

OF COUNTERPOINT.

The term *counterpoint* originated in the ancient manner of writing notes as mere points, or large dots; where it denoted "point againſt point," or one part to another. This latter ſignification it ſtill has in modern harmony, where "writing a counterpoint" denotes the harmoniſing of a ſingle part, by ſetting one or more parts to it. The part to be harmoniſed is called the *ſubject*, or principal melody; and the parts ſet to it are the *counterpoint*. But in general the ſubject and counterpoint are underſtood collectively, when counterpoint is ſpoken of, without diſtinguiſhing them. And, as a ſubject harmoniſed produces a compoſition in parts, or a harmony; ſo the term counterpoint, in a more general ſenſe, denotes muſic in parts, or muſic in full harmony.

According to the above definitions, harmony or counterpoint may be ſet either with regard merely to its ſimple correctneſs, without the object of rendering the parts invertible; or for the double purpoſe of rendering the parts invertible, as well as correct. The former is called *ſimple counterpoint;* the latter, *double counterpoint.*

Of Simple Counterpoint.

Simple counterpoint may be divided into *plain* and *figurative.* Both ſorts may conſiſt of harmonies of any number of parts; and in any of their forms, the principal melody may be in the higheſt, loweſt, or middle, part, when there are more than two parts.

It will be uſeful to obſerve, that what is meant by *ſtrict harmony*, or counterpoint, is a compoſition which conſiſts of nothing but eſſential chords and their ſyncopation; and *free harmony*, is that in which the diatonic and chromatic means are introduced among the eſſential notes.

Plain ſimple counterpoint conſiſts of notes of the ſame length. On Plate IX. Ex. 1. is a melody as higheſt part, to which a baſs and two middle parts are to be ſet. At Ex. 2. the melody is in the baſs; and at Ex. 3. in a middle part.

Figurative ſimple counterpoint allows notes of different durations, both in the ſame part and in different parts of the harmony; as in Ex. 4.

Of Double Counterpoint.

Double counterpoint denotes a compoſition calculated for inverſion; and though, with particular regard to the number of invertible parts, there are not only double, but alſo treble, quadruple, and greater, counterpoints, every poſſible inverſion of them muſt be as regular as double counterpoint with any of the invertible parts; for all depends on the knowledge of conſtructing any two parts of a harmony, ſo that the lower may be ſet over the higher, or the contrary. The doctrine of double counterpoint is one of the moſt important branches of harmony; for it ſhows how different harmonies can be produced with the ſame parts or melodies, or how a ſtricter unity can be combined with moſt intereſting varieties, than by mere ſimple counterpoint. And theſe varieties conſiſt either in different ſtates of the ſame fundamental harmony, as in the counterpoint of the octave, or in different fundamental harmonies, as in all the other counterpoints, or alſo in the intermixture of both parts.

Double counterpoint is to be conſidered; firſtly, with regard to the interval in which the inverſion ſhall take place; ſecondly, with regard to the number of invertible and other parts; and, thirdly, with regard to the ſort of motion in which the inverſion ſhall be introduced.

1. A counterpoint may be calculated for an inverſion in one interval only; or in two or more different intervals. And it is called according to its reſpective interval; viz. a counterpoint of the octave, ninth, tenth, and ſo forth. But the intervals that exceed a ſeventh are nothing more than octaves of ſmaller intervals, as in ſimple counterpoint. Thus, the ninth is a higher ſecond, the tenth a higher third, &c. A counterpoint of the octave, therefore, admits of an inverſion in the octave of the ſame interval; one of the twelfth, an inverſion in the octave of the fifth, and ſo forth; and the double octave may be uſed inſtead of the ſimple octave where occaſion permits.

The general rules in double counterpoint are as follow: 1. The two parts muſt be calculated ſo that every interval is treated regularly, both before and after the inverſion; and then it is the ſame thing, whether the inverſion is produced by carrying the lower part over the higher, or the contrary. 2. The two parts muſt not croſs each other before the inverſion, nor contain any interval greater than that in which the inverſion is to take place.

Double Counterpoint of the Octave.

This conſiſts of two parts calculated to be inverted, by carrying either of them an octave or double octave towards the other. The rules of it depend on the change of intervals which the inverſion produces, according to the following table:

Intervals before the inverſion	1	2	3	4	5	6	7	8.
Their inverſion in the octave	8	7	6	5	4	3	2	1.

Here it appears, that, by this inverſion, the uniſon produces an octave; the ſecond a ſeventh, the third a ſixth, and ſo forth. A counterpoint of the octave, therefore, admits of any fundamental or inverted, eſſential or accidental, interval, that is treated regularly before the inverſion, except conſecutive perfect fourths; becauſe in the inverſion they produce diſallowed fifths. Neither ought ninths to be taken, becauſe they cannot be inverted. At *a*, Ex. 5. is a ſhort ſubject in the higher, and its counterpoint in the lower, part; at *b* is an inverſion of it in the octave; and at *c* an inverſion in the double octave; *d* is another example of inverſion in the octave.

Of Double Counterpoint of other Intervals beſides the Octave.

Theſe counterpoints may be divided into two claſſes; viz. principal and derivative. The former are thoſe of the three fundamental intervals beſides the octave; viz. the twelfth, tenth, and fourteenth. And the latter are thoſe which ariſe from the inverſion of the three former ones in the octave; viz. the eleventh, thirteenth, and ninth. Both ſorts rank in the order in which they are here placed; for an inverſion in the twelfth, as octave of the fifth, leaves the tranſpoſed melody major or minor as before, and conſequently neareſt related to its previous ſtate; but an inverſion in the tenth, as octave of the third, changes the tranſpoſed melody from major to minor, or the contrary, which renders it leſs related to its previous ſtate than the former inverſion; and that in the fourteenth, or octave of the ſeventh, is ſtill leſs related to its previous ſtate, becauſe it renders every interval diſſonant to its former ſtate; and the ſame it is with the counterpoints of the eleventh, thirteenth, and ninth.

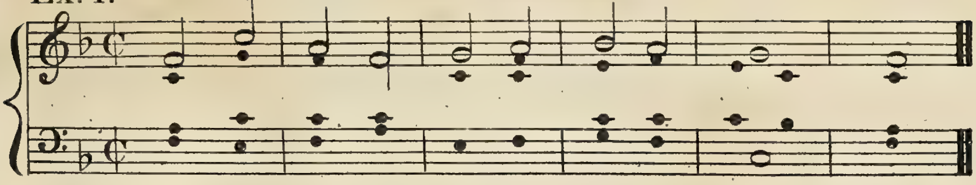
The general rules are as follows: 1. It produces the ſame change of intervals, whether the higher part is carried into its reſpective interval over the lower, or the lower part over the higher; or alſo when the one part is carried but into its reſpective ſimple interval, and the other part

MUSIC.

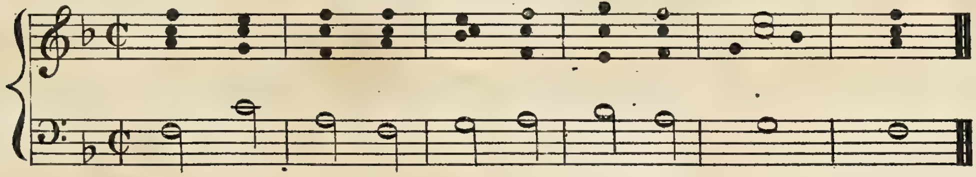
Plate IX.

COUNTERPOINT.

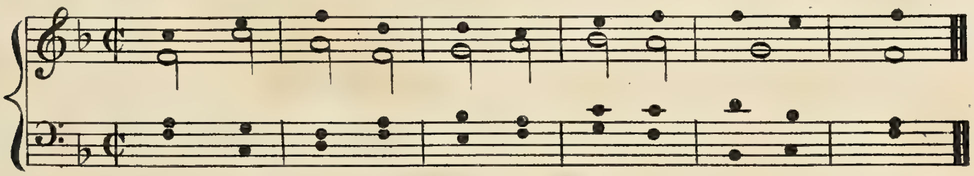
Ex: 1.



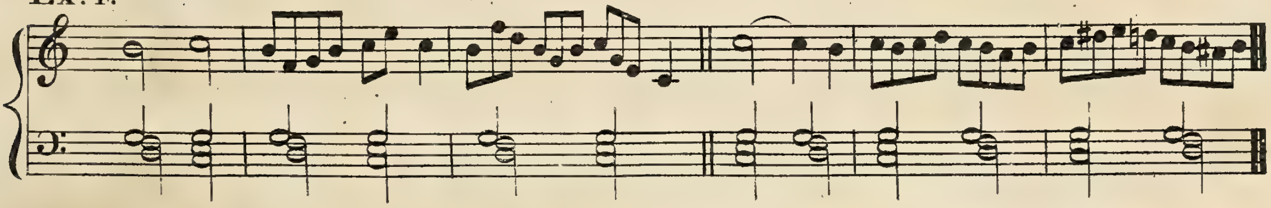
Ex: 2.



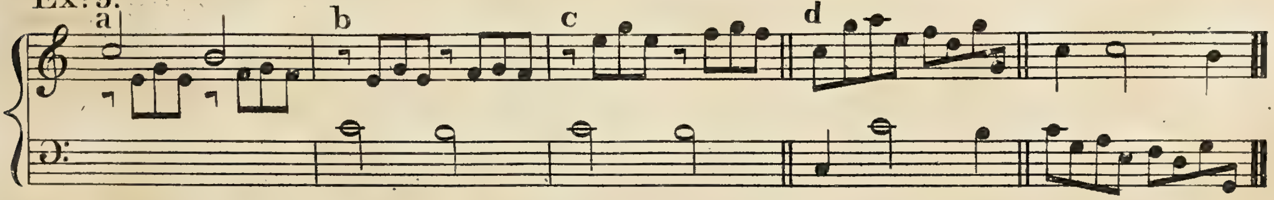
Ex: 3.



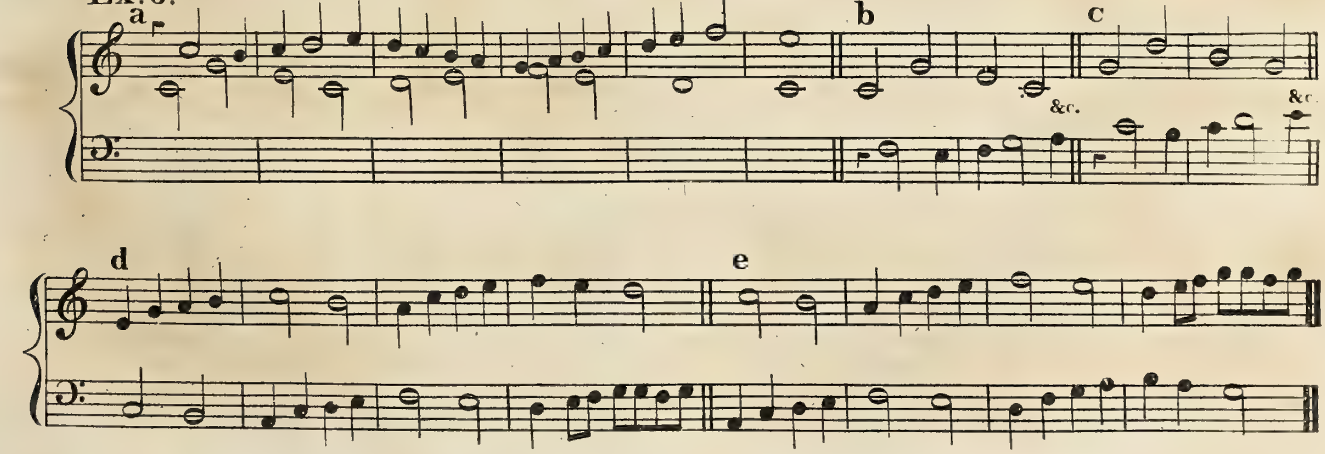
Ex: 4.



Ex: 5.

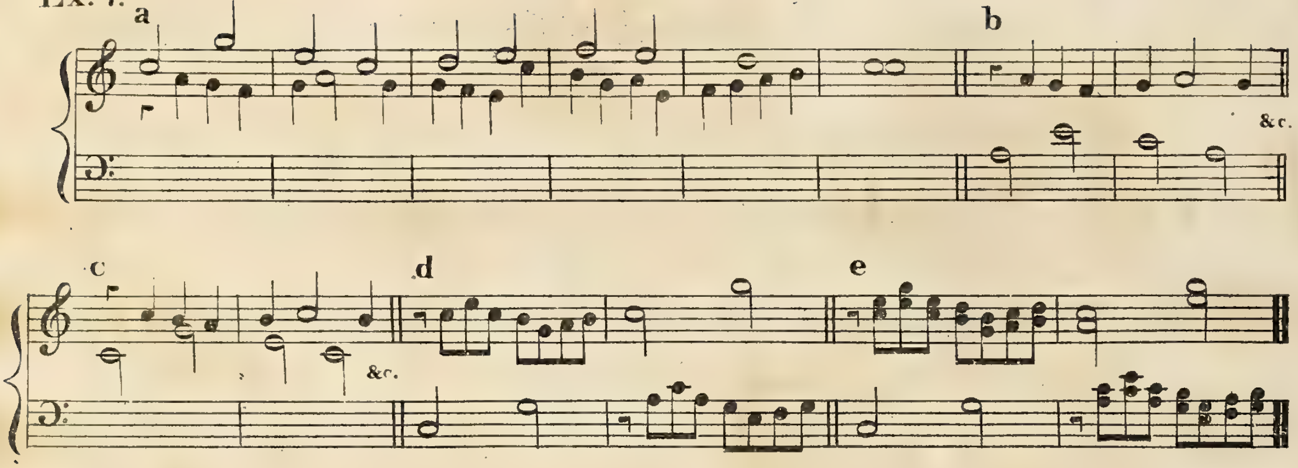


Ex: 6.

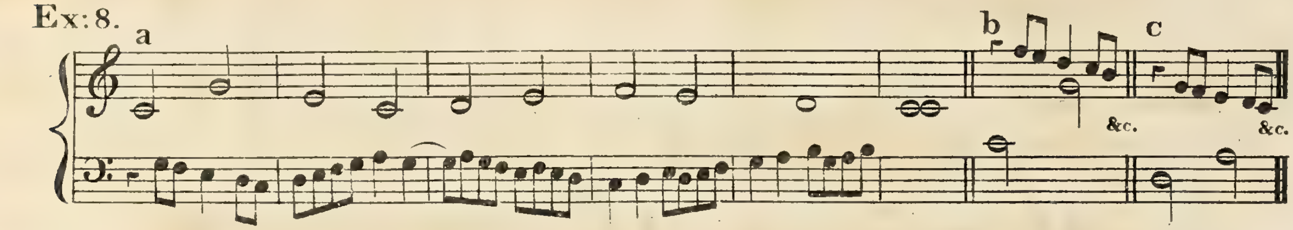


(Eng^{d} by Skarratt)

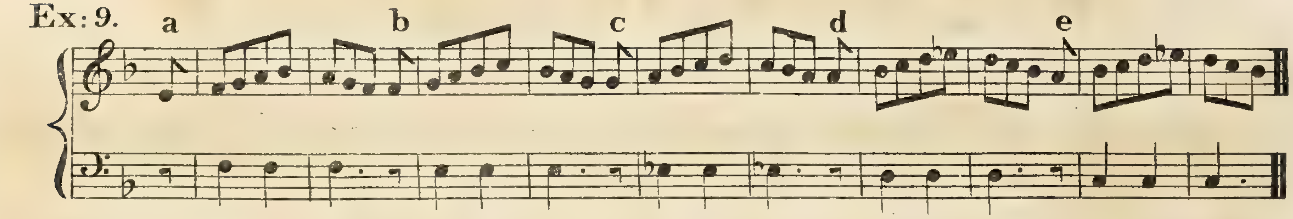
Ex: 7.



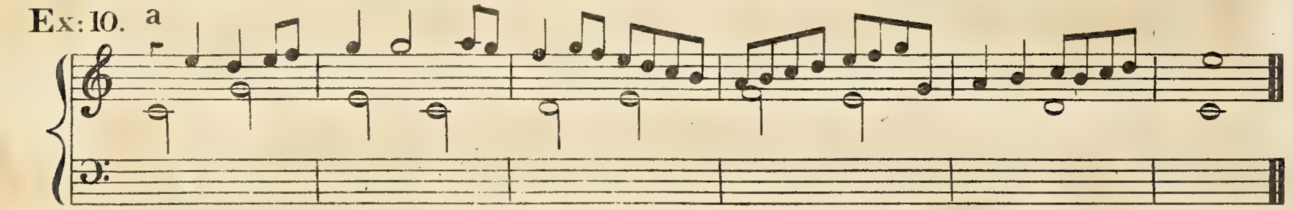
Ex: 8.

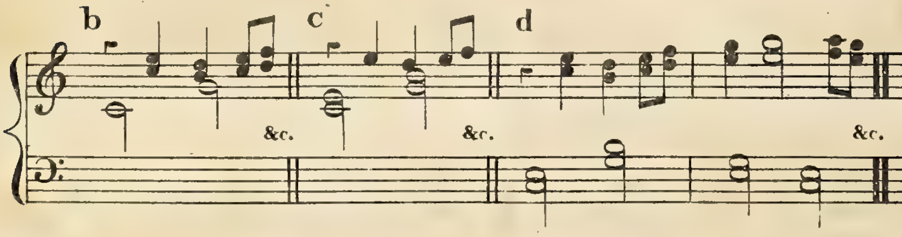


Ex: 9.

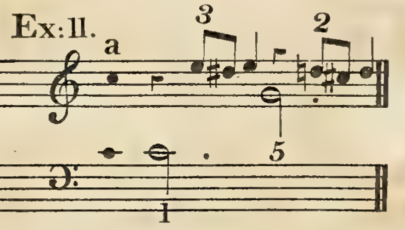


Ex: 10.





Ex: 11.



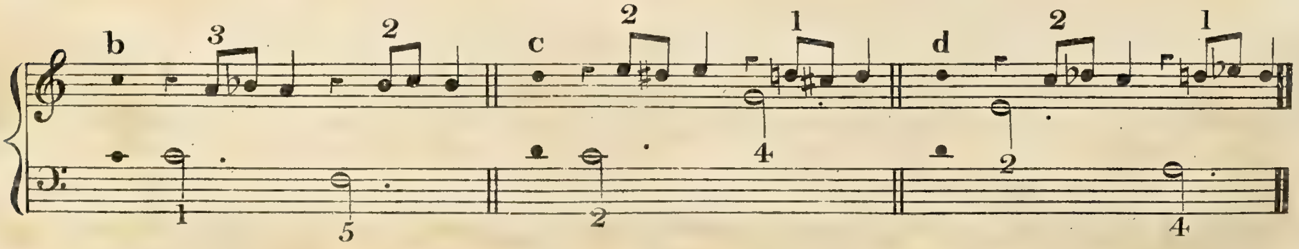


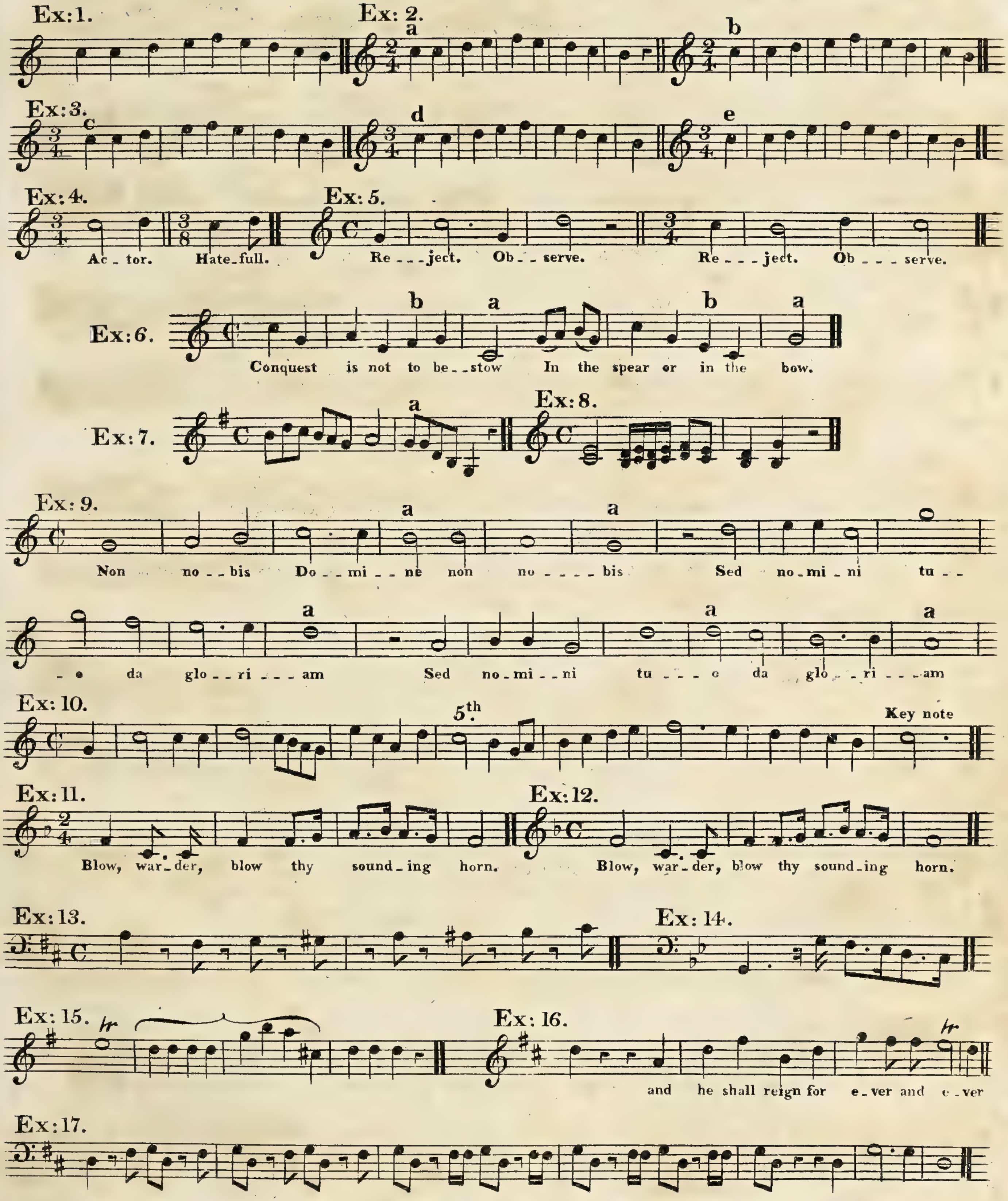
Plate IX.

Engraved for the Encyclopædia Londinensis 1818.

MUSIC.

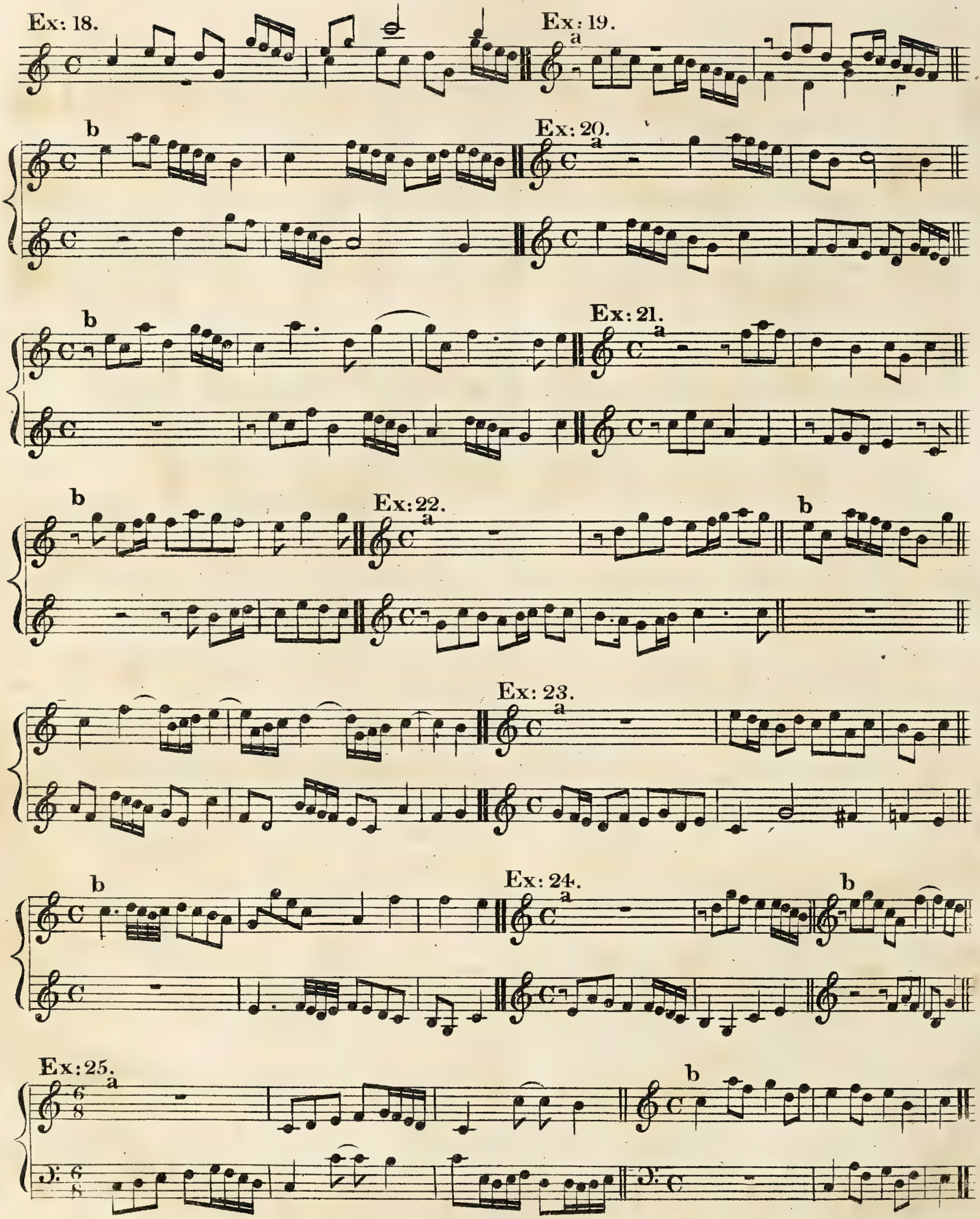
Plate X.

RHYTHM.


Ex:1.
Ex: 2.
a
b
Ex: 3.
c
d
e
Ex: 4.
Ac_tor. Hate_full.
Ex: 5.
Re_ _ _ject. Ob_ _ serve.
Re_ _ _ject. Ob_ _ _ serve.
Ex: 6.
b a b a
Conquest is not to be_ _stow In the spear or in the bow.
Ex: 7.
a
Ex: 8.
Ex: 9.
a a
Non no_ _bis Do_ _mi_ _ne non no_ _ _ _bis Sed no_mi_ni tu_ _
a a a
_ o da glo_ _ri_ _ _ am Sed no_mi_ _ni tu_ _ _ o da glo_ _ri_ _ _am
Ex: 10.
5th
Key note
Ex: 11.
Blow, war_der, blow thy sound_ing horn.
Ex: 12.
Blow, war_der, blow thy sound_ing horn.
Ex: 13.
Ex: 14.
Ex: 15.
tr
Ex: 16.
tr
and he shall reign for e_ver and e_ver
Ex: 17.

Eng^d by Skarratt.

IMITATIONS.



Engraved for the Encyclopædia Londinensis 1818.

an octave towards it. 2. Some accidental ſharps or flats are allowed in the inverſion, to preſerve the original progreſſion more ſtrictly than could otherwiſe be done. And the end of an inverſion may be altered, if a concluſion on the ſucceeding harmony require it. 3. Every interval may be uſed as an accidental one. And thoſe eſſential ones which cannot be uſed without certain limitations, may be covered by a diatonic or chromatic gradual progreſſion to and from them.

Double Counterpoint of the Twelfth or Fifth.—Two parts calculated to be inverted by carrying either of them a twelfth towards the other, are called a counterpoint of the twelfth. The particular rules of this counterpoint depend on that change of intervals which the inverſion produces, as expreſſed in the following table:

Intervals before the inverſion	1	2	3	4	5	6	7	8	9	10	11	12
Their inverſion in the twelfth	12	11	10	9	8	7	6	5	4	3	2	1

Here it appears, that, by the inverſion, the uniſon becomes a twelfth, the ſecond an eleventh, and ſo forth. Hence it follows: Firſt, that all the intervals, except the fourth and the ſixth, can be treated in the ſame manner as in ſimple counterpoint; but that the fourth and ſixth, when inverted, become diſcords; and therefore ought only to be introduced by a gradual progreſſion in one of the parts. Secondly, that conſecutive thirds are good, becauſe they become thirds again. See Ex. 6. where, at *a*, the ſubject is in the lower, and a counterpoint to it in the higher, part; at *b* is one inverſion of the ſame, by carrying the higher part a twelfth towards the lower; and at *c* the other inverſion, by carrying the lower part a fifth towards the higher, and the higher part an octave towards it; at *d* and *e* are farther examples of this kind of inverſion.

When this counterpoint is inverted in the octave, either before or after its inverſion in the twelfth, it becomes a counterpoint of the eleventh, which may be inverted in both in the ſame manner as that of the twelfth.

Double Counterpoint of the Tenth or Third.—Two parts calculated to be inverted by carrying either of them a tenth towards the other, are called a counterpoint of the tenth. The particular rules of this counterpoint alſo depend on that change of intervals which the inverſion produces, as expreſſed in the following table:

Intervals before the inverſion	1	2	3	4	5	6	7	8	9	10
Their inverſion in the tenth	10	9	8	7	6	5	4	3	2	1

Here it appears, that, by the inverſion, the uniſon becomes a tenth, the ſecond a ninth, and ſo forth. From which it follows: Firſt, that all the intervals, except the fourth, may be treated the ſame as in the ſimple counterpoint. Secondly, that the equal motion muſt be avoided throughout.

Ex. 7. at *a*, is the former ſubject with a counterpoint to it; and at *b* and *c*, its two inverſions in the tenth; *d* and *e* are other examples of the ſame kind of inverſion.

When this counterpoint is inverted in the octave, like the former one, it produces a counterpoint of the thirteenth.

Double Counterpoint of the Fourteenth or Seventh.—Two parts calculated to be inverted by carrying either of them a fourteenth towards the other, are called a counterpoint of the fourteenth. The particular rules of this counterpoint again depend on that change of intervals which the inverſion produces, viz.

Intervals before the inverſion	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Inverſion in the fourteenth	14	13	12	11	10	9	8	7	6	5	4	3	2	1

Here it appears, that, by the inverſion, the uniſon becomes a fourteenth, the ſecond a thirteenth, and ſo forth. From which it follows: Firſt, that all the intervals, except the ſixth and the octave, may be treated as in the ſimple counterpoint. Secondly, that equal motion muſt be avoided throughout.

Ex. 8. at *a*, is the former ſubject, with a counterpoint to it; and at *b*, *c*, its inverſions in the fourteenth.

When this counterpoint is inverted in the octave, like the two former, it produces a counterpoint of the ninth.

Double Counterpoint of the Eleventh, Thirteenth, and Ninth.—It has already been ſhown how this counterpoint ariſes from the three former ones by the ſimple proceſs of an inverſion in the octave; viz. the counterpoint of the eleventh or fourth, from that of the twelfth or fifth; the counterpoint of the thirteenth or ſixth, from that of the tenth or third; and the counterpoint of the ninth or ſecond, from that of the fourteenth or ſeventh. Whenever, therefore, counterpoints of the eleventh, thirteenth, and ninth, are introduced, they are mere derivatives of the former ones in the ſame manner as the fourth, ſixth, and ſecond, are derivative intervals of the fifth, third, and ſeventh.

Ex. 9. at *a*, is the original counterpoint, which is invertible in the twelfth, tenth, and fourteenth, and conſequently alſo in their inverſions in the octave. At *b*, each part is ſet one degree farther from the other, which is the ſame as ſetting one of the parts a third farther from the other; and conſequently, alſo, the ſame as if the higher part of it had been the lower, and the two parts inverted in the tenth. At *c*, the higher part of *a* is carried a third higher, and the lower part one degree lower, which is the ſame as if one of the parts had been carried a fourth from the other; and conſequently, the ſame as if the parts of *a* had been firſt inverted in the twelfth, and then a double octave back again. At *d*, ſee the original higher part *a* ſet a fourth higher, and the lower two degrees lower, which is the ſame as ſetting one of the parts a ſixth farther from the other; and conſequently, alſo the ſame as if the counterpoint at *a* had been firſt inverted in the tenth, and then in the double octave back again. At *e*, the original part is diſpoſed as if one of them had been ſet a ſeventh farther from the other, which is the ſame as if the original higher part had been the lower, and then an inverſion had taken place in the fourteenth.

According to the rules of a muſical mode, a ſubject and its counterpoint in any interval may take place on every degree of the diatonic ſcale; and this produces the different ſpecies of every ſort of double counterpoint, as well as of its different inverſions, in a ſimilar manner as the different ſpecies of intervals and chords ariſe from their taking place on the other degree of the ſcale.

2. Counterpoint may conſiſt of more than two invertible parts; and others may alſo be added as mere accompaniments. When it conſiſts of three invertible parts, it is called triple counterpoint; and four invertible parts make a quadruple counterpoint. Theſe are the moſt uſeful counterpoints; for quintuple, ſextuple, &c. &c. are only uſed in canons of ſo many real parts. The inverſions which a triple and quadruple counterpoint is calculated for are—Firſt, all poſſible ones in the octave; and, ſecondly, thoſe in other intervals. A triple or quadruple counterpoint may be formed in two different ways; viz. firſt by doubling one or both parts of a double counterpoint in thirds; and, ſecondly, by giving every part its own melody or progreſſion.

The counterpoints whoſe parts may be doubled in thirds, are all thoſe invertible in the tenth; either without or with being alſo invertible in the twelfth or fourteenth. And the principle according to which they may thus be doubled is; that the conſecutive tenths or thirds, which the inverſion produces to the original counterpoint, have ſo good an effect, as to admit being added to the original part or parts. But it makes a material difference whether the original parts ſhall be doubled in thirds only before their inverſion in the twelfth, tenth, and fourteenth, or both before and after thoſe inverſions; as will appear in the following particulars.

If a counterpoint be doubled in thirds only *before* its inverſion in the twelfth, tenth, and fourteenth, it muſt be obſerved: Firſt, that in any counterpoint which is invertible in the tenth, one part may be doubled; viz. the higher part in thirds below, or the lower part in thirds above. Secondly, that, if the ſaid thirds ſhall be ſet to both parts at once, it is neceſſary to avoid the ſecond, fourth, and ſixth, as eſſential intervals; to uſe no long accidental intervals; and to avoid the equal motion throughout. But if both parts be doubled in thirds, not only before, but alſo *after*, their inverſion, the following rules muſt be attended to.

Rule I. If no other intervals are uſed as eſſential than the third, fifth, and octave, the thirds may be uſed, firſt before the inverſion of the counterpoint, and ſecondly after its two inverſions in the twelfth.

Rule II. If no other eſſential intervals are uſed than the third and fifth, the thirds in queſtion may be uſed, firſt before the inverſion, and ſecondly after the two inverſions in the fourteenth, as well as after thoſe in the twelfth.

Rule III. In all the caſes under the two preceding rules, the thirds are added below the higher and above the lower part. But, though no long accidental notes ought to be uſed, any ſhort eſſential or accidental note may be ſet in a gradual progreſſion to and from the allowed principal notes; and the equal motion muſt be avoided as before.

Rule IV. If both parts ſhould be doubled in thirds after their two inverſions in the tenth, the thirds muſt be ſet either over both parts or under both. But this produces no other variety than doubling the parts in the former manner after their two inverſions in the twelfth.

The varieties of harmony and inverſion which can be produced by the doubling of a counterpoint in the deſcribed manner are as follows: When one part is doubled in thirds, it produces a triple counterpoint of the octave; and, when both parts are doubled, it produces a quadruple counterpoint of the octave. Each ſort may be inverted in the octave as often as the order of its parts one over the other can be changed, as expreſſed in the following tables.

A triple counterpoint admits of five inverſions in the octave; as follows:

1	1	2	2	3	3
2	3	1	3	1	2
3	2	3	1	2	1

A quadruple counterpoint admits of twenty-three inverſions in the octave; as follows:

1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4	4	4
2	2	3	3	4	4	1	1	3	3	4	4	1	1	2	2	4	4	1	1	2	2	3	3
3	4	4	2	2	3	3	4	1	4	1	3	2	4	1	4	1	2	2	3	1	3	1	2
4	3	2	4	3	2	4	3	4	1	3	1	4	2	4	1	2	1	3	2	3	1	2	1

In both the above tables, the firſt rank of figures ſhows the three or four original parts, and the other ranks their inverſions. Ex. 10. *a*, exhibits a counterpoint that is invertible in the twelfth and tenth; at *b*, thirds are ſet under the original part; at *c*, thirds over the original lower part; and, at *d*, both at once.

When a counterpoint that has been inverted in the ninth or eleventh is to be rendered triple or quadruple, the thirds muſt be added on the oppoſite ſide; that is to ſay, above the higher and below the lower part; and in the inverſion in the thirteenth they muſt be added in the ſame manner as in that in the tenth.

3. The inverſions of counterpoints may be calculated for a reverſe, a retrograde, and a reverſe-retrograde, motion. A *reverſe motion* is that in which every aſcending interval becomes deſcending, or the contrary. A *retrograde motion*, that which introduces a melody backwards without reverſing it. And a *reverſe-retrograde motion*, that which introduces a melody both backwards and reverſed.

The firſt, or reverſe motion, is very uſeful, becauſe it produces a fine variety of the harmony and progreſſion without loſing ſight of the ſubject. But the two latter motions are conſidered as a matter of curioſity rather than of utility in practice; becauſe it is very difficult to trace the ſubject in retrograde or reverſe-retrograde motion, except it be very ſhort.

The rules for counterpoint reverſed are as follows: 1. Any counterpoint of the octave, tenth, twelfth, or fourteenth, may be reverſed before as well as after all its reſpective inverſions, if it contains no diſcord, except in a tranſient gradual progreſſion to and from the concords allowed in it. And, if it is calculated to be doubled in thirds, it may alſo be reverſed with thoſe thirds. 2. The reverſion muſt be made in both parts according to the ſame fixed note, and not according to the different notes with which the two parts of a counterpoint may begin.

At Ex. 11. *a*, the key-note, as a fixed note, is expreſſed by a large dot. The figures ſhow the different intervals; figure 1 denotes the uniſon, 3 the 3d, &c. At *b*, ſee the ſame reverſed. At *c*, the ſecond of the ſcale is marked by the large dot, as a fixed note; and at *d*, the ſame is reverſed.

Of RHYTHM. Plate X.

Muſic may be conſidered as conſiſting of three component parts; melody, harmony, and *rhythm*. Rhythm is an agreeable ſucceſſion of ſounds conſidered with reſpect to the time of their whole duration. Melody is an agreeable ſucceſſion in reſpect to the pitch, or the frequency of vibrations of each ſound. Harmony is an agreeable combination of ſeveral ſounds at the ſame time. It is evident that rhythm and melody are almoſt inſeparable; but that harmony is by no means neceſſary to the exiſtence of muſic. In the firſt place, it is eaſy to conceive that a love of rhythm, or of the periodical recurrence of the ſame or ſimilar ſenſations at equal intervals of time, may be derived from the habit of a certain equality and recurrence in the motions of the body, ſuch as walking, or, in children who cannot yet walk, from the paſſive motion of geſtation; this predilection for the return of cuſtomary ſenſations appears to be an innate and fundamental tendency of the human ſyſtem, to which phyſiologiſts and metaphyſicians have been obliged ultimately to refer many properties, both of body and mind. But be this as it may, the love of rhythm, which is perhaps the loweſt ingredient in muſical taſte, is, in modern times, ſtill more univerſal than the love of harmony and melody. Poetry, or rather metrical compoſition, is diſtinguiſhed from proſe only by the regularity of its rhythm; and the knowledge of metre and proſody, however high it may rank in the critic's eſtimation, is a ſubordinate and comparatively inſignificant branch of muſical ſcience. The natural fondneſs for rhythm is the principal foundation of the pleaſure of dancing, an amuſement intimately connected with muſic, and no leſs popular. The rhythm of a muſical compoſition is almoſt always at leaſt two-fold, often three or four fold, conſiſting of ſubordinate diviſions or bars, and periodical returns of larger members, either phraſes or ſtrains, containing equal numbers of thoſe diviſions. All this is perfectly natural, but perhaps not ſo neceſſary to muſic as Mr. Walter Young, in his excellent eſſay, printed in the Edinburgh Tranſactions, appears to imagine; for thoſe who are already experienced muſicians are generally obſerved to delight in recitative, where the rhythm is almoſt entirely loſt; and ſtill more in fugues, where two or three ſeries of rhythms, almoſt independent of each other, are carried on at the ſame time, one part beginning its ſubdiviſions when another has made ſome progreſs, and a third is ſtill to follow. But the pleaſure derived from ſuch compoſitions is, as Kirnberger has obſerved, more intellectual than ſenſual, ariſing in a great meaſure from the conſciouſneſs of being able to comprehend that which is "caviare to the general." Rhythm is generally marked in performance by a ſlight increaſe of force at the beginning of each ſubdiviſion or bar; ſometimes, and in ſome inſtruments always, the change of ſounds, in point of acuteneſs and gravity, or the interruption of the ſame ſound, is a ſufficient diſtinction; and ſometimes, after the rhythm has already been firmly impreſſed on the mind, neither change of ſound nor of ſtrength is perpetually repeated, the imagination alone being ſufficient to conceive the continuation of rhythm: but this conſtitutes a kind of *tempo rubato*, where the perception of meaſure is intentionally weakened or ſuſpended. The Æolian harp pleaſes indeed without rhythm; but the pleaſure would ſoon be exhauſted by repetition.

From the ſtrict union of poetry and muſic among the ancients, which ſeem to have been almoſt inſeparable, an offence againſt time or rhythm was unpardonable, as it not only deſtroyed the beauty of the poetry, but ſometimes even the meaning of the words of which it was compoſed. By the Greeks it was conſidered the principal point in their muſic, without which they regarded melody as wholly unmeaning and lifeleſs. Hence Plato refuſed the title of muſician to every one who was not perfectly verſed in rhythm, as we ſhould now to a bad *timiſt*. It is of ſuch importance, that, without it, muſic can have no power over the human paſſions. Pythagoras, according to Martianus Capella, uſed to call Rhythm in muſic the *male*, and Melos the *female;* and Doni has compared Rhythm with *deſign* in painting, and Melos to *colouring*. It is certain that an ordinary melody, in which the time is ſtrongly marked, and the accents are well placed, has more effect than one that is deficient in thoſe particulars, though more refined and uncommon, and ſet off with all the richneſs of harmony, and learning of modulation.

Ariſtides Quintilianus defines muſical rhythm "the aſſemblage of many parts of time, which preſerve a certain proportion with each other;" which, ſince the uſe of bars in muſic, may be called aliquot parts of a meaſure, or a given portion of time. For the better underſtanding of this definition, it is neceſſary to remember that the muſic in queſtion was conſtantly ſung to verſes, the words of which were all compoſed of long and ſhort ſyllables; that the ſhort ſyllable was pronounced as quick again as the long; and, the ſhort ſyllable being regarded as one part or portion of this meaſure, the long was equal to two; ſo that, conſequently, the ſound which was applied to the long ſyllable was equal in duration to two ſuch ſounds as were ſung to ſhort ſyllables; or, in other words, that one note was equal to two portions of time, and the other to one. It muſt likewiſe be remembered, that the verſes thus ſung were compoſed of a certain number of feet, formed by theſe long and ſhort ſyllables differently combined, and that the rhythm of the melody was regulated by theſe feet; as, whatever was their length, they were always divided into two parts, equal or unequal, the firſt of which was called ἀϱσις, "elevation," and the ſecond ϑεσις, "depreſſion." A *foot* in poetry ſeems to anſwer to a *bar* in muſic. A *time*, among the ancients, was a portion of that foot or bar; as, with us, a bar is divided into accented and unaccented parts. In like manner the rhythm of the melody, correſponding with theſe feet, was divided into two parts, equal or unequal, which we now call the *down* and *up* parts of a bar, expreſſed by *beating down* the hand or foot, and *lifting it up*. Thus far concerns *vocal* rhythm; what follows belongs to *inſtrumental*.

As the notes of the ancient muſic were conſtantly written over each ſyllable of the verſes which were to be ſung; as the quantity of each of theſe ſyllables was perfectly known to muſicians; and as the duration of each ſound was regulated by the ſyllables; it did not ſeem neceſſary that the time ſhould be marked by any particular ſign or character. However, for the eaſe and convenience of the muſician, a canon, or rule, was given of the rhythm at the beginning of a lyric poem. This canon conſiſted of nothing but the numbers 1 and 2, that is, the alpha and beta of the Greek alphabet, diſpoſed according to the order of the breves and longs which compoſed each verſe, and divided according to the number of its feet. The alpha, or unit, marked a breve, becauſe it contained only one portion of time; and the beta, or binary, marked a long, being equal to two portions. Some of theſe poetical or rhythmical canons are ſtill to be found in the Manual of Hephæſtion.

The Romans had ſigns for rhythm, as well as the Greeks; and theſe ſigns were not only called *numerus*, "number," but *æra*, that is, "the mark for time." *Numera nota*, ſays Nonius Marcellus. In this ſenſe we find the word uſed in a verſe of Lucilius: "Hæc eſt ratio? perverſa *æra*? ſumma ſubducta improbè?" Though the word *æra* was at firſt only applied by muſicians to the time, or meaſure of the melody, they afterwards made the ſame uſe of it as of *numerus*, to expreſs the tune or melody itſelf; and it has been thought that the word *air*, or, as the Italians call it, *aria*, which includes a certain piece of muſic of a peculiar rhythm, or cadence, is derived from *æra*.

Such was the manner in which the ancients marked the meaſure in their written muſic; but, to make it ſtill more ſenſible in the execution, they beat time in ſeveral different ways. The moſt common was by the motion of the foot, which was lifted up and beat down alternately. To regulate the time was generally the office of the muſic-maſter or director, *coryphæus*, becauſe he was placed in the middle of the orcheſtra, among the muſicians, and in an exalted and conſpicuous ſituation, in order to be ſeen and heard the more eaſily by the whole band. The directors of the time were likewiſe called in Greek ποδοκτυποι and ποδοψοφοι, from the noiſe of their feet. In Latin they were called *pedarii*, *podarii*, and *pedicularii*, for the ſame reaſon. Their feet were generally furniſhed with wooden or iron ſandals, in order to mark the time in a more diſtinct manner; theſe implements the Greeks called κϱȣπεζια, κϱȣπλα, κϱȣπετα; and the Latins *pedicula*, *ſcabella*, or *ſcabilla*, becauſe they reſembled little pattens, or clogs. But it was not only with the feet that the ancients beat the time, but with all the fingers of the right hand upon the hollow part of the left; and he who marked the time or rhythm in this manner, was called *manu-ductor*. For this purpoſe they ſometimes uſed oyſter-ſhells, and the ſhells of other fiſh, as well as the bones of animals, in beating time, as we do of caſtanets, tabors, &c. Both Heſychius and the ſcholiaſt of Ariſtophanes furniſh paſſages to confirm this aſſertion. What a noiſy and barbarous muſic! all rhythm, and no ſound. The drums and ſyſtrums of the Idæi Dactyli could not have been more ſavage.

Many ancient inſtruments were monotonous, and of little uſe but to mark the meaſure; ſuch were the cymbalum and ſiſtrum; and it was for this reaſon, perhaps, that the cymbal was called *æra* by Petronius. But it would afford us no very favourable idea of the abilities of modern muſicians, who ſhould require ſo much parade and noiſe in keeping together. The more time is beat, ſays M. Rouſſeau, the leſs it is kept; and, in general, bad muſic, and bad muſicians, ſtand moſt in need of ſuch noiſy aſſiſtance.

However, if any thing like the power which ancient muſic is ſaid to have had over the paſſions can be credited, it muſt have derived this power chiefly from the energy and accentuation of the rhythm. Ariſtides Quintilianus gives a long liſt of different metres, with their ſeveral properties of calming or agitating the mind, according to the nature of the ſyllables, or feet of the verſes, as well as the ſentiments which they were intended to expreſs; and, as it will afford the reader an opportunity of ſeeing how much ſtreſs was laid on this part of muſic, and how fanciful and ideal many of the diſtinctions ſeem to have been, we ſhall give the whole paſſage in Engliſh. "Meaſure, which begins by a *down part* of the metrical diviſion, is calm and gentle; whereas, that which begins by an *up part*, expreſſes trouble and agitation. Full time, that is, always accompanied with melody, is noble in its effect; and that ariſing from catalectic verſes, deficient in a ſyllable or note, if it be ſupplied by a reſt or pauſe, has more ſimplicity. Time of equal proportions, is graceful; and that of odd numbers, or ſeſquialterate proportion, is more proper to excite commotion. Double time is a kind of mean betwixt the graceful and the turbulent. Among the movements of two even notes, if they are ſhort, their effect is lively, impetuous, and proper for military dances, called *Pyrrhics,* in which the dancers are armed; and time of which the movement is regulated by poetic feet compoſed of long ſyllables, is more grave, ſerious, and fit for hymns which are ſung in honour of the gods, at feſtivals, and in ſacrifices; the meaſure compoſed of a mixture of long and ſhort notes, participates of the qualities of both theſe laſt mentioned. Among the duplicate proportions, the Iambic and Trochaic have the moſt vivacity and fire, and are peculiarly proper for dancing. Thoſe called ορθιοι and σημαντοι, of which the arſis anſwers to two long ſyllables, are full of dignity. Compound meaſures are more pathetic than ſimple; and ſuch as are confined to one genus, move the paſſions much leſs than thoſe which paſs from one genus to another."

After giving theſe characteriſtics of time, Ariſtides proceeds to prove their reality and foundation in Nature, by drawing a parallel between ſome particular ſpecies of rhythm and the gait and actions of man. He pretends, for inſtance, "that the motion which anſwers to the Spondaic meaſure, is a ſign of moderation and fortitude; that Trochaics, or Pæans, indicate a greater degree of fire and vivacity; that the Pyrrhic has ſomething low and ignoble in it; that an irregular velocity implies diſſoluteneſs and diſorder; and finally, that a movement reſulting from all theſe is wild and extravagant."

With reſpect to the excellence and effects of ancient muſic, it is very difficult to ſteer between the extremes of credulity and ſcepticiſm. Such enthuſiaſts as Ariſtides Quintilianus, by aſſerting too much, have thrown a ridicule upon the ſubject, and inclined us, perhaps, to believe too little. The ſimplicity of ancient melody, and its ſlaviſh dependence upon poetry, may probably have given birth to ſome of theſe fancies.

Modern muſic, by its diviſion into *equal* bars, and its *unequal* ſubdiviſion of theſe bars by notes of various lengths, unites to the pleaſure which the ear is by nature formed to receive from a regular and even meaſure, all the variety and expreſſion which the ancients ſeem to have aimed at by ſudden and convulſive changes of time, and a continual conflict of jarring and irreconcileable rhythms.

Nothing ſeems more eſſential to muſical pleaſure, than the diviſion of melody into equal portions of time, or bars. Quintilian attributed to this natural menſuration of the ear, the firſt production of poetry: "Poema—aurium menſurâ, et ſimiliter decurrentium ſpatiorum obſervatione eſſe generatum." Hexameters and Iambics appear to have been the moſt ancient Greek metres; and the latter, if we may credit Horace, (Art. Poet. 255.) were at firſt *pure* and uncompounded. The mixture of *unequal* feet, and the dithyrambic licenſe of lyric poetry, were later refinements. The progreſs of muſical rhythm was, of courſe, the ſame. Plutarch expreſsly ſays, in the dialogue de Muſicâ, that the compoſitions of Terpander, and other old maſters, were ſet to hexameters, chiefly of Homer; that is, they were in regular common time. The change and intermixture of rhythms is ſpoken of as the innovation of modern artiſts. Plato rejects theſe complicated meaſures from the muſic of his republic; and even Iſaac Voſſius, the great champion of ancient rhythm, who aſſerts that "no man can be a good muſician that is not a *good drummer*," owns, (p. 11.) that "vitioſum et incompoſitum imprimis, fiet carmen, ſi duorum, trium, quatuor, pluriumve, temporum pedes, veluti Pyrrichii, Iambi, Dactyli, Pæones, Ionici, ſimul copulentur;" though this is done continually, not only in the lyric part, but even in the dialogue, of the ancient drama.

The Greeks and Romans had but two different degrees of long and ſhort notes; and even the old lozenge and ſquare characters ſtill uſed in the canto fermo of the Romiſh church, under the denomination of Gregorian notes, are but of two kinds. The time of theſe may, indeed, have been accelerated or retarded, but ſtill the ſame proportion muſt have been preſerved between them; and all their variety muſt have ariſen from different combinations of theſe two kinds of notes, ſuch as any two of ours could afford; as ſemibreves and minims, minims and crotchets, or crotchets and quavers. This accounts for the facility with which even the common people of Greece could diſcover the miſtakes, if any were committed, in the length and ſhortneſs of the ſyllables, both with reſpect to the poetry and the muſic, a point of hiſtory in which all writers agree; for, beſides the intervals peculiar to the melody, rhythm or time muſt have contributed to characteriſe the modes, though it has no kind of connexion with our flat and ſharp keys; and this gives an idea quite different from what our modern modes taken as keys, and our muſic in general, furniſh. Tartini, upon this ſubject, ſays, that we make the proſody ſubſervient to the muſic, not the muſic to the proſody; and adds, "that as, by the laws preſcribed to the ancient muſicians, they were obliged to preſerve rigorouſly in their muſic the quantity of ſyllables, it was impoſſible to protract a vowel, in ſinging, beyond the time which belonged to a ſyllable; we, on the contrary, prolong the vowels through many bars, though in reading they are oftentimes ſhort."

Having explained the nature, difference, and properties, of ancient rhythm, Dr. Burney beſtows a few words on an examination of the modern, and endeavours to ſhow what it has in common with the ancient, and what peculiar to itſelf. We no longer know rhythm under its ancient name; however, it has been continued, with a ſmall change of pronunciation, merely to expreſs the final cadence of verſes, or the agreement and ſimilarity of ſound in the laſt ſyllables of two or more lines in poetry; being at preſent what we call *rhyme*; whereas the proportion ſubſiſting between the different parts of a melody are called *time, meaſure, movement.* And, when we come to imagine this proportion, we find that it only conſiſts of two kinds, differently modified; and theſe two are known by the names of *common time,* conſiſting of equal numbers, and *triple time,* of unequal.

Tartini has deduced all meaſure from the proportions of the octave and its fifth. "Common time, or meaſure," ſays he, "ariſes from the octave, which is as 1 : 2; triple time ariſes from the fifth, which is as 2 : 3. Theſe," adds he, "are the utmoſt limits within which we can hope to find any practicable proportions for melody. Indeed many have attempted to introduce other kinds of meaſure, which, inſtead of good effects, have produced nothing but the greateſt confuſion; and this muſt always be the caſe."

Iſaac Voſſius, in his Diſſertation "de Poematum cantu et viribus Rhythi," has attributed to rhythm all the miraculous powers of ancient muſic, He adds, that it is now above a thouſand years ſince muſicians have loſt that great power over the affections which aroſe only from the true ſcience and uſe of rhythm; and he accuſes modern muſic of ſuch a want of time and accent, as to be all of one ſtyle and colour. We will not defend the age in which Voſſius wrote from the charge, nor the muſic of the preſent ſerious opera in France; but the compoſitions of Italy, Germany, and England, are certainly free from the cenſure, as muſic is now more divided into phraſes, and ſentences, than it was; time is more marked, and more eaſily felt, than it has ever been ſince the days of Guido. What it was before, is not very well known; but it is our opinion, that whatever it has comparatively loſt in ſome particulars it has gained in others.

In the preſent uſe and practice of rhythm, the branches neceſſary to be conſidered are, 1. The Accent. 2. The Foot. 3. The Cæſura. 4. The Phraſe. 5. The Section. 6. The Period.

1. Of Accent.—The neceſſity of dividing notes into equal portions of time, called bars, may be ſhown by conſidering the ſeries of notes in Ex. 1. This cannot be performed, without making certain diviſions on which a preſſure, called *accent,* muſt be laid. It may be accented two ways in equal time; as at Ex. 2. *a, b.* But the ſame

melody divided into three crotchets in a bar, admits of three accentual variations; as at Ex. 3. *c, d, e.*

Emphaſis is diſtinguiſhed from accent by its occurring on the unaccented part of the bar; by the different grouping of the quavers, ſemiquavers, &c. and by the mark of *Rf.* (Rinforzando) placed over the notes. Accent requires *preſſure* after the note is ſtruck; and Emphaſis *force* at the time of ſtriking it.

2. Of the Foot.—A portion of melody, with one principal accent, including the value of a bar, is termed a foot. It has been uſual with ſome authors to apply the names of ancient poetical feet to correſponding muſical paſſages; but the difference between ancient and modern quantity and accent, leaves a doubt concerning the propriety of uſing the terms of Grecian rhythm. The words, "Actor, Hateful," may be repreſented in notation ſeveral ways, as at Ex. 4. The words "Reject, Obſerve," may be repreſented by oppoſite rhythm. Ex. 5.

3. Of the Cæsura.—This word is uſed for the rhythmic termination of any paſſage which conſiſts of more than one foot. In other words, the cæſura is the laſt accent of a phraſe, ſection, or period; and is diſtinguiſhed by its place in the bar. The utility of this diſtinction will appear, by conſidering the two methods in which the muſic might be compoſed to the lines

Conqueſt is not to beſtow,
In the ſpear or in the bow. *Dr. Arne's Judith.*

If theſe bars (ſee Ex. 6.) were not divided as they are, that is, if the ſong had begun with the whole-bar inſtead of the half, the cæſura, which is now properly placed on the accented part (*a*), would have fallen on the unaccented (*b*).

The cæſura is not always the *laſt* note; the melody is often prolonged after it. See Ex. 7. *a.*

4. Of the Phrase.—The phraſe is a ſhort melody, which is generally formed of two feet, and therefore contains the value of two bars; ſee Ex. 8. from Beethoven, Op. 2. and it is ſubject to all the variety of accent that diſtinguiſhes the feet of which it is formed.

Conſiderable difference of opinion ariſes with regard to this term. Rouſſeau defines it to be ſimilar to the word *Section.* He diſtinguiſhes between phraſes in melody and phraſes in harmony. Holden uſes the term in a general ſenſe, and includes all rhythmic varieties in its definition. The Rev. Mr. Jones, of Nayland, calls them *Clauſes;* and conſiders two ſimilar phraſes, following and depending on each other, as antecedent and conſequent. Whenever, by repeating one of the feet, or any other variation of the melody, three bars are employed inſtead of two, the phraſe is termed *extended,* or irregular. In figurative counterpoint, where fugues and canons are employed, the phraſes are interwoven in the different parts. Of this kind of muſic, the fineſt ſpecimen now extant is the celebrated Non nobis, Domine, by Bird; which will ever remain a laſting ornament to the taſte and ſcience of the country in which it was produced. The phraſes of this canon are marked with *a* in Ex. 9.

5. Of the Section.—A ſection is a portion of melody formed by two phraſes, the laſt of which is terminated by a cadence. The ſection may end on the key-note, or on the fifth, according to its final harmony, as in Ex. 10. from Haydn's Creation, ("The heavens are telling.") In vocal muſic, the harmony of a ſection is protracted for the ſake of expreſſing the words, as in Dr. Callcott's Glee of the "Red Croſs Knight;" the firſt ſection of which, if regular, would have been expreſſed as in Ex. 11. But to give greater effect to the words "Blow, Warder, blow," the two firſt notes are augmented to minims; and the ſection, as written in common time, appears contracted, although it is really extended. See Ex. 12.

The *Codetta.*—A ſhort phraſe, or any other paſſage which does not conſtitute part of a regular ſection, but ſerves to connect one ſection or period to another, is termed a codetta. In the Duet of Mozart, the following phraſe unites the minor period to the original theme. Ex. 13.

The extemporary diviſions made at a cloſe by ſingers, or ſolo performers, and termed *cadences,* are all a ſpecies of codetta. In the repetition of a ſtrain, the paſſages marked firſt and ſecond time, generally contain each a codetta; the one to lead back to its commencement, the other to lead forward to its continuation. In the *Da Capo* airs of Handel, &c. a codetta is generally inſerted to lead back to the theme. See Ex. 14. from "O the pleaſures of the plains."

6. Of the Period.—A period conſiſts of one or more ſections, occaſionally interſperſed with feet, phraſes, or codettas. Thus the air of "God ſave the king" conſiſts of two periods. When one or more periods are terminated by a double bar, they are termed *ſtrains.* The period generally ends with a radical cadence.

Of the Coda.—The concluding paſſage of many movements, when it occurs after a protracted perfect cadence, is termed the *coda,* i. e. the tail, or final period. The length of the coda may be various; in ſome pieces it contains ſeveral ſections, in others merely a ſingle phraſe. The ſhort coda at Ex. 15. is from Haydn, Op. 40. In this paſſage, the two firſt bars of the coda might be omitted, without injuring the harmony. There is a ſtyle of coda peculiar to Italian bravura airs, as may be ſeen at the concluſion of the chorus in Haydn's Creation, "The Heavens are telling." In rondeaus, &c. the coda is placed as a ſeparate ſtrain, with the term itſelf annexed. But, to ſhow what great effects are derived from this addition after the laſt perfect cadence has been heard, the "Hallelujah Chorus" of the Meſſiah may be adduced. The laſt ſection before the coda, cloſes the period with the authentic cadence, Ex. 16. This is followed by a coda on the chords of the fourth and key-note, concluding with a plagal cadence, Ex. 17. Such were the ſimple but ſublime notes which occurred to the genius of this truly great compoſer; and the chorus in which they appear will ever remain a ſtriking memorial of the immortal talents of Handel.

Of IMITATION. Back of Plate X.

Imitation, in its technical ſenſe, is uſing the ſame or a ſimilar paſſage or melody, in many different parts, which are heard one after the other, in the uniſon, fifth, fourth, third, or in any other interval. Imitation is always pleaſing, even if many notes are changed, provided the air is not ſo diſguiſed as to be no longer recognizable, and the rules of modulation are not violated. Often, in order to render imitation more perceptible, it is preceded by a reſt, or by long notes, which ſeem to extinguiſh the melody at the very moment when it is renewed by the imitation. Imitations are warrantable at pleaſure; they are confined to no particular intervals; they may be continued or changed; or the imitation made in *moto contrario,* or in what way we pleaſe. Performers like it better than a dull and dry accompaniment; it renders a part more amuſing to the player and important to the hearer. The rules are as relaxed as thoſe of fugue are rigid; for which reaſon, ſome great maſters diſdain imitations from the facility with which they are compoſed; and, when purſued too cloſely with the manifeſt ambition of being particularly noticed, they diſcover the *young* contrapuntiſt. *Rouſſeau.*

As the octave conſiſts of only eight intervals, imitation muſt take place, either on the uniſon, as at Ex. 18. or on the ſecond above or below, Ex. 19. *a, b.* on the third above or below, Ex. 20. *a, b.* the fourth above or below, Ex. 21. *a, b.* on the fifth above or below, Ex. 22. *a, b.* on the ſixth above or below, Ex. 23. *a, b.* on the ſeventh above or below, Ex. 24. *a, b.* or, laſtly, on the eighth above or below, as at Ex. 25. *a, b.*

Examples might be given of imitation by contrary and retrograde motion, by augmentation and diminution, &c. but theſe will be treated of under the heads of Fugue and Canon.

Of FUGUES. Plate XI.

Fugue, in Italian *fuga*, from the Latin *fugere*, to fly, is a compoſition in which the leading part, or firſt treble, is purſued by the ſecond, the ſecond treble by the tenor, and the tenor by the baſs; ſo that a fugue is a *flight* and a *purſuit*. Rouſſeau defines a fugue "a piece of muſic in which a trait of melody, called the *ſubject*, is treated according to certain eſtabliſhed rules of harmony and modulation, in making it paſs ſucceſſively and alternately from one part to another." The ſubject reſembles the *text* of a ſermon, out of which all that is ſaid ſhould naturally ariſe, and ſerve as a commentary and illuſtration. But though, for variety, or to indulge caprice, fugues and canons have been compoſed in all intervals, yet orthodox contrapuntiſts allow no fugues to be regular, but thoſe of which the anſwer is made in the fifth, fourth, eighth, or uniſon, as then the intervals will be the ſame. And of the *anſwers*, the preference is given to the fifth, then to the fourth, eighth, and uniſon; as the effect is pleaſing in that order. It muſt be remembered that the *ſubject* itſelf, as of all other movements, ſhould begin on the key-note, its fifth, or its eighth.

Of all kinds of muſical compoſition, the fugue is the only one that hath ſuſtained itſelf through all the caprices of faſhion. Ages have not changed its form; and fugues compoſed two hundred years ago are as new as thoſe of the preſent day. See p. 301.

"The art of fugue and double counterpoint," ſays Mr. Kollman, "has been ſo much neglected ever ſince the time of thoſe two greateſt fuguiſts John Sebaſtian Bach and George Frederic Handel, that at preſent it is too generally deſpiſed, for want of being ſufficiently known. And yet nothing in muſic deſerves more to be cultivated than the knowledge of that art. For it teaches how a melody can be harmoniſed by other melodies; and how the inverſion, tranſpoſition, and imitation, of melodious parts, produce an abundance of ſublime and intereſting varieties, which the greateſt genius and natural talent cannot make us invent, without ſuch an aſſiſtance." And Dr. Burney obſerves, that, "when Sig. Eximeno calls fugues and canons Gothic compoſitions, he does not diſgrace their ſtructure any more than he would our cathedrals, by calling them Gothic buildings. Let fugues be baniſhed from the theatre and private concert, if he pleaſes; but let them remain in the church as a diſtinct ſpecies of compoſition, where they were firſt generated, and where they can never become vulgar or obſolete. The ſtyle is naturally grave, requires muſical learning, and will, by the ſolemnity of the words and place of performance, continue to be reverenced and reſpected. It is allowed that variety is more wanted in muſic than in any other art; and by totally excommunicating canons and fugues from the church, the art would loſe one capital ſource of variety, as well as ingenuity; and intelligent hearers be bereaved of a ſolemn ſtyle of muſic, to be heard no-where elſe."

In the chants of the ancient church, that part of the ſcale contained between the key-note and its fifth above, was called the *authentic mode;* and the remaining part, contained between the fifth and the key-note, the *plagal mode*. Thus, the authentic mode conſiſts of five notes, and the plagal of four. In the minor key, the ſixth and ſeventh in the plagal mode may be occaſionally raiſed a ſemitone. Ex. 1. contains a variety of ſubjects with their anſwers.

The melody of the anſwer muſt exactly correſpond with that of the ſubject. A true modulation, or exact conformity to the key, muſt be obſerved. The key-note and fifth muſt anſwer each other on the firſt and laſt note of the ſubject and anſwer. In a ſkip they muſt anſwer each other in the ſame manner. Different anſwers may be given to the ſame ſubject, according to the key into which the ſubject is to modulate. To ſhow the difference between a fugue and mere imitation, we have given, from the MSS. of Mr. Baumgarten, a ſtrict fugue at Ex. 2. *a*, and the ſame ſubject in common imitation at *b*.

When the ſubject and anſwer have been given, the ſubject may be repeated by a third part, and anſwered by the fourth, if there are ſo many parts; after which, the compoſer may uſe either the ſubject or the anſwer, or ſmall portions of them, in any key he pleaſes, and even on different notes. The ſubjects and anſwers ſhould become more cloſe and frequent towards the concluſion. In Ex. 3. at *a*, ſee a ſubject from Handel, to which, it will be obſerved, the compoſer has added a free accompaniment; and at *b* a paſſage of imitation between the anſwer and return of the ſubject, in order to aſſiſt the modulation.

The ſubject, with its anſwers and repetitions, may be brought at various diſtances of time, and on various notes of the key, as in Ex. 4. The firſt note of the ſubject or anſwer is frequently ſhortened or lengthened in the courſe of the fugue, as in Ex. 5.

A *double fugue* is one in which two or more ſubjects are uſed together. The ſubjects may begin nearly together, at the beginning of the fugue, as at Ex. 6. *a;* (where they are diſtinguiſhed by the figures 1 and 2.) or the ſecond ſubject may be introduced in the middle, or towards the latter end, or with the firſt ſubject, as at *b*. The four ſubjects of the chorus, "Let old Timotheus yield the prize," in Handel's Alexander's Feaſt, is exhibited at Ex. 7.

The ſubject of a fugue is ſometimes anſwered in inverſion, reverſion, diminution, and augmentation. The ſubject is anſwered in inverſion in the overture to Eſther. See Ex. 8. *a*. In the laſt movement in the Meſſiah, the ſubject is anſwered by reverſion; ſee *b*. An anſwer by diminution, from the chorus "Let all the angels of God," in the Meſſiah, ſee at *c;* and an example of augmentation, at *d*.

A holding-note, or *point d'orgue*, may be uſed either on the key-note, or fifth in the baſs; and ſometimes firſt on one and then on the other, for ſeveral bars previous to the concluſion of a fugue. See Ex. 9. from the laſt chorus in the Meſſiah.

Of CANONS. Plate XII.

A canon is a melody performed by two or more parts of a ſcore; one of which muſt begin before the other has finiſhed. The word is Greek, κανων, "a rule, or law." A canon, therefore, is a *law* given by one part to another, or to ſeveral parts. As nothing is more difficult to compoſe than canons, ſo no ſpecies of compoſition has exerciſed ingenuity, meditation, and labour, in more various ways than the conſtruction of them.

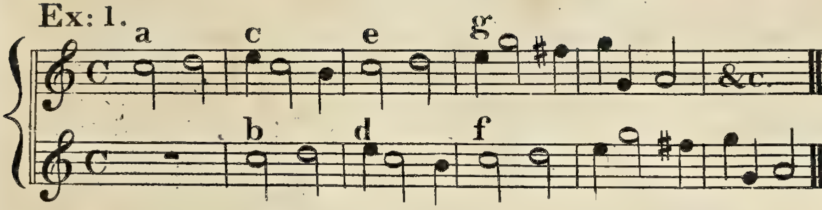
In the uniſon and octave, they are not only more eaſy to compoſe, but are more pleaſing to hear; as all other canons are moving in two or three different keys at the ſame time. But canons that are eaſy to write, and pleaſing to hear, are in no eſtimation among maſters and profound contrapuntiſts. They have no more reſpect for a canon in the uniſon and octave, than a geometrician for a ſum in addition; they regard canons as muſical problems, of which if the ſolution is eaſy, they are unworthy of notice. They are, in reality, more calculated to exerciſe intellect, than delight the auricular ſenſe.

Canons were the laſt compoſitions which maſters condeſcended to publiſh in ſcore. They were regarded as enigmas, which required the deepeſt ſagacity and ſcience to unfold. All the ſeveral parts were written on one ſtaff, frequently without ſpecifying when, where, and in what interval, the other parts came in. Sometimes, indeed, the compoſer was ſo indulgent as to place this character 𝄋 over the firſt note of each of the other parts; but without indicating at what diſtance from the *propoſta*, or ſubject, or whether above or below it. At other times the performers were told what kind of canon it was, and how reſolved, by a Greek or Latin term; that is, on what ſound the

MUSIC.

CANON.

Ex: 1.



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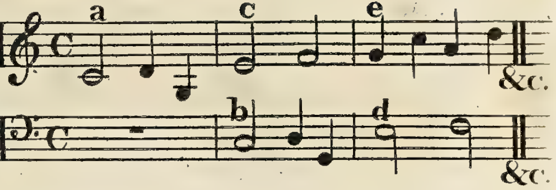

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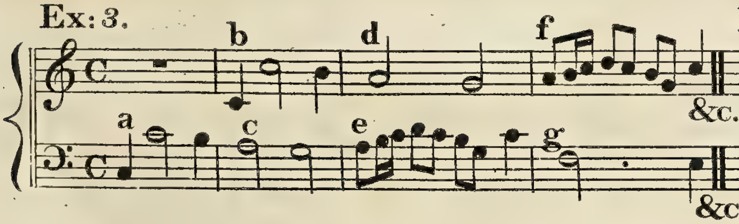

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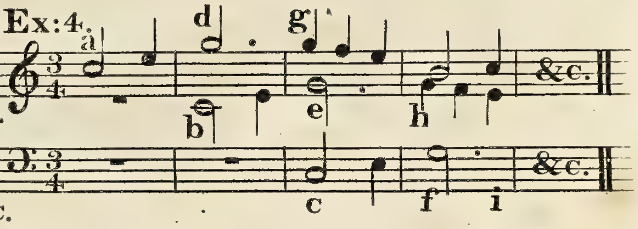

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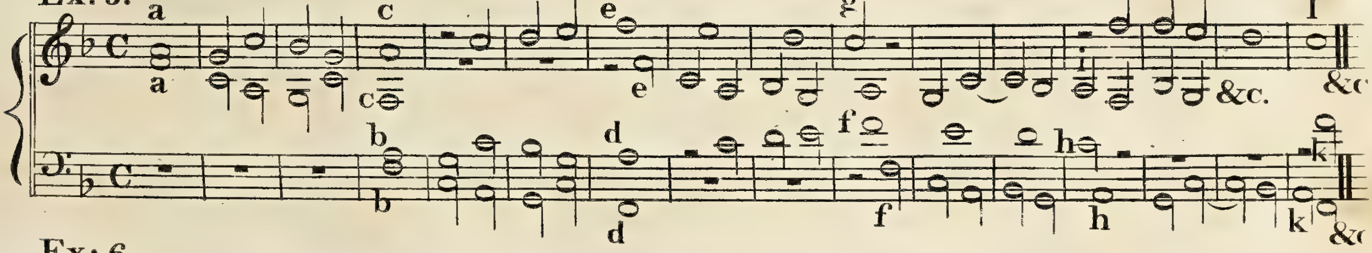

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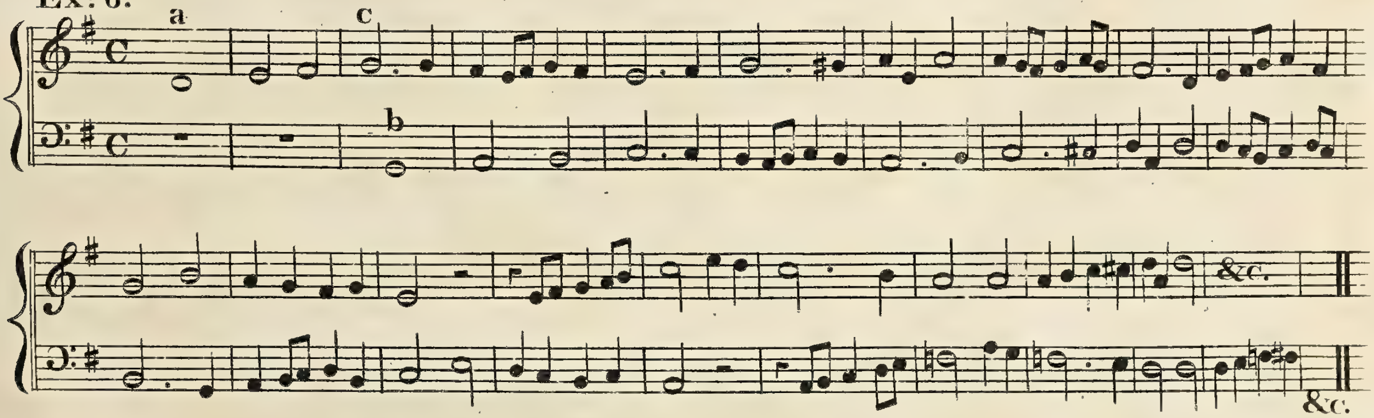
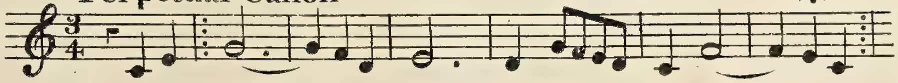


Perpetual Canon

Ex: 7.



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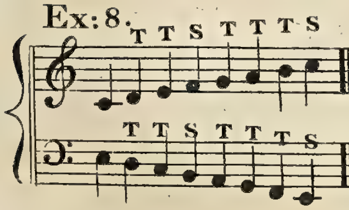

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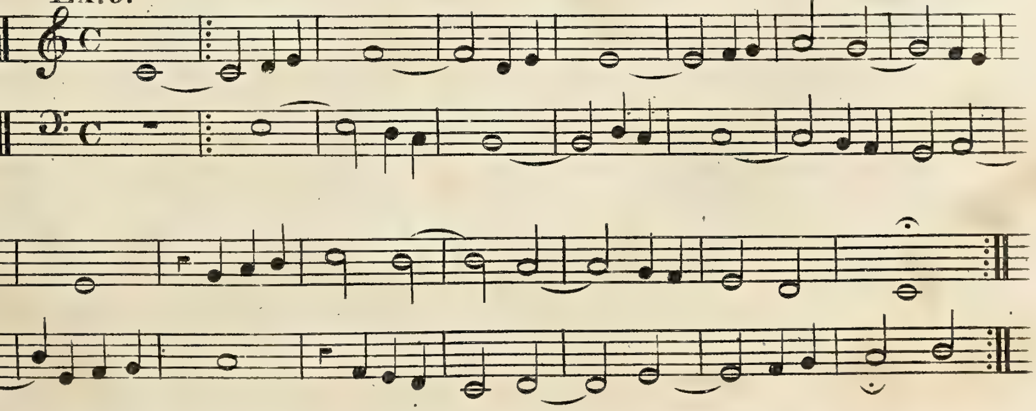
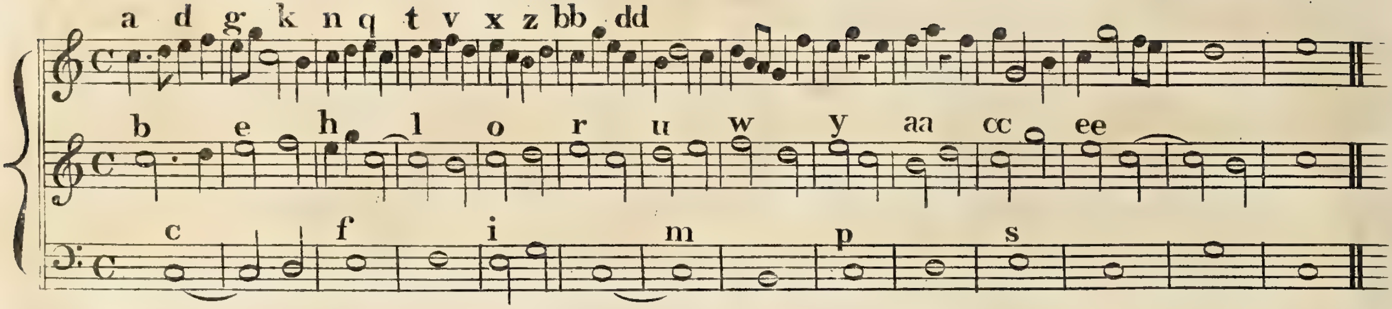
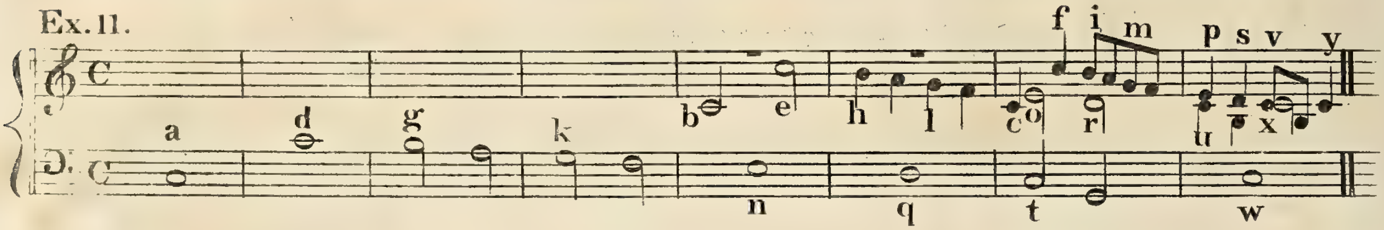


(Engd. by Skarratt)

Ex. 10.



Ex. 11.



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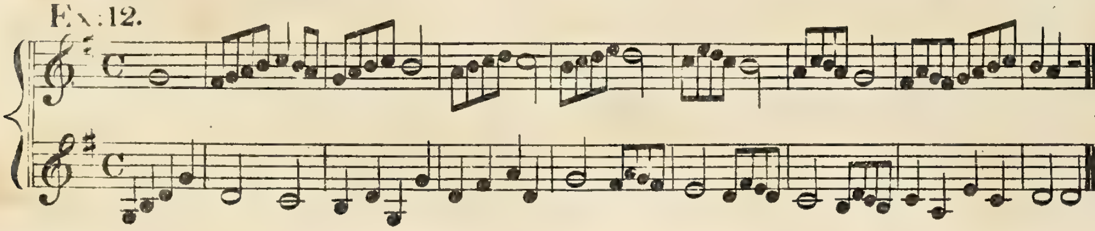

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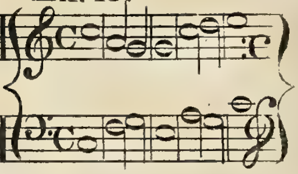

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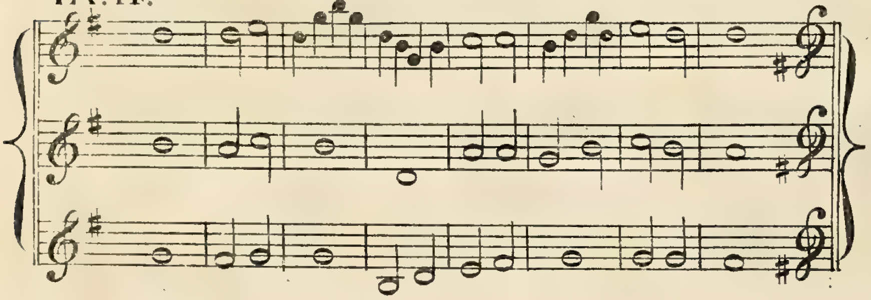

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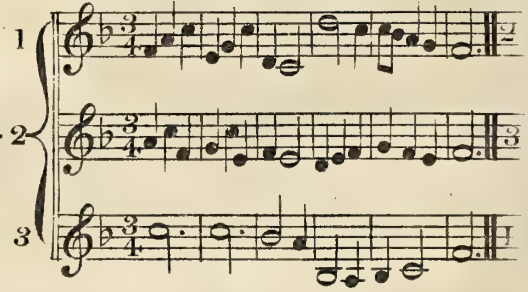

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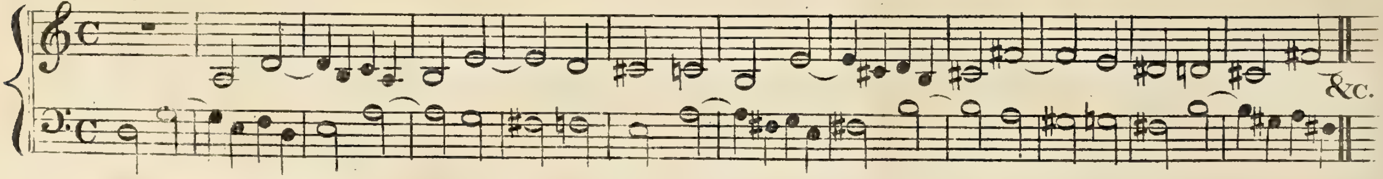
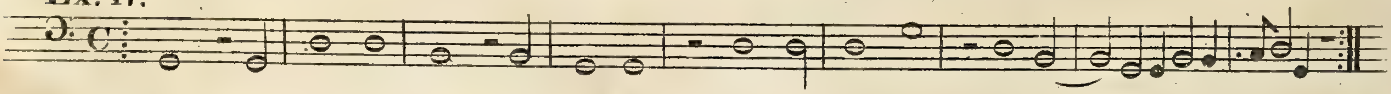


POLYMORPHOUS CANONS.

Ex: 17.



Ex: 18.

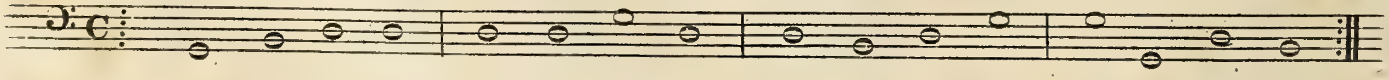


Plate XII.

Engraved for the Encyclopædia Londinensis 1818.

riſpoſta, or anſwer, was to be made. If in the 4th, 5th, 8th, &c. the words *diateſſeron*, *diapente*, *diapaſon*, &c. occur. If theſe terms are uſed ſimply and unaccompanied, they generally imply that the anſwer is made in ſuch interval above; but, if ſome expletive is not added to the interval in which the anſwer is made, the performer is uncertain whether it is above or below the text or ſubject propoſed.

Padre Martini ſays (*Saggio di Contrappunto*) that there are ſo many canons ſtill preſerved of the old eccleſiaſtical compoſers, each of which is upon ſome peculiar conſtruction, that it would require a long treatiſe even ſuperficially to explain them. A canon that is written and compoſed in a myſterious and ſingular manner, is called by the Italians *canone chiuſo*; a canon in ſcore, or clearly explained, *canone aperto*. A canon written only on one line, and ſeemingly in one part or melody, ſometimes has its ſolution pointed out by different clefs and reſts at the beginning. In old compoſers, whether the *riſpoſta* is made above or below the ſubject, is often determined by the Latin particle *ſuper* or *ſub*, or by the Greek *hyper* or *hypo*. So many of the moſt ancient canons are locked up in the myſtery of enigmatical inſcriptions or mottos, that the good Padre Martini has collected and explained between fifty and ſixty of theſe oracular decrees: ſuch as

1. Clama ne ceſſes.
2. Ocia dant vitia.
3. Dii faciant ſine me non moriar ego.
4. Omnia ſi perdas famam ſervare memento,
   Qua ſemel amiſſa, poſtea nullus eris.
5. Sperari & preſtolari multos facit morari.
6. Ocia ſecuris inſidioſa nocent.
7. Tarda ſolet magnis rebus ineſſe fides.
8. Fuge morulas.

Each of theſe enigmas implies, that the parts which anſwer the leader are to pay no attention to the reſts, but to ſing the notes without them.

The twelve next enigmas imply nothing more than that the firſt of the two anſwers begins with the firſt note of the ſubject propoſed, and advances ſtraight forward to the end; while the ſecond anſwer begins at the end, and moves backward to the beginning. It is eaſy enough (ſays M. Ginguené) to conceive the difficulty of conſtructing ſuch canons, and how impoſſible it is to divine the author's meaning, if ſome written clue is not given to it; but it is not ſo eaſy to conceive what pleaſure can reſult from the execution of ſuch a taſk, or the merit of taking ſuch great pains for ſo little pleaſure.

Marpurg defines canon, "a muſical compoſition, in which the parts are diſperſed according to the rules of imitation."

Compoſition in plain and florid counterpoint ſhould be ſtudied, and its rules and exceptions well digeſted, by a muſical ſtudent, before he attaches himſelf to fugue and canon, which will make him indifferent about *melody*, provided, under *canonical* reſtrictions, he can make his *harmony* correct.

All that now remains for us to do, in order to ſmooth the way in this kind of ſtudy when the young compoſer thinks it expedient to undertake it, is to give a few ſhort ſpecimens of the principal kinds of canons that have been cultivated by great maſters of the old ſchool, when nothing elſe was prized, and all their powers were devoted to that almoſt excluſively.

Canons may be either 2 parts in 1 melody, viz. two parts performing the ſame melody, or 3 parts in 1; 4 in 1; 5 in 1; 4 in 2 melodies; 5 in 2, viz. 3 in 1, and 2 in the other; 6 in 2; 7 in 2, viz. 4 in 1, and 3 in the other; 8 in 2; 6 in 3; or 8 in 4. The ſubject may be anſwered on the uniſon; on the octave or fifteenth above or below; on the fourth or eleventh above or below, or on any other note; but the above-mentioned are of the moſt eaſy conſtruction. Thus, a canon two in one on the uniſon, ſignifies that two parts perform the ſame melody, both beginning on the ſame note; three in one on the fifth and eighth above, means, that three parts perform one melody, the anſwers beginning reſpectively a fifth and an octave above the firſt note of the ſubject.

For a canon two in one on the uniſon, ſee Ex. 1. In framing a canon, write as much of the ſubject as exiſts before the anſwer begins, ſuppoſe one bar, as at *a*; then tranſcribe it into the anſwer, as at *b*. Compoſe a ſimilar portion, as at *c*, making a good accompaniment to *b*; then tranſcribe it to *d*; to which add *e*, *f*, *g*, &c. The diſtance at which the anſwer is made is optional. If too far, it will appear flimſy, and poſſeſs little merit; if too near, the ſubject will not be diſtinguiſhed by the ear, before its anſwer commences.

Ex. 2. is a canon 2 in 1 on the octave below. Ex. 3. 2 in 1 on the octave above. Ex. 4. 3 in 1 on the eighth and fifteenth below. Ex. 5. 4 in 2 on the eighth below; here are two ſubjects and two anſwers. Ex. 6. 2 in 1 on the twelfth below, with modulation or change of key.

A *perpetual canon* is one in which a certain number of bars are marked to be repeated as often as the performers chooſe, and then the canon is concluded either by a pauſe over one of the notes; by a double bar; or by a coda, viz. a few bars either in canon or not, as the compoſer think fit. See one of the former, at Ex. 7.

A *canon by inverſion* is one in which the anſwer conſiſts of the ſame melody as the ſubject, but all the motion inverted: where the ſubject aſcends, the anſwer is to deſcend; and *vice verſâ*. Previouſly to a compoſition of this ſort, the ſtudent ſhould make a ſcale of the ſubject and anſwer, the one aſcending, the other deſcending, by ſimilar intervals, as in Ex. 8. where it will be found, that, when the ſubject begins on the key-note of the major key, an anſwer on the third or tenth above, or ſixth or thirteenth below, will be the moſt eaſy to conſtruct. Ex. 9. is a canon 2 in 1 by inverſion (or per arſin et theſin) on the ſixth below. Other preparatory arrangements of ſcales will be neceſſary, according to the diſtance of the anſwer.

A *canon by augmentation* is one in which the notes of the anſwer are double the length of thoſe of the ſubject. Double augmentation is when the notes of the ſecond anſwer are twice the length of the firſt, and four times the length of the ſubject. Ex. 10. is a canon 3 in 1 by augmentation and double augmentation on the uniſon and fifteenth below.

A *canon by diminution* is when the notes of the anſwer are half the length of thoſe of the ſubject. In double diminution, the notes of the ſecond anſwer are one quarter the length of thoſe of the ſubject. Ex. 11. is a canon 3 in 1 by diminution and double diminution on the octave above.

Other pieces of muſic, in which the intervals are not exactly preſerved in the anſwers, have nevertheleſs obtained the name of canons. Such are melodies that are firſt played forwards and afterwards backwards. The melody in two parts at Ex. 12. is to be firſt performed in the uſual manner from left to right, and then from right to left, or *per recte et retro*. A melody *alla roveſcio* is one which is firſt performed in the uſual way, and then with the paper inverted, as in Ex. 13. The name of canon has alſo been improperly beſtowed on ſuch a melody as Ex. 14. which is firſt to be performed in the uſual way, from left to right, and then from right to left; then the paper is inverted, and the melody performed from left to right, and from right to left; this, however, not producing a full cloſe, the paper muſt be returned to its former poſition, and the melody again performed from left to right, and from right to left; and this has been called a canon 3 in 1, *per recte et retro*, and *alla roveſcio*.

Modern times have furniſhed us with ſome *jeux d'eſprit* of this kind. When Haydn was to receive his doctor's diploma at Oxford, he addreſſed to his judges a ſheet of muſic ſo compoſed, that whether read backwards or forwards, beginning at the top, the bottom, or the middle, it always preſented an air with an original accompaniment. And the writer of this article has frequently played, in the orcheſtra of Covent-garden theatre, a minuet of Haydn's, which reads the ſame forwards, backwards, and upſide down.

Rounds alſo, or *catches*, have been written in the form of canons, and called ſuch, particularly by the modern Italians. A round is a vocal compoſition in three or more parts, all written in the ſame clef, the performers of which are to ſing each part in ſucceſſion, as indicated by the figures at the beginning and end of each line, viz. the firſt voice is to ſing the firſt, ſecond, and third, parts in ſucceſſion, and then the firſt again, &c. The ſecond voice is to begin the firſt line when the firſt voice begins the ſecond; and, when the firſt voice begins the third line, the third voice is to begin the firſt line, and the ſecond voice the ſecond line. See Ex. 15. That this does not anſwer the definition of a canon is obvious; yet it is frequently made to reſemble a canon in uniſon, by writing it at full length. But, if the mere following of the parts in the manner of a round conſtitute a canon; any piece of muſic may be converted into a canon by performing the parts in rotation.

A *circular canon* begins like any other, and goes as far as one round; but, when it is repeated, the intervals are a little altered, ſo as to gain an additional ſharp or flat, by which means the circle of the twelve keys may be obtained. See Ex. 16.

But the moſt tremendous of all canons, is the *Canon Polymorphus*, a kind of ſacred muſic compoſed for ſeveral choirs. It ſeems as if the primitive Chriſtians had had no conceptions more ſublime of the employment of the bleſt in the celeſtial abodes, than that they were eternally ſinging. The ancient hymn, "Te Deum laudamus," ſtill retained in the church, appears to have furniſhed the poet Dante with a model of the 28th canto of his Paradiſo; where, under three different hierarchies, conſiſting each of three choirs, or choruſes, the heavenly hoſt of cherubim and ſeraphim are ſinging perpetual hoſannahs. Milton has aſſigned them the ſame employment:

> Their golden harps they took:
> Harps *ever tun'd*, that glittering by their ſide
> Like quivers hung, and with preamble ſweet
> Of charming ſymphony they introduce
> Their ſacred ſong, and waken raptures high;
> No voice exempt, no voice but well could join
> Melodious part;—ſuch concord is in heaven. *Parad. loſt.*

Orazio Benevoli compoſed, in the 17th century, a maſs for the ceſſation of the plague at Rome, upon the ſame idea, for ſix choirs, of four parts each, the ſcore conſiſting of twenty-four different parts: it was performed in St. Peter's church, of which he was maeſtro di capella, and the ſingers, amounting to more than two hundred, were arranged in different circles of the dome; the ſixth choir occupying the ſummit of the cupola.

At Ex. 17. is a canon, compoſed by Mich. Romanos, for nine choirs in 36 parts. The ſolution in notes would extend to many plates: the following is a brief deſcription of it.

1ſt. Choir.—The baſs and tenor begin together; the baſs as it is written, the tenor at the twelfth above, and by contrary motion. The counter-tenor, after one ſemibreve reſt, begins in the octave above, and the treble begins at the ſame time by the twelfth above, and by contrary motion.

2d. Choir.—The baſs and tenor begin together like the preceding, but after a pauſe of 2 ſemibreves. The counter-tenor and treble do the ſame, after a pauſe of 3 ſemibreves.

3d. Choir.—The baſs and tenor begin after 4 ſemibreves reſt, and the counter-tenor and treble, after a pauſe of 5 ſemibreves.

4th. Choir.—The baſs and tenor begin after 6 ſemibreves, and the counter-tenor and treble after 7 ſemibreves. The other choirs begin in ſucceſſion one ſemibreve after each other, till the whole is finiſhed.

At Ex. 18. is another canon of the ſame kind, compoſed by Valentini, for 96 voices and 24 choirs! This canon is called by Berardi *Solomon's Knot*, and by Kircher the *Labyrinth*. The ſolution is much the ſame as the preceding. Marpurg has exhibited one more by the ſame author, ſuſceptible of 2000 ſolutions, and upon which Valentini himſelf has written a large folio volume under the title of *Canoni Muſicali*, which was printed at Rome in the year 1655.

Since the printing of p. 291. in which we delivered our opinion on the hammers and anvils of Pythagoras, we have been favoured with the following remarks upon that ſubject, by a gentleman to whom we are indebted for the expoſition of the Greek modes, included in this article at p. 323. Now, although it is of no great import to the muſical world to know whether Pythagoras was right or wrong reſpecting his theory of ſounds as grounded upon the different effects of hammers ſtriking on an anvil; yet, as the opinion of a man who deſervedly obtained the reputation, and received the name, of the moſt profound philoſopher among a hoſt of learned men at his period of time, ought to be of great weight in the ſtudy of abſtruſe ſciences, it would be unfair to keep back any explanation that may help us to the underſtanding of his ſyſtem, concerning the generation of ſounds or their mutual relation.

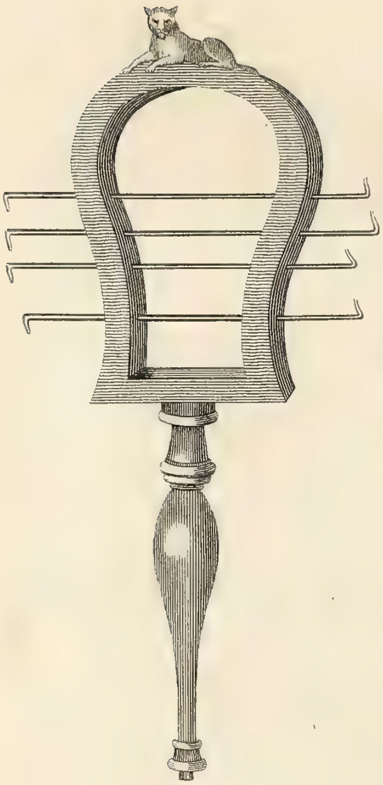
It certainly appears ridiculous, *primâ facie*, to ſuppoſe, that the different weights of hammers can produce a difference in ſound; (ſee p. 292.) But do we exactly know how the anvils of the ancients were conſtructed? The name *incus* has no other meaning than its thema *cudere*, "to ſtrike;" and the Greek appellation of *ακμων* ſignifies only, that the anvil is indefatible in bearing the repeated ſtrokes of the hammers. But it is not improbable that *anvil* is derived from *ancile*, "a ſmall round ſhield," or perhaps *vice-verſâ*, *ancile* from *anvil*. Whence we may perhaps conclude, that the *ακμων* of the Greek reſembled in ſhape the round buckler with a convex ſurface. In this caſe, where is the impoſſibility of the anvil becoming reſponſive in ſound to the reſpective weights of the hammers? This convexity might have acted like the ſounding-board of an inſtrument. Beſides, the compariſon which has been adduced between hammers and anvils, and ſtrings and bows, or clappers and bells, does not apply; for, if wine-glaſſes, for inſtance, are ſtruck againſt a key, a candleſtick, a decanter, or any other body, they moſt certainly give various ſounds according to their various ſhapes, capacities, and weights. So that the clapper of a bell in this ſituation is wrongly compared to the hammer; for in fact, the clapper is the anvil in motion againſt the ſteady hammer. Let us place a number of bells, each of a different ſound, upon a ſcrew-ſhaped barrel, and let them ſtrike ſucceſſively a fixed knob of any hard ſubſtance; will they not give the ſame variety of ſounds as if ſmall hammers were ſet to ſtrike upon them? will they not play the part of clappers and hammers, inſtead of bells and anvils? The ſame reaſoning applies to ſtrings and bows; which laſt, upon experiment, will certainly and invariably emit different ſounds, according to the different ſize and length of the cord. Dryden ſeems to have been of opinion that there exiſts a ſort of *chiming* in the ſtrokes of hammers upon anvils; for, in his tranſlation of the Æneid of Virgil, in book viii. v. 593. eager to repreſent the *harmony* contained in theſe beautiful lines of the original;

> Illi inter ſeſe magnâ vî brachia tollunt,
> In numerum verſant-que tenaci forcipe ferrum;

where the cadence is ſo forcibly expreſſed, that Pythagoras (could he have anticipated it) might have brought it as a ſupport for his ſtatement; the Engliſh poet ſays,

> By turns their arms advance in equal time;
> By turns their hands deſcend, and hammers *chime*.

3



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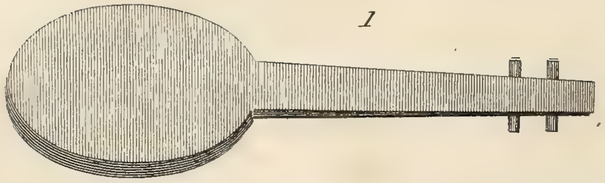

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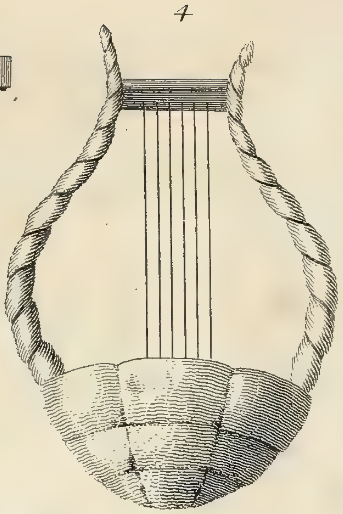

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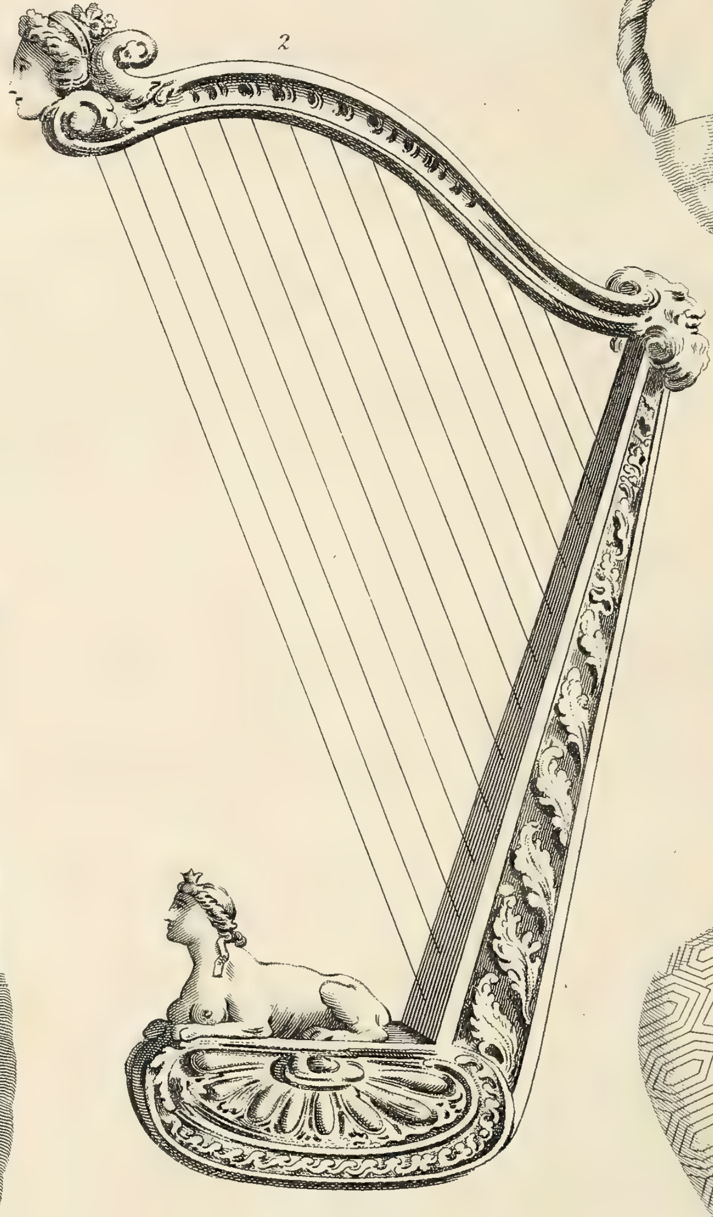

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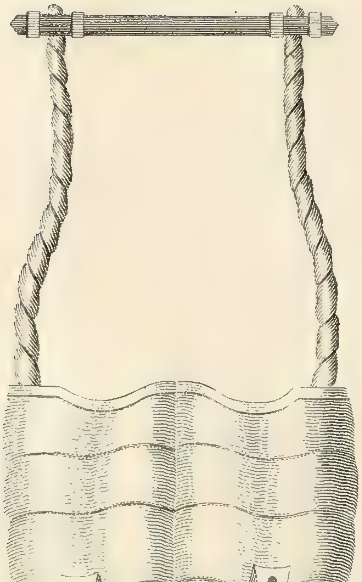

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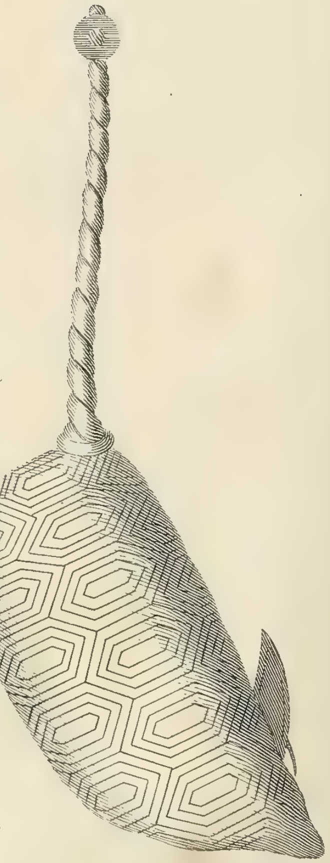
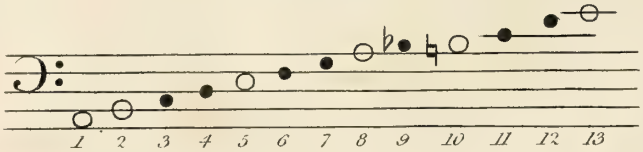




Musical Instruments of the Egyptians.

Pass sculp.

[illegible]

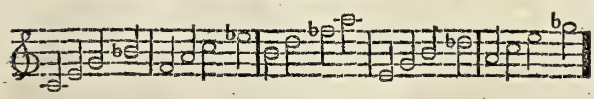
Now it is indiſputable, according to our beſt philologiſts, that *chiming* implies harmony. Therefore the ſound of hammers, when ſtriking the anvil, had anciently, if they have not "in theſe degenerate days," (ſee p. 292.) a ſort of correſpondence in ſound, which, to a well-exerciſed ear, might conſtitute muſical intervals, and, conſequently, ratios of harmony.

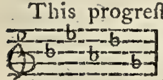
If, now, our correſpondent has ſucceeded in eſtabliſhing the probability of ſonorous anvils, the reſult will be, as ſtated at p. 291, that the weight of the hammers were in the proportion of 6, 8, 9, 12; and this reſult appears to be not only correct, but leading alſo to a new conſideration of the relative power of ſounds. But we muſt obſerve, *in limine*, that the reaſon why this reſult has not been found correct, is, that ſome of the ancient and modern theoriſts have uſed modern means to ſolve the old enigma. Aware of this, let us try the tetrachords, and the long-ſought-for ſolution will be found. Let us join the following inſulated tetrachords: C D E F....G A B C ....D E F G.... aſcending from C the loweſt to G the higheſt. Then, take this laſt to be N° 1. and come down to C, which will be N° 12, (as Ex. 3. Plate III.) we ſhall find that 9 (the key-note being 12=C) will be F the fourth, 8=G the fifth, and 6 the flat ſeventh, inſtead of the octave as commonly ſtated by tranſlators. In this plain ratio, calling the heavieſt hammer 12℔. the next above will be 9℔. that is to ſay, $\frac{3}{4}$ of twelve; the following in aſcenſion is 8℔. $\frac{2}{3}$ of twelve; and the next above 6℔. the $\frac{1}{2}$ of twelve. But this laſt requires explanation.

Referring to p. 317, it will appear ſufficiently evident that the ancients knew nothing about octaves, ſince "the fourth ſerved as a boundary to a ſyſtem of four ſounds." C, D, E, F.... F, G, A, B. (See Ex. 3. Plate III. as quoted at p. 324.) Therefore, tranſlating the 6-pounds-weight hammer by the word *octave* muſt be an unpardonable miſtake or groſs ignorance. In the annexed diagram

		12	G	ſol	1	
		11	F	fa	2	
		10	E	mi	3	
		9	D	re	4	
		8	C	ut	5	
Two tetrachords conjoined.	B♭	7	B	ſi♭	6	flat 7th, or top of the tetrachord conjoined.
	A	6	A	la	7	
	G	5	G	ſol	8	5th, or $\frac{2}{3}$.
	F	4	F	fa	9	4th, or $\frac{3}{4}$.
	E	3	E	mi	10	
	D	2	D	re	11	
	C	1	C	ut	12	key-note.

it will be found, that the figure 6 falls upon the note B, which, according to the natural generation of ſounds, muſt be B♭, the minor third of G, as F is the minor third of D. Now B♭, which is ſuppoſed to be repreſented by N° 6. of the hammers, is the generator of the next modulation or key in the bemol or flat mode, F. (C, E, G, B♭—F, A, C, E♭—&c.) as below:



This progreſſion brings to the key the following:—  ; which, if it proceeds one ſtep farther, brings the whole of the octave to its priſtine denomination, but four commas lower, ſince C flat, as it would be then, is one comma above B natural, as it is generally called; a peculiarity, which, however, owing to the imperfection of our muſical organs and inſtruments, *(felix culpa,)* impreſſes a diſtinctive character on this mode, and all thoſe originating from it.

To conclude. It appears indubitable, that Pythagoras had in view the key-note, its fourth, fifth, and flat ſeventh, in the numbers 6, 8, 9, 12, reſulting from the comparative weight of the hammers; and that he came to the ſolution of his problem by uniting three tetrachords, and counting down from the top note to the loweſt.

Of MUSICAL INSTRUMENTS, and their SCALES.

I. Of the EGYPTIANS. Plate XIII.

At p. 288. we have alluded to thoſe moſt ancient monuments of human art, at preſent extant at Rome, the obeliſks brought thither from Egypt, two of which are ſaid to have been erected by Seſoſtris at Heliopolis, four hundred years before the ſiege of Troy. Theſe were, by the order of Auguſtus, brought to Rome after the conqueſt of Egypt. One of them called *Guglia Rotta*, or the Broken Pillar, which, during the ſacking of the city in 1527 was thrown down and broken, ſtill lies in the Campus Martius. On it is ſeen the figure of a muſical inſtrument of two ſtrings, and with a neck. It reſembles much the *calaſcione* ſtill uſed in the kingdom of Naples. It is repreſented on Plate XIII. fig. 1.

This curious relic of antiquity affords better evidence than, on the ſubject of ancient muſic, is uſually to be met with, that the Egyptians, at ſo very early a period of their hiſtory, had advanced to a conſiderable degree of excellence in the cultivation of the arts. By means of its neck, this inſtrument was capable, with only two ſtrings, of producing a great number of notes. Theſe two ſtrings, if tuned fourths to each other, would furniſh that ſeries of ſounds called by the ancients *heptachord*, which conſiſts of two conjunct tetrachords as B, C, D, E; E, F, G, A; if tuned fifths, they would produce an octave, or two disjunct tetrachords. The calaſcione is tuned in this laſt manner. The Ruſſians alſo have a guitar with two ſtrings, called *batalaika*. The inſtrument repreſented in our plate, which was drawn of the exact dimenſions in Dr. Burney's preſence, is 21 inches long, of which the neck is 12; and its breadth in the wideſt part is 5 inches. A dichord very ſimilar to this, appears in an antique painting which ſtill ſubſiſts in a ſepulchral grotto near the ancient Tarquinia, and was communicated to Dr. Burney by Mr. Byers of Rome. The annals of no nation other than Egypt, for many ages after the period of the obeliſk at Heliopolis, exhibit the veſtige of any contrivance to ſhorten ſtrings during performance by a neck or finger-board. Father Montfaucon obſerves, that, after examining five hundred ancient lyres, harps, and citharas, he could diſcover no ſuch thing.

Egypt indeed ſeems to have been the ſource of human intelligence, and the favourite reſidence of genius and invention. From that celebrated country did the Greeks derive their knowledge of the firſt elements of thoſe arts and ſciences in which they afterwards ſo eminently excelled. From Greece again did the Romans borrow their attainments in the ſame purſuits. And from the records of thoſe different nations have the moderns been enabled to accompliſh ſo wonderful an improvement in ſcience.

The monaulos, or ſingle flute, called by the Egyptians *photinx*, was probably one of the moſt ancient inſtruments uſed either by them or any other nation. From various remains of ancient ſculpture, it appears to have been ſhaped like a bull's horn; and was at firſt, it may be ſuppoſed, no other than the horn itſelf. Before the invention of flutes, as no other inſtrument except thoſe of percuſſion were known, muſic muſt have been little more than metrical. When the art of refining and lengthening ſounds was firſt diſcovered, the power of muſic over mankind, from the agreeable ſurpriſe occaſioned by ſoft and extended notes, was probably irreſiſtible.

At a time when all the reſt of the world was involved in ſavage ignorance, the Egyptians were poſſeſſed of muſical inſtruments capable of much variety and expreſſion. Of this the aſtoniſhing remains of the city Thebes ſtill ſubſiſting afford ample evidence. In a letter from Mr. Bruce, printed in Dr. Burney's Hiſtory of Muſic, there is given a particular deſcription of the Theban harp, an inſtrument of extenſive compaſs, and exquiſite elegance of form. It is accompanied with a drawing taken from the ruins of an ancient ſepulchre at Thebes, ſuppoſed by Mr. Bruce to be that of the father of Seſoſtris. We ſhall inſert the account of this inſtrument, and of the particular ſituation in which it was found, in Mr. Bruce's own words.

"Behind the ruins of the Egyptian Thebes, and a very little to the north-weſt of it, are a great number of mountains, hollowed into monſtrous caverns; the ſepulchres, according to tradition, of the firſt kings of Thebes. The moſt conſiderable of theſe mountains thus hollowed, contains a large ſarcophagus of granite, of which the lid only is broken. In the entrance of the paſſage which leads, ſloping gently down, into the chamber where is the ſarcophagus, there are two pannels, one on each ſide; on that of the right is the figure of the *ſcarabæus Thebaicus*, ſuppoſed to have been the hieroglyphic of immortality; on the left is the crocodile, fixed upon the apis with his teeth, and plunging him into the waves: theſe are both moulded in baſſo-relievo, in the ſtucco itſelf. This is a ſufficient indication of the grotto, to any one who may wiſh to examine it again. At the end of the paſſage on the left-hand, is the picture of a man playing upon the harp, painted in freſco, and quite entire. He is clad in a habit made like a ſhirt, ſuch as the women ſtill wear in Abyſſinia, and the men in Nubia. This ſeems to be white linen or muſlin, with narrow ſtripes of red. It reaches down to his ancles; his feet are without ſandals, and bare; his neck and arms are alſo bare; his looſe wide ſleeves are gathered above his elbows; his head is cloſe ſhaved; he ſeems a corpulent man, of about fifty years of age, in colour rather of the darkeſt for an Egyptian. To gueſs by the detail of the figure, the painter ſhould have had about the ſame degree of merit with a good ſign-painter in Europe; yet he has repreſented the action of the muſician in a manner never to be miſtaken. His left hand ſeems employed in the upper part of the inſtrument among the notes in alto, as if in an arpeggio; while, ſtooping forwards, he ſeems with his right hand to be beginning with the loweſt ſtring, and promiſing to aſcend with the moſt rapid execution; this action, ſo obviouſly rendered by an indifferent artiſt, ſhows that it was a common one in his time, or, in other words, that great hands were then frequent, and conſequently, that muſic was well underſtood, and diligently followed. If we allow the performer's ſtature to be about five feet ten inches, then we may compute the harp, in its extreme length, to be ſomething leſs than ſix feet and a half. It ſeems to ſupport itſelf in equilibrio on its foot, or baſe, and needs only the player's guidance to keep it ſteady. It has thirteen ſtrings; the length of theſe, and the force and liberty with which they are treated, ſhow that they are made in a very different manner from thoſe of the lyre. I did not chooſe to embarraſs the harp with the figure that is playing on it, becauſe this would neceſſarily conceal great part of the inſtrument; and our buſineſs is with the inſtrument, and not with the figure.

"This inſtrument is of a much more elegant form than the triangular Grecian harp. It wants the fore-piece of the frame, oppoſite to the longeſt ſtring, which certainly muſt have improved its tone, but muſt likewiſe have rendered the inſtrument itſelf weaker, and more liable to accidents, if carriage had not been ſo convenient in Egypt. The back part is the ſounding-board, compoſed of four thin pieces of wood, joined together in form of a cone, that is, growing wider towards the bottom; ſo that, as the length of the ſtring increaſes, the ſquare of the correſpondent ſpace, in the ſounding-board, in which the tone is to undulate, always increaſes in proportion. Beſides that the whole principles upon which the harp is conſtructed are rational and ingenious, the ornamental parts are likewiſe executed in the very beſt manner; the bottom and ſides of the frame ſeem to be vaneered, or inlaid, probably with ivory, tortoiſe-ſhell, and mother-of-pearl, the ordinary produce of the neighbouring ſeas and deſerts. It would be even now impoſſible to finiſh an inſtrument with more taſte and elegance. Beſides the elegance of its outward form, we muſt obſerve, likewiſe, how near it approached to a perfect inſtrument; for it wanted only two ſtrings of having two complete octaves in compaſs. Whether theſe were intentionally omitted or not, we cannot now determine, as we have no idea of the muſic or taſte of that time; but, if the harp be painted in the proportion in which it was made, it might be demonſtrated that it could ſcarcely bear more than the thirteen ſtrings with which it was furniſhed. Indeed the croſs bar would break with the tenſion of the four longeſt, if they were made of the ſize and conſiſtence, and tuned to the pitch, that ours are at preſent.

"I look upon this inſtrument, then, as the Theban harp, before and at the time of Seſoſtris, who adorned Thebes, and probably cauſed it to be painted there, as well as the other figures in the ſepulchre of his father, as a monument of the ſuperiority which Egypt had in muſic at that time, over all the barbarous nations that he had ſeen or conquered.

"Aſtronomy, and, we may imagine, the other arts, made a rapid progreſs at this period in Upper Egypt, and continued to do ſo for fifty years after; between which time and the Perſian conqueſt ſome cataſtrophe muſt have happened that reduced them to the loweſt ebb, which hiſtorians have miſtaken for their firſt original.

"We know about the time of Seſoſtris, if, as ſir Iſaac Newton ſuppoſes, this prince and Seſac were the ſame, that in Paleſtine the harp had only ten ſtrings; but as David, while he played upon it, both danced and ſung before the ark, it is plain that the inſtrument upon which he played could have been but of ſmall volume, we may ſuppoſe little exceeding in weight our guitar; though the origin of this harp was probably Egyptian, and from the days of Moſes it had been degenerating in ſize, that it might be more portable in the many peregrinations of the Iſraelites.

"I ſhall ſay nothing of the capabilities of this harp, nor what may be proved from it relative to the ſtate of muſic at a time when men were able to make ſuch an inſtrument; I ſhall with impatience expect this detail from you, better qualified than any one I know now in Europe for this diſquiſition; it is a curious one, and merits your utmoſt reflection and attention. It overturns all the accounts of the earlieſt ſtate of ancient muſic and inſtruments in Egypt, and is altogether in its form, ornaments, and compaſs, an inconteſtible proof, ſtronger than a thouſand Greek quotations, that geometry, drawing, mechanics, and muſic, were at the greateſt perfection when this harp was made; and that what we think in Egypt was the *invention* of arts, was only the beginning of the æra of their *reſtoration*."

Dr. Burney, in his remarks upon this letter, calls the Theban harp "the moſt curious and beautiful of all the ancient inſtruments that have come to my knowledge. The number of ſtrings, the ſize and form of this inſtrument, and the elegance of its ornaments, awaken reflections, which, to indulge, would lead me too far from my chief enquiries, and indeed out of my depth. The mind is wholly loſt in the immenſe antiquity of the painting in which it is repreſented; indeed the time when it was executed is ſo remote, as to encourage a belief, that arts, after having been brought to great perfection, were again loſt, and again invented, long after this period; and there can be no doubt but that human knowledge and refinements have ſhared the ſame fate as the kingdoms in which they have been cultivated. They have had their gradual riſe and declenſion; and in ſome of the countries firſt civilized, arts, by the arrival of new invaders, and eſtabliſhment of new modes, new laws, and new governments, may be ſaid to have experienced ſeveral deaths and regenerations; or, according to the Pythagoric doctrine, their ſouls may be ſaid to have tranſmigrated through ſeveral bodies, ſince they have been inhabitants of this world.

“ With reſpect to the number of ſtrings upon this harp, if conjectures may be allowed concerning the manner of tuning them, two might be offered to the reader's choice. The firſt idea that preſented itſelf at the ſight of thirteen ſtrings was, that they would furniſh all the ſemitones to be found in modern inſtruments within the compaſs of an octave, as from C to *c*, D to *d*, or E to *e*. The ſecond idea is more Grecian, and conformable to antiquity, which is, that if the longeſt ſtring repreſented *proſlambanomenos*, or D, the remaining twelve ſtrings would more than ſupply all the tones, ſemi-tones, and quarter-tones, of the diatonic, chromatic, and enharmonic, genera of the ancients, within the compaſs of an octave; but, for my part, I ſhould rather incline to the firſt arrangement, as it is more natural, and more conformable to the ſtructure of our organs than the ſecond; for, with reſpect to the genera of the Greeks, though no certain hiſtoric teſtimony can be produced concerning the invention of the diatonic and chromatic, yet ancient writers are unanimous in aſcribing to Olympus the Myſian the firſt uſe of the enharmonic; and though, in the beginning, the melody of this genus was ſo ſimple and natural as to reſemble the wild notes and rude eſſays of a people not quite emerged from barbariſm, yet, in after-times, it became overcharged with finical fopperies, and fanciful beauties, ariſing from ſuch minute diviſions of the ſcale as had no other merit than the difficulty of forming them. Another conjecture concerning the tuning of the thirteen ſtrings of the Theban harp, is, that they furniſhed the four tetrachords, *hypaton*, *meſon*, *ſynemmenon*, and *diezeugmenon*, with *proſlambanomenos* at the bottom, as ſhown, with the inſtrument itſelf, at fig. 2.

“ It ſeems a matter of great wonder, with ſuch a model before their eyes as the Theban harp, that the form and uſe of ſuch an inſtrument ſhould not have been perpetuated by poſterity; but that many ages after, another, of an inferior kind, with fewer ſtrings, ſhould take place of it; yet, if we conſider how little acquainted we are at preſent with the uſe, and even conſtruction, of the inſtruments which afforded the greateſt delight to the Greeks and Romans, or even with others in common uſe in a neighbouring part of Europe but a few centuries ago, our wonder will ceaſe; eſpecially if we reflect upon the ignorance and barbariſm into which it is poſſible for an ingenious people to be plunged, by the tyranny and devaſtation of a powerful and cruel invader.”

It is but of ſmall importance to us now, perhaps, to know what kind of muſical inſtruments were in uſe among the Egyptians, in times ſo remote from our own; indeed, it is a humiliating circumſtance to reflect how little permanence there is in human knowledge and acquirements; and, before we attempt to improve our intellects, or refine our reaſon, how long and laborious a work it is to deviſe expedients for ſupplying the wants, and defending the weakneſs, of our nature. Some ages, and ſome countries, have been more ſucceſsful in theſe endeavours than others; however, there ſeems to be a boundary ſet to the ſum total of our perfectibility, and, like the ſtone of Siſyphus, when we are arrived with infinite toil at a certain height, we are precipitated back to the level whence we ſet off, and the work is to do again!

The Greeks, who loſt no merit by neglecting to claim it, unanimouſly confeſs, that moſt of their ancient muſical inſtruments were of Egyptian invention; as the triangular lyre; the monaulos, or ſingle flute; the ſymbal, or kettle-drum; and the ſiſtrum, an inſtrument of ſacrifice, which was ſo multiplied by the prieſts in religious ceremonies, and in ſuch great favour with the Egyptians in general, that Egypt was often called, in deriſion, “ the country of ſiſtrums;” as Greece has been ſaid to be governed by the lyre.

The ſiſtrum is ſtill uſed by the Abyſſinians in religious ceremonies. Spon deſcribes it of an oval form, made in manner of a racket, with three ſticks traverſing it breadthwiſe, which, playing freely by the agitation or beating of the inſtrument, yielded a kind of ſound, which, to the ancients, ſeemed melodious. The upper part was adorned with three figures; that of a cat with a human face in the middle, the head of Iſis on the right ſide, and the head of Nephthys on the left. The repreſentation which we have given at fig. 3. was drawn from an ancient ſiſtrum preſerved in the library of St. Genevieve at Paris. It has been diſputed by the abbé Winckelman, whether the ſiſtrum was of very high antiquity in Egypt, becauſe it did not appear in the hands of ſuch Egyptian ſtatues as he had ſeen at Rome; but, as there is one in the hand of a very ancient ſtatue of Iſis which Dr. Pococke brought into England from Egypt, it puts that point of muſical hiſtory out of all diſpute. The ſiſtrum appears in the Iſiac Table; and Apuleius makes an old Greek invoke an Egyptian prieſt “ by the ſtars in the firmament; by the infernal divinities; by the elements which compoſe the univerſe; by the ſilence of the night; by the ſanctuary in the temple of Coptos; by the increaſe of the Nile; by the myſteries of Memphis; and by the ſiſtrum of Pharos.” By Pharos, an Egyptian iſland, was here figuratively meant all Egypt. Mr. Malcolm takes the ſiſtrum to have been no better than a kind of rattle. Jer. Boſius has an expreſs treatiſe on the ſiſtrum, entitled, “ Iſiacus de Siſtro.” Oiſelius obſerves, that the ſiſtrum is found repreſented on ſeveral medals; and alſo on taliſmans. Oſiris, on ſome medals, is painted with the head of a dog, and with a ſiſtrum in his hand.

We ſhall now return to Mr. Bruce, whoſe original communications, publiſhed by Dr. Burney, are extremely valuable.

There are ſix muſical inſtruments known in Abyſſinia; the flute, the trumpet, the kettle-drum, the tambourine, the ſiſtrum, and the *lyre*. The four firſt are uſed in war, and are by much the moſt common; the fifth is dedicated to the ſervice of the church; and the ſixth is peculiarly an attendant on feſtivity and rejoicings.

There are two principal languages in Abyſſinia: the *Æthiopic*, which is the literal, or dead language; and the *Amharic*, or language of Amhara, ſpoken by the court.

The *flute*, in the Æthiopic, is called *kwetz*, a word difficult to be written or ſounded in Engliſh: in the Amharic, it is called *agada*. It is about the ſhape and ſize of the German flute, but played upon long-ways, with a mouth-piece reſembling that of the clarinet; its tone is not loud, but accompanied with a kind of jar, like a broken hautbois; not owing to any accidental defect, but to conſtruction and deſign, as it would not be eſteemed without it. It is probable that the jar ariſes from the vibration of a reed, which conſtitutes the difference between the tone of a hautbois and a flute.

The *kettle-drum* is called in both languages *nagareet*, becauſe all proclamations (called *nagar*) are made by the ſound of this drum. If made by governors, they have the force of laws in their provinces; but, if made by the king, they are for all Abyſſinia; for the kettle-drum is a mark of ſovereign power. Whenever the king promotes a ſubject to be governor, or his lieutenant-general in a province, he gives him a kettle-drum and ſtandard as his inveſtiture. The king has forty-five of theſe drums always beating before him when he marches. They are in ſhape and ſize like ours, only they are braced very diſadvantageouſly; for the ſkin is ſtrained over the outer rim or lip of the drum, and brought a third down its outſide, which deadens it exceedingly, and deprives it of that clear etallic ſound which ours has. Each man has but a ſingle drum, upon the left ſide of his mule, and beats it with a crooked ſtick about three feet long. Upon the whole, its ſound is not diſagreeable; and it is heard at an incredible diſtance.

The third inſtrument is the ſmall drum, called *kabaro* in Æthiopic and Amharic; though in ſome parts of Amhara it is alſo called *hatamo*. It is about half the diameter, and twice the length, of our common drum; it is juſt the *tambourine* of Provence, only rounded to a point at the lower end. This is beaten always with the hand, and carried ſometimes on foot, ſometimes on horſeback, when any inferior officer (not having a *nagareet*) marches.

The *trumpet* is called *meleket kenet* in Amharic, but *keren* in Æthiopic, (or horn,) which ſhows of what materials it was anciently formed. It is now made of a cane that has leſs than half an inch aperture, and about five feet four inches in length. To this long ſtalk is fixed at the end, a round piece of the neck of a gourd, which has juſt the form of the round end of our trumpet, and is on the outſide ornamented with ſmall white ſhells; it is all covered over with parchment, and is a very neat inſtrument. This trumpet has been already ſpoken of at p. 315.

The fifth inſtrument is the *ſiſtrum:* it is uſed in the quick meaſure, or in allegros, in ſinging pſalms of thankſgiving. Each prieſt has a ſiſtrum, which he ſhakes in a very threatening manner at his neighbour, dancing, leaping, and turning round, with ſuch an indecent violence, that he reſembles rather a prieſt of paganiſm, whence this inſtrument was derived, than a Chriſtian. See above.

The ſixth and laſt inſtrument is the *lyre*, which is never played ſolo, but always accompanying the voice, with which it plays conſtantly in uniſon; “*nor did I ever hear muſic in parts, in any nation, ſavage or poliſhed, out of Europe.* This is the laſt refinement muſic received.”—Its conſtruction has been fully deſcribed under the article Lyre, Vol. xiii. p. 840, 1. and its form is ſhown on the preceding Plate, at fig. 4.

The moſt ancient repreſentations of the *teſtudo*, or lyre, agree very well with the account of its invention. The lyre, in particular on the old celeſtial globes, was repreſented as made of the entire ſhell of a tortoiſe; and that of Amphion in the celebrated group of the Dirce, or Toro, in the Farneſe palace at Rome, which is of exquiſite Greek ſculpture, and very high antiquity, is figured in the ſame manner. Dr. Burney had a front and ſide view of this lyre drawn under his own eye, in order to furniſh the reader with an idea of the form given to the inſtrument by ancient ſculptors, upon the ſtrength of this legend. See fig. 5, 6. The two projections near the bottom of fig. 5. ſeem to have been faſtenings for the ſtrings, and to have anſwered the purpoſe of tail-pieces in modern inſtruments. Amphion was the twin-brother of Zethus, who uſurped the crown from Laius, the father of the unfortunate Œdipus. But, though Amphion is the firſt and only Theban muſician upon record in theſe early ages, it is very doubtful whether muſic had any of thoſe obligations to his genius and talents, which the poets, many ages after the time when he is ſaid to have reigned, beſtowed upon him. Homer, indeed, tells us, that, to ſecure the crown which he had uſurped, he incloſed the city of Thebes with a wall, fortified with ſeven gates, and many ſtately towers; the poet, however, does not ſay a word of the miraculous power of Amphion's muſic, or of his building the wall by the ſound of his lyre. Pliny aſcribes to him, however, the invention of the cithara; and both theſe authors ſay, that Amphion learned muſic in Lydia; and, bringing it from that country into Greece, was called the inventor of the Lydian mode.

II. Of the Hebrews. Plate XIV.

The conſtruction and uſe of muſical inſtruments have a very early place among the inventions attributed to the firſt inhabitants of the globe by Moſes. See Gen. iv. 21. and p. 288 of this article.

The *trumpet of the jubilee* is mentioned ſo ſoon after the flight from Egypt, that it muſt have been an Egyptian inſtrument. See Lev. xxv. 9.

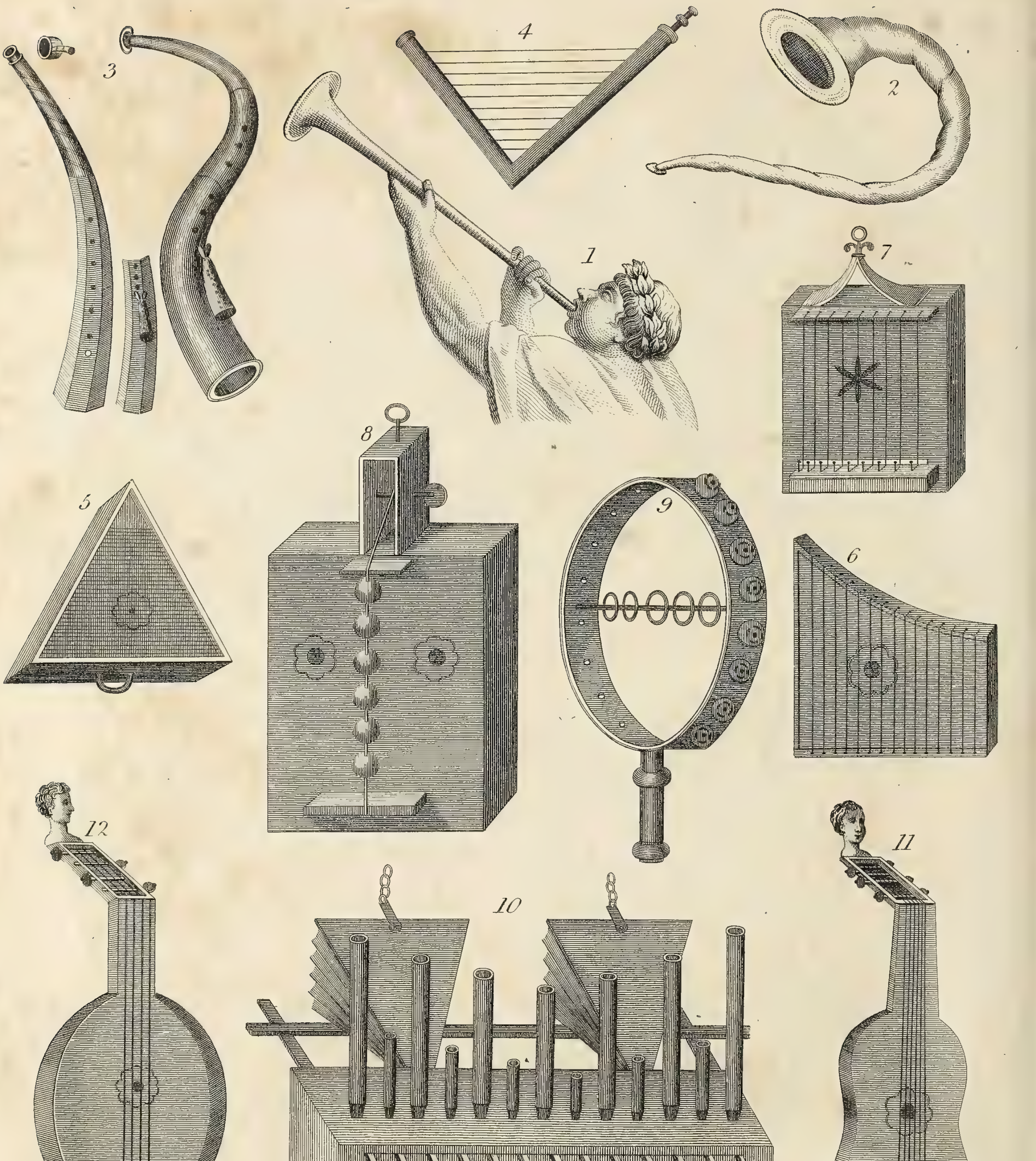
However, in the infancy of a ſtate, a nation has but little leiſure for cultivating muſic any otherwiſe than as it is connected with religious rites and the military art. Accordingly, we find no other muſical inſtrument mentioned during the adminiſtration of the great Hebrew legiſlator than trumpets, except the timbrel uſed by Miriam. Numb. chap. x. 2. he is ordered by divine command to make two trumpets of ſilver of a whole piece, *for aſſembling together the people, and for journeying the camps.* And in the eight following verſes all the ſignals to be ſounded by one and by two trumpets are regulated. But theſe inſtruments ſeem to differ from that of the jubilee, mentioned before, in nothing but the materials of which they were made; as the Hebrew text, and the ſeveral verſions, agree in calling them all by one common name.

The *trumpets of rams' horns* uſed at the ſiege of Jericho, ſeem to have been leſs muſical inſtruments than military ſignals for the aſſailants to march and ſhout by, in order, by their noiſe, to terrify and diſmay the enemy.

In 2 Sam. vi. 5. we read, that “David, and all the houſe of Iſrael, played before the Lord, on all manner of inſtruments made of *fir-wood;* even on *harps, and on pſalteries, and on timbrels, and on cornets, and on cymbals.*” This is related 1 Chron. chap. xiii. ver. 8. in nearly the ſame words. But in the different tranſlations theſe inſtruments are differently named. In the Syriac we are told, that David and all Iſrael ſung before the Lord, accompanied by the *cithara, pſaltery, cymbal, and ſiſtrum.* And in the Arabic it is *flutes, cymbals, bells, and harps.* It is worthy of notice, as to the uſe of *fir-wood*, mentioned at the beginning of this quotation, that this ſpecies of wood, ſo ſoft in its nature, and ſonorous in its effects, ſeems to have been preferred by the ancients, as well as moderns, to every other kind, for the conſtruction of muſical inſtruments, particularly the bellies of them, upon which their tone chiefly depends. Thoſe of the harp, lute, guitar, harpſicord, and violin, in preſent uſe, are conſtantly made of fir-wood.

In the fifteenth, ſixteenth, and twenty-third, chapters of the Firſt Book of Chronicles, there is a particular account and enumeration of all the muſicians appointed by David in the ſervice of the ark, before a temple was erected. 1 Chron. xxiii. 5. David appoints four thouſand of the Levites to praiſe the Lord with inſtruments; and, chap. xxv. ver. 1. the number of ſuch as were *inſtructed*, and were *cunning* in ſong, is ſaid to have been two hundred fourſcore and eight. In 1 Chron. ix. 33. we are told of “the *ſingers*, chief of the fathers of the Levites, who remaining in the chambers, were free; for they were employed in that work day and night.” Before this time, it does not appear from the ſacred writings, that any other inſtruments than trumpets, or ſinging than in a general chorus of the whole people, were uſed in the daily celebration of religious rites; though others are mentioned in *proceſſions*, and on occaſions of joy and feſtivity.

It has ever been the cuſtom of legiſlators and founders of religion, in compliance with the prejudices of mankind, to retain part of the former laws and religious inſtitutions. The Egyptians divided the inhabitants of their country into *caſtes*, or tribes, confining each profeſſion to one family. And, as muſic was many ages confined by them to the prieſthood, and to religious purpoſes, the Hebrews, who had their arts and ſciences from the Egyptians, and who adopted many of their religious rites, (as the primitive Chriſtians did afterwards thoſe of the Pagans, in order to conciliate parties, and facilitate the eſtabliſhment of a new worſhip,) made both prieſts and muſicians *hereditary* in the tribe of Levi. “And the ſons of Aaron, the *prieſts*, ſhall *blow with the trumpets*, and they ſhall be to you for an ordnance *for ever*, throughout your generations.” Num. x. 8. Accordingly, during the life of Moſes, none but the prieſts blew the trumpets, whether in peace or war; as, afterwards, in Joſhua's adminiſtration, both at the ſiege of Jericho, and upon all other occaſions, we find the office of blowing the trumpets was ſtill confined to the prieſthood; and, when David firſt regulated the muſical eſtabliſhments for the ſervice of religion, it appears, that, not only the ſelect



Musical Instruments of the Hebrews.

J Pass sculp.

Engraved for the Encyclopaedia Londinensis 1818.

band of ſinging men and ſinging women; but all the four thouſand performers upon inſtruments, were choſen from the families of prieſts and levites.

Of the muſical inſtruments of the Hebrews, continually mentioned in the Pſalms, ſo diſcordant are tranſlators and commentators on the ſubject, that no preciſe or ſatisfactory ideas can be collected for our guidance. Dr. Burney has obſerved, that almoſt all the Hebrew inſtruments are enumerated in the laſt Pſalm; and he has given ſix different tranſlations of the 3d, 4th, and 5th, verſes of that pſalm, "to ſhow," as he ſays, "once for all, that there is no dependence upon any one of them, or any hope that theſe points can ever be cleared up."

If, indeed, the leaſt ray of hope remain that a true idea of Jewiſh inſtruments can ever be acquired, it muſt be from the arch of Titus at Rome, where it is ſuppoſed that the ſpoils brought by that emperor from Jeruſalem have been exactly repreſented in ſculpture. Among theſe are ſeveral muſical inſtruments; particularly the ſilver trumpets, called by the Hebrews *chatzotzeroth;* and horns, ſuppoſed to reſemble the ſhawms, mentioned ſo often in the Scriptures, called in Hebrew *keranim*, or ſacerdotal trumpets. But the arch upon which theſe inſtruments are ſculptured, though, according to Venuti, of excellent workmanſhip, was not erected till after the death of Titus; and, to ſay the truth, the inſtruments are of no uncommon form. The trumpets are long ſtraight tubes, as modern trumpets would be, if not folded up for the convenience of the player; and the horns are ſuch as frequently occur in ancient ſculpture. The ſubjects on the annexed Plate XIV. are engraved after original drawings, from Titus's arch, from Trajan's pillar, and from bas-reliefs of ſtill more ancient ſculpture.

Fig. 1. The *tuba*, or long trumpet, called by the Hebrews the "trumpet of the jubilee." It may be ſeen in ſeveral pieces of ancient ſculpture at Rome, particularly on the arch of Titus and on Trajan's pillar. Dr. Burney's repreſentation of it, from which our's is copied, was deſigned from a baſſo-relievo of it at the Capitol, repreſenting the triumph of Marcus Aurelius.

Fig. 2. The *buccina*, ſuppoſed by ſome to have been the ſhell of the Buccinum, or whelk. (See the article CONCHOLOGY, Plate XIII. vol. v.) Others derive it from the Hebrew *buk*, a trumpet. Varro will have it to have been originally formed by onomatopæia, from *bou bou*, alluding to the ſound it gives. The buccina is uſually conſidered as a ſpecies of *tuba*, or trumpet; from which, however, in propriety, it appears to have differed, not only in reſpect of figure, which in the tuba was ſtraight, and in the buccina recurved or crooked; but in ſound, that of the buccina being ſharper and audible to a greater diſtance than the trumpet-ſound. The buccina approached neareſt to the *cornu*, or horn; originally the two ſeem to have been the ſame; though in after-times a difference aroſe; the name buccinum being reſtrained to the ſmaller ſorts, and cornu to the larger. Some alſo take the buccina to have been leſs crooked than the cornu, which made a full ſemicircle. Varro aſſures us, that the buccinæ were alſo called *cornua*, horns; becauſe originally made of the horns of cattle, as is ſtill done among ſome people. Servius intimates, that they were at firſt made of goats' or rams' horns; and accordingly, in Scripture, the like inſtruments, uſed both in war and in the temple, are called "rams-horns," *keren-jobal;* and *ſopheroth baijobelim*, or "buccinæ of rams." This inſtrument was in uſe among the Jews, to proclaim their feaſt-days, new moons, jubilees, ſabbatic years, and the like. Their uſe was continued at Greece and in Rome. At Lacedæmon, notice was given by the buccina when it was ſupper-time; and the like was done at Rome, when the grandees had a buccina blown both before they ſat down to table, and after they roſe from their meal.

Fig. 3. The cornet. This was a kind of horn, much in the form of a trumpet. Vegetius informs us, that the legions had trumpets, cornets, and buccinæ; that, when the cornet only ſounded, the enſigns, or ſtandard-bearers, were to move forward without the ſoldiers; but, when the trumpets only ſounded, the ſoldiers were to advance, or move forward, without the enſigns or ſtandard-bearers; that the cornets and buccinæ ſounded the charge and retreat, and the cornets and trumpets during the battle.

Fig. 4, 5, 6. The harp. Concerning the form of king David's harp we are utterly ignorant, though diſſertations have been written upon it, and Calmet has ventured to give it a form. All we know of it is, that it was called *chinnor* in Hebrew, and that the pſalmiſt himſelf frequently deſignates it as "an inſtrument of ten ſtrings." It was probably of a ſmall ſize, as the player could carry it in his hand, and could at the ſame time dance at a pretty good rate; (2 Sam. vi. 14, 16.) It may probably have been like the *trigonum*, or triangular harp with ten ſtrings, at fig. 4. copied from an ancient painting in the muſeum of the king of Naples, in which it is placed on the ſhoulder of a little dancing cupid, who holds the inſtrument with his left hand, and plays on it with his right. The trigonum is mentioned by Athenæus, lib. iv. and by Julius Pollux, lib. iv. c. 9. According to Athenæus, Sophocles calls it a Phrygian inſtrument; and one of his dipnoſophiſts tells us, that a certain muſician of the name of Alexander Alexandrinus was ſo admirable a performer upon it, and had given ſuch proofs of his abilities at Rome, that he made the inhabitants μουσομανειν, "muſically mad." It may not be unworthy of remark, that this little inſtrument reſembles the Theban harp (Plate XIII. fig. 2.) in the circumſtance of wanting one ſide to complete the triangle. The performer too, being a native of Alexandria, as his name implies, makes it probable that it was an Egyptian inſtrument upon which he gained his reputation at Rome.— Fig. 5. is the *chinnor*, as repreſented by Kircher from an old book in the Vatican library. It has thirty-two ſtrings. —Fig. 6. the nablum, or nebel. This had ſtrings like the harp, and was played with both hands, and, as ſome ſay, with ſmall ſticks, like a dulcimer. In the Septuagint and Vulgate, it is called *nablon*, *pſalterion*, *lyra*, and ſometimes *cithara*. See Calmet's Diſſertation concerning the muſical Inſtruments of the ancient Hebrews, prefixed to the ſecond volume of his Commentary on the Pſalms. Kircher ſuppoſes it to have been a horizontal harp, and that it furniſhed the firſt idea of a harpſichord. Baptiſt Folengius, on the 33d Pſalm, ſays that this inſtrument was eſteemed the moſt noble of all; becauſe, when the ſeventy ſymphoniſts who blew the trumpet, and played the organs, the cymbals, and the lyre, were aſſembled to play in concert, the king played alone upon the nablum; *Rex ſolus ſalterio regio canebat*

Fig. 7, 8. The pſaltery. We know nothing of the preciſe form of the ancient pſaltery. Kircher has taken pains to prove that it was of a ſquare form; and from an old book in the Vatican library he has given a repreſentation of it, which we have copied at fig. 7.—The *minagnghinim*, fig. 8. is another kind of pſaltery, for a deſcription of which, ſee vol. xv. p. 421.

Fig. 9. The timbrel, tabret, or tambour de baſque. This inſtrument is of very high antiquity, and of very general uſe; having been employed by the Hebrews, Greeks, and Romans. Our figure is taken from the picture of a bacchante, dug out of Herculaneum. Kircher ſays it was made of metal; to the rim were hung little bells, or looſe pieces of metal; and it was furniſhed with iron rings ſuſpended on a rod or bar that paſſed acroſs the circle. He ſuppoſes that it was moved to and fro by a handle fixed to it, and thus emitted a melancholy kind of murmur.

Fig. 10. The maſrakitha, a very curious wind-inſtrument; our figure of which is copied from the plates of the Encyclopédie méthodique; and of which we have no other deſcription than that already given in vol. xiv. p. 505.

Fig. 11. the machul; fig. 12. the minnin. Theſe were two inſtruments of the ſtringed kind; the former with ſix ſtrings, the latter with three or four: though there is great reaſon to doubt whether inſtruments which ſeem to require the aid of a hair-bow, and which ſo much reſemble the violin, can be ſo ancient. They might, however, have been played with the fingers, like a guitar. See the word Minnin, vol. xv. p. 540.

III. Of the Greeks and Romans.

Cadmus, who came into Greece from Phœnicia about 140 years before the Trojan war, brought with him his wife *Harmonia*, who, as Athenæus tells us, was "a player on the flute." This relation might encourage a belief, that, as Cadmus brought letters into Greece, his wife brought *harmony* thither, as the word ἁρμονια has been ſaid to have no other derivation than from her name; which makes it very difficult to aſcertain the ſenſe annexed to it by the Greeks in their muſic; for it has no roots by which it can be decompounded, in order to deduce it from its etymology. This derivation is given by ſome to Plato; and there is a paſſage in his Phœdon, in which he evidently gives his ſanction to the common etymology of the word generally adopted by the learned; who deduce it from ἁρμοζω, which is derived from the old verb, ἄρω, "to fit, to join." And yet, as the flute upon which Harmonia played was a ſingle inſtrument, capable of *melody only*, and as ſhe was ſaid to be the firſt who performed upon that inſtrument in Greece, the inhabitants of that country perhaps called by her name the art which ſhe had introduced among them, as the metal (copper) which her huſband invented received his name. Agenor, the father of Cadmus, was an Egyptian; and Cadmus is ſaid by many ancient writers to have received his education in Egypt. Harmonia may likewiſe have come from that country; however, her wild flute has never been ſaid to have furniſhed the Greeks with their muſical ſcale; but there is nothing more extraordinary in a barbarous people having muſic without a gamut, than language without an alphabet.

Diodorus Siculus has given a very circumſtantial account of the wedding of Cadmus and Harmonia in Samothrace, at which all the Pagan divinities were preſent; and tells us, that this was the firſt hymenæal feſtival which the gods deigned to honour with their preſence: "Ceres, who was tenderly attached to Jaſion, the brother of the bride, preſented corn to the new-married couple; Mercury brought his lyre; Minerva, her famous buckler, her veil, and her flute; Electra, the mother of the bride, celebrated there the myſteries of Cybele, the mother of the gods, and had the orgies danced to the ſounds of drums and cymbals. Apollo afterwards played on the lyre, the Muſes accompanied him with their flutes, and all the other divinities ratified their nuptials with acclamations of joy." This ſeems to be the outline of a dramatic repreſentation, which was perhaps exhibited by the prieſts at ſome feſtival, or myſtical celebration, in order to commemorate the wedding of Cadmus and Harmonia.

But, though Cadmus and his companions were called Idæi Dactyli, and Curetes, they ſeem not to have been the firſt who came into Greece; for both Strabo and Diodorus Siculus tell us, that "the Curetes, who introduced muſic, poetry, dancing, and arts, and attended on the ſacrifices, were no leſs active about religious inſtitutions; and for their ſkill, knowledge, and myſtical practices, were accounted wiſe men and conjurers by the vulgar; that theſe, when Jupiter was born in Crete, were appointed by his mother Rhea to the nurſing and tuition of him in a cave of mount Ida, where they danced about him in armour, with great noiſe, that his father Saturn might not hear him cry. And, when he was grown up, theſe aſſiſted him in his conqueſts, were appointed his prieſts, and inſtituted myſteries, in memory of the ſhare which they had in his education." This wild ſtory, collected from all the beſt proſe-writers of Greece, is told by ſir Iſaac Newton in his *Chronology*; and it is quoted here, in order to ſhow the ſimple ſtate which muſic was in at its firſt introduction into Greece.

No inſtruments are mentioned to have been uſed by the Idæi Dactyli, who attended Jupiter in Crete, but drums and cymbals, inſtruments of percuſſion, which, affording but one tone, require but little art in the player, or knowledge in the hearer:

Dictæos referunt Curetas: qui Jovis illum
Vagitum in Creta quondam occultaſſe feruntur;
Cum pueri circum puerum pernice chorea
Armati in numerum pulſarent æribus æra. Lucret. ii.

Theſe repreſent the armed prieſts, who ſtrove
To drown the tender cries of infant Jove;
By dancing quick they made a greater ſound,
And beat their armour as they danc'd around. *Creech.*

But Virgil applies this rude and artleſs muſic to a leſs noble purpoſe than quieting the infant Jupiter in his cradle:

Nunc age, naturas apibus quas Jupiter ipſe
Addidit, expediam: pro qua mercede, canoros
Curetum ſonitus crepitantiaque æra ſecutæ,
Dictæo cæli regem pavere ſub antro. Georg. iv.

Now liſten, while the wond'rous powers I ſing,
And genius giv'n to bees, by heav'n's almighty king,
Whom, in the Cretan cave, they kindly fed,
By cymbal's ſound and claſhing armour led. *Warton.*

Ariſtotle has thought it worth recording, that Archytas of Tarentum, the famous mathematician, invented a rattle for children; and Perault ſays, if we conſider the muſic of the ancients according to the idea which the early writers give us of it, we ſhall find it to have been a kind of noiſe ſuitable to the *infancy* of the world, as the firſt inſtruments were certainly little better than rattles, or corals, fit only for children. And, indeed, the Phœnicians may be ſaid to have brought into Greece *time*, rather than *tune*: but *rhythm* is of ſuch conſequence both to poetry and to muſic, that this was no inconſiderable preſent.

As the firſt muſic mentioned in the Grecian hiſtory, is that of the *Idæi Dactyli*, after the birth of Jupiter, which conſiſted of a rhythmical claſh of ſwords, as modern morrice-dancers delight in the claſh of ſtaves; it is not unnatural to ſuppoſe, that when this prince was grown up, had conquered his enemies, and was peaceably eſtabliſhed on his throne, the arts and ſciences were cultivated and rendered flouriſhing, particularly muſic, through the ſkill and influence of Apollo, and his other ſons; and this perhaps was found to be the moſt effectual means of taming and poliſhing a rude and ſavage people.

Among the *dii majorum gentium*, ſome of the female divinities laid claim to a ſhare in muſical diſcoveries. Of this number was Minerva, or Pallas, the daughter of Jupiter, who is ſometimes called *Muſica*, or the Muſician, a name ſhe acquired from her ſtatue made by Demetrius, in which, when the ſerpents of the Gorgon were ſtruck, they reſounded like a lute. She is alſo honoured with the invention of chariots, together with having firſt uſed trumpets, and invented the flute. The vouchers for her muſical talents are Pauſanias, Plutarch, and Fulgentius, among the proſe-writers; and Pindar, Nonnus, Ovid, Hyginus, Propertius, and Claudian, among the poets. The flute that ſhe invented, is ſaid by Hyginus to have been made of bone, and by Ovid of box:

Prima terebrato per rara foramina buxo,
Ut daret, effeci, tibia longa ſonos. Faſt. vi.

Foramina rara, "with few holes," it is natural to ſuppoſe. Indeed the *ſyrinx*, ſaid to have been invented by Pan, whoſe ſhape is now well known under the vulgar appellation of *Pan's pipes*, was found inconvenient. It conſiſted of a number of pipes of different lengths, tied together, or faſtened by wax, which were played on, according to Lucretius, by blowing in them one after the other, moving the inſtrument ſideways for the admiſſion of wind into the ſeveral tubes; and it was by the ſagacity and penetration of Minerva, that it was found practicable to produce the ſame variety of tones with a *ſingle pipe*, by means of *ventiges* or holes, which had the effect of lengthening or ſhortening the tube, by a quick alteration of the column of air which was forced through it.

Two other circumſtances are related of Minerva with reſpect to the flute. She is ſaid by Hyginus to have found herſelf laughed at by her mother and ſiſter, Juno and Venus, whenever ſhe played the flute in their preſence: this ſuggeſted to her the thought of examining herſelf in a fountain, which, ſerving as a mirror, convinced her that ſhe had been juſtly derided for the diſtortion of her countenance, occaſioned by ſwelling her cheeks in the act of blowing the flute. This is one reaſon given for her throwing aſide that inſtrument, and adopting the lyre. However, a better cauſe, and one more worthy of her wiſdom, is aſſigned for her throwing aſide the flute, upon ſeeing Apollo perform on the lyre; for, by having his mouth at liberty, ſhe found that it enabled him to ſing at the ſame time as he played, which afforded an opportunity of joining inſtruction to pleaſure.

Having traced the uſe of inſtruments of percuſſion as high as the birth of Jupiter, and ſhown that the ancient Greeks attributed the origin of wind-inſtruments to Minerva, it now remains to ſpeak of the third ſpecies of inſtruments, the tones of which are produced by ſtrings; and among theſe, the firſt in order and celebrity is the lyre, of which the invention is given, both by the Egyptians and Greeks, to Mercury.

Almoſt all the ancient poets relate the manner in which the Grecian Mercury diſcovered the lyre; and tell us that it was an inſtrument with *ſeven ſtrings*; a circumſtance which makes it eſſentially different from that ſaid to have been invented by the Egyptian Mercury, which had but *three*. However there have been many claimants beſides Mercury to the ſeven-ſtringed lyre; and the great number of different muſicians to whom the ſame inventions have been given in Greece, is but a proof that inſtruments reſembling each other in form and properties, may have had many inventors. A ſyrinx, made of reeds tied together, exactly reſembling that of the ancients, has been lately found to be in common uſe in the iſland of New Amſterdam in the South Seas, as flutes and drums have been in Otaheite and New Zealand; which indiſputably prove them to be inſtruments natural to every people emerging from barbariſm. They were firſt uſed by the Egyptians and Greeks, during the infancy of the muſical art among them; and they ſeem to have been invented and practiſed at all times by nations remote from each other, and between whom it is hardly poſſible that there ever could have been the leaſt intercourſe or communication.

Calmet, in his Diſſertation on the Muſical Inſtruments of the Hebrews, has given us an account of this diſcovery from Homer's Hymn to Mercury, in which he tranſlates πληκτρον, plectrum, by the French word *archet*, "a bow," without citing a ſingle authority for it from ancient authors. What kind of implement the *plectrum* was, may be diſcuſſed hereafter; but it is moſt certain that the *bow* now in uſe was utterly unknown to the ancients.

Of all the divinities of Paganiſm, there was no one by whom the polite arts were ſaid to have been, in ſo particular a manner, cheriſhed and protected, as by Apollo; who had a variety of names given to him that were either derived from his principal attributes, or the chief places where he was worſhipped. To the other perfections of this divinity, the poets have added beauty, grace, and the art of captivating the ear and the heart, no leſs by the ſweetneſs of his eloquence than by the melodious ſounds of his lyre. However, with all theſe accompliſhments, he had not the talent of captivating the fair with whoſe charms he was enamoured; but we have nothing to do with his amours, nor with the other adventures related of this god during his reſidence on earth, which are indeed too numerous, and too well known, to be inſerted here: however, ſuch as concern his muſical conteſts, in which he was always victorious, ſeem too much connected with our ſubject to be wholly unnoticed.

To begin, therefore, with the diſpute which he had with Pan, that was left to the arbitration of Midas. Pan, who thought he excelled in playing the flute, offered to prove that it was an inſtrument ſuperior to the lyre of Apollo. The challenge was accepted; and Midas, who was appointed the umpire in this conteſt, deciding in favour of Pan, was rewarded by Apollo, according to the poets, with the ears of an aſs, for his ſtupidity. This fiction, which ſeems founded upon hiſtory, muſt be explained. Midas, according to Pauſanias and Strabo, was poſſeſſed of ſuch great riches, and ſuch an inordinate deſire of increaſing them by the moſt contemptible parſimony, that, according to the poets, he converted whatever he touched into gold. However, his talent for accumulation did not extend to the acquirement of taſte and knowledge in the fine arts; and perhaps his dulneſs and inattention to theſe, provoked ſome muſical poet to invent the fable of his deciſion in favour of Pan againſt Apollo. See MIDAS, vol. xv. p. 334.

Marſyas, another player on the flute, was ſtill more unfortunate than either Pan or his admirer Midas. Hyagnis, a native of Celænæ, the capital of Phrygia, and cotemporary with Erichthonius, who inſtituted the Panathenæan games at Athens, was the inventor of the flute, and of the Phrygian mode; as well as of the *nomes*, or airs, that were ſung to the Mother of the Gods, to Bacchus, to Pan, and to ſome other divinities and heroes of that country. Plutarch and Nonnus both tell us that he was the father of Marſyas; Athenæus, from Ariſtoxenus, ſays that he invented the Phrygian mode; and Apuleius aſcribes to him not only the invention of the ſingle flute, but of the double. The double flute, however, is more generally given to his ſon Marſyas. Julius Pollux (lib. iv. cap. 10.) ſpeaks of two kinds of ſingle flute, the invention of which was attributed to the Libyans: the oblique flute, ϖλαγιαύλος, ſo called, perhaps, from being blown at the ſide, like the modern fife, or German flute; and a very ſhrill flute, made of laurel-wood, after the pith and bark were removed, that was uſed in breaking horſes, ἱπποφορϐος. The natives of every quarter of the globe ſeem to have invented their own flutes; and, if Hyagnis and his ſon Marſyas furniſhed the Aſiatics with thoſe inſtruments, Africa may have had her's from Lybia, or its neighbouring country, Egypt.

The connexion of Marſyas with Cybele, afterwards ſo celebrated as the mother of the gods, makes it neceſſary to ſpeak of her, in the hiſtory of that unfortunate muſician. The Phrygians, ſays Diodorus Siculus, affirm, that they had formerly a king named Meon, who was likewiſe ſovereign of Lydia. This king took to wife a princeſs of the name of Dindyma, by whom he had a daughter. Enraged at the diſappointment of not having a ſon, he expoſed her upon mount Cybele. However the gods permitted her to be ſuckled by wild beaſts; which being afterwards diſcovered by ſome ſhepherdeſſes in the neighbourhood, they ſtole her from her ſavage nurſes, and upon carrying her home called her *Cybele*, from the name of the mountain where ſhe had been found. This child ſurpaſſed, as ſhe grew up, all her companions, not only in beauty, but wiſdom and talents; for ſhe invented a flute, compoſed of many pipes, and was the firſt of that country who introduced drums and cymbals into choruſſes. The chief of her friends was Marſyas, a man commendable for his wiſdom and temperance: he manifeſted great genius in the invention of a flute, which, by means of holes, like that of Minerva, expreſſed all the ſounds of the ſeveral pipes of which the ſyrinx was compoſed; and his attachment to Cybele muſt have been of a very pure and Platonic kind; for we are told that he preſerved his chaſtity to the laſt hour of his life. Cybele, tranſported with love for a young man named Atys, who had been put to death by her parents, became inſane, and ran wildly up and down the country, beating the cymbals. Marſyas, taking pity of her misfortunes, and preſerving his former friendſhip for her, followed her in all her rambles, till ſhe arrived at Nyſa, the reſidence, at that time, of Bacchus, or Oſiris, where they found Apollo, who had acquired great reputation by his manner of playing the lyre. For it is ſaid, that, though Mercury invented this inſtrument in the manner already related, he afterwards gave it to Apollo, who was the firſt that played upon it with method; and, by ſinging to it, made it the conſtant companion of poetry. Diod. Sic. lib. iii. c. 10. But, according to Homer's account of this tranſaction, in his Hymn to Mercury, it was given by that god to Apollo as a peace-offering and indemnification for the oxen which he had ſtolen from him:

To Phœbus Maia's ſon preſents the lyre,
A gift intended to appeaſe his ire;
The god receives it gladly, and eſſays
The novel inſtrument a thouſand ways.
With dext'rous ſkill the plectrum wields, and ſings,
With voice accordant to the trembling ſtrings,
Such ſtrains as gods and men approv'd; from whence
The ſweet alliance ſprung of ſound and ſenſe.

Be this as it may, Marſyas, having engaged in a muſical diſpute with Apollo, choſe the people of Nyſa for judges. The particulars and the fatal event have been related at length under the word Marsyas, vol. xiv. p. 428. Diodorus informs us, that Apollo, ſoon repenting of the cruelty with which he had treated Marſyas, broke the ſtrings of the lyre, and by that means put a ſtop, for a time, to any further progreſs in the practice of that new inſtrument.

The next paſſage in this author being wholly applicable to the hiſtory of the ancient lyre, we ſhall tranſcribe it; "The Muſes, ſays he, afterwards added to this inſtrument the ſtring called *meſe;* Linus, that of *lichanos;* and Orpheus and Thamyras, thoſe ſtrings which are named *hypate* and *parhypate*." It has been already related, that the lyre invented by the Egyptian Mercury had but three ſtrings; and, by putting theſe two circumſtances together, we may perhaps acquire ſome knowledge of the extenſion of its ſcale, in the higheſt antiquity. *Meſe*, in the Greek muſic, is the fourth ſound of the ſecond tetrachord of the great ſyſtem, and firſt tetrachord invented by the ancients, anſwering to our A on the fifth line in the baſs. If this ſound then was added to the former three, it proves two important points; firſt, that the moſt ancient tetrachord was that from E in the baſs to A; and that the three original ſtrings in the Mercurian and Apollonian lyre were tuned E, F, G, which the Greeks called *hypate meſon, parhypate meſon*, and *meſon diatonos.* The addition therefore of *meſe* to theſe, completed the firſt and moſt ancient tetrachord, E, F, G, A. Captain Norden ſays, the ſepulchral urn on the firſt pyramid near Memphis, though it reſts intirely upon its baſe, ſounds like a bell; and Dr. Shaw believes the ſound emitted to be *E-la-mi.* Now, if it be true that the Greeks had their firſt muſical knowledge from Egypt, we may ſuppoſe this ſound to be the ſtandard pitch and fundamental note of the Mercurian lyre, and firſt tetrachord E, F, G, A. The ſtring *lichanos*, then, being added to theſe, and anſwering to our D, on the third line in the baſs, extended the compaſs downwards, and gave the ancient lyre a regular ſeries of five ſounds, in the Dorian mode, the moſt ancient of all the Greek modes; and the two ſtrings called *hypate* and *parhypate*, correſponding with our B and C in the baſs, completed the heptachord, or ſeven ſounds, B, C, D, E, F, G, A, a compaſs that received no addition till after the time of Pindar, who calls the inſtrument then in uſe the "ſeven-tongued lyre." But, though Pindar calls the lyre *ſeven-tongued*, yet we are told that Pythagoras, who lived before him, added an eighth ſtring to that inſtrument. This new ſtring, however, might not be in general uſe in Pindar's time.

Plato tells us, that we are indebted to Marſyas and Olympus for wind-muſic; and to theſe two muſicians is likewiſe attributed the invention of the Phrygian and Lydian meaſure. There were two great muſicians in antiquity of the name of *Olympus*, and both celebrated performers on the flute. One of them flouriſhed before the Trojan war; and the other was cotemporary with Midas, who died 697 years before Chriſt. The firſt was a ſcholar of Marſyas, and a Myſian; the ſecond, according to Suidas, was a Phrygian, and author of ſeveral poems, which were by ſome attributed to the firſt Olympus. But the moſt important addition which the diſciple of Marſyas made to the muſical knowledge of his time, was the invention of the enharmonic genus; (ſee p. 347.) Plato and Ariſtotle, as well as Plutarch, celebrate his muſical talents, and tell us that ſome of his airs were ſtill ſubſiſting in their time. Religion only can give permanence to muſic. The airs of Olympus uſed in the temple-worſhip during the time of Plutarch were not more ancient (ſays Dr. Burney) than the chants, or canto fermo, to ſome of the hymns of the Romiſh church; and the melodies now ſung to many of the hymns and pſalms of the Lutherans and Calviniſts, are ſuch as were applied to them at the time of the reformation.

Plato ſays the muſic of Olympus was, in a particular manner, adapted to affect and animate the hearers; Ariſtotle, that it ſwelled the ſoul with enthuſiaſm; and Plutarch, that it ſurpaſſed, in ſimplicity and effect, every other muſic then known. According to this biographer, he was author of the curule ſong, which cauſed Alexander to ſeize his arms, when it was performed to him by Antigenides. To his muſical abilities he joined thoſe of poetry; and, according to Suidas, and Julius Pollux, he compoſed elegies, and other plaintive ſongs, which were ſung to the ſound of the flute; and the melodies of theſe poems were ſo much celebrated in antiquity for their pathetic and plaintive caſt, that Ariſtophanes, in the beginning of his comedy called the Knights, where he introduces the two generals, Demoſthenes and Nicias, traveſtied into valets, and complaining of their maſter, makes them ſay, "Let us weep and wail like two flutes, breathing ſome air of Olympus.'

At p. 295. we have noticed the violent manner of blowing the flute in ancient times, and the danger attending ſuch obſtreperous exertions. Among the inventions of Marſyas is numbered the bandage made of leather thongs, occaſionally uſed by the ancients in playing the flute, in order to keep the cheeks and lips firm, and to prevent the diſtortion of the countenance, ſo common in playing upon wind-inſtruments. This contrivance, which left only a ſmall aperture between the lips, juſt ſufficient to receive the mouth-piece of the flute, augmented likewiſe the force of the performer. This bandage was called *φορβεια*, or *περιστομιον*, the "headſtall." It is mentioned in Plutarch's Sympoſiacs, in the Scholiaſt of Ariſtophanes, and elſewhere; and may be ſeen in ſome ancient ſculpture which Bartholinus has had engraved in his treatiſe de Tibiis Veterum. See alſo our Plate XV.

As Apollo was the god of the fine arts, thoſe who cultivated them were called his ſons. Philammon of Delphos, being a great poet and muſician, was reported to be the offspring of the god who preſided over thoſe arts. He is one of the firſt, after Apollo, upon fabulous record, as a vocal performer, who accompanied himſelf with the ſound of the lyre: his ſon was the celebrated Thamyris. Tatian ranks Philammon among the writers who flouriſhed before the time of Homer; and the ſcholiaſt of Apollonius Rhodius, from Pherecydes, affirms, that it was this muſical poet, and not Orpheus, who accompanied the Argonauts in their expedition. If this circumſtance could be depended upon, there would be no difficulty in fixing the time when he lived, as the chronologiſts place this expedition in the century immediately preceding the Trojan war.

Plutarch, who was himſelf a prieſt of Apollo, impreſſed with the higheſt reſpect and veneration for him and for muſic, in his Dialogue upon that art, makes one of his interlocutors ſay, that an invention ſo uſeful and charming could never have been the work of man, but muſt have originated with ſome god; ſuch as Apollo, the inventor of the flute and lyre, improperly attributed to Hyagnis, Marſyas, Olympus, and others; and the proofs he urges in ſupport of this aſſertion, ſhow, if not its truth, at leaſt that it was the common and received opinion. All dances and ſacrifices, ſays he, uſed in honour of Apollo, are performed to the ſound of flutes; the ſtatue of this god at Delos, erected in the time of Hercules, had in its right hand a bow, and on the left ſtood the three Graces, who were furniſhed with three kinds of inſtruments; the lyre, flute, and ſyrinx. The youth alſo, who carries the laurel of Tempè to Delphos, is accompanied by one playing on the flute; and the ſacred preſents formerly ſent to Delos by the Hyperboreans, were conducted thither to the ſound of lyres, flutes, and ſhepherds' pipes. He ſupports theſe facts by the teſtimonies of the poets Alcæus, Alcman, and the poeteſs Corinna.

The ancients had numberleſs ingenious and fanciful ideas concerning the Muſes; and ſome very whimſical and diverting: Fulgentius informs us that Apollo was painted with a cithara of *ten ſtrings*, as a ſymbol of the union of the god with the nine muſes, and to ſhow that the human voice is compoſed of *ten parts*; of which the four firſt are the front *teeth*, placed one againſt the other, ſo uſeful for the appulſe of the tongue, in forming ſounds, that, without any one of them, a whiſtle would be produced inſtead of a voice; the fifth and ſixth are the two *lips*, like cymbals, which, by being ſtruck againſt each other, greatly facilitate ſpeech; the ſeventh is the *tongue*, which ſerves as a plectrum to articulate ſounds; the eighth is the *palate*, the concave of which forms a belly to the inſtrument; the ninth is the *throat*, which performs the part of a flute; and the tenth the *lungs*, which ſupply the place of bellows.

Next after the Muſes, the names of Linus and Orpheus will naturally preſent themſelves to the reader, as inventors or improvers of inſtruments. But ſo many fables have been deviſed concerning the firſt poets and muſicians, that a doubt has been thrown even upon their exiſtence. Chiron, Amphion, Orpheus, Linus, and Muſæus, are ſpoken of by the poets and mythologiſts ſo hyperbolically, that the time when, and place where, they flouriſhed, will appear to many as little worth a ſerious enquiry as the genealogy of Tom Thumb, or the chronology of a fairy tale. However, though ready to part with the miraculous powers of their muſic, we are unwilling that perſons, whoſe talents have been ſo long celebrated, ſhould be annihilated, and their actions cancelled from the records of paſt times.

Though the Egyptian Thebes is of much higher antiquity than the Grecian, yet this laſt is ſo ancient, and its hiſtory is ſo much involved in darkneſs and poetic fiction, that nothing can be depended upon concerning it, but that it is recorded to have been built by Cadmus, long before the Trojan war, or even the Argonautic expedition. Pauſanias, indeed, gives a liſt of ſixteen kings, who reigned at Thebes in Bœotia, but they are rather the heroes of tragedy than of real hiſtory. Among theſe is Amphion, of whom we have already ſpoken at p. 348. and, becauſe it was thought neceſſary to ſhow the analogy between the Græco-Theban and the Egypto-Theban lyre, the lyre of Amphion has been engraved on the ſame plate with the Egyptian inſtruments. See Plate XIV.

Chiron the Centaur (ſee CHIRON, vol. iv.) is ſaid to have been the inſtructor of the Grecian Bacchus, who learned of this maſter the revels, orgies, Bacchanalia, and other ceremonies of his worſhip. According to Plutarch, it was likewiſe at the ſchool of Chiron that Hercules ſtudied muſic, medicine, and juſtice; though Diodorus Siculus tells us that Linus was the muſic-maſter of this hero. Theſe are points which it is now not eaſy to ſettle; nor are they of any other conſequence to our enquiries, than ſerving as proofs, that ancient authors all agreed in thinking it natural and neceſſary for heroes to have been inſtructed in muſic. *Nec fides didicit, nec natare*, was, in antiquity, a reproach to every man above the rank of a plebeian. But among all the heroes who have been diſciples of this Centaur, no one reflected ſo much honour upon him as Achilles, whoſe renown he in ſome meaſure ſhared, and to whoſe education he in a particular manner attended, being his grandfather by the mother's ſide. Apollodorus tells us that the ſtudy of muſic employed a conſiderable part of the time which he beſtowed upon his young pupil, as an encitement to virtuous actions, and a bridle to the impetuoſity of his temper. One of the beſt remains of antique painting now ſubſiſting, is a picture upon this ſubject, dug out of Herculaneum, in which Chiron is teaching the young Achilles to play on the lyre. See Plate XV.

Every thing intereſting concerning LINUS, the maſter or the ſcholar of Orpheus, has been given under that word, vol. xiv. p. 767.

Orpheus is one of the moſt ancient and venerable names among the poets and muſicians of Greece. His reputation was eſtabliſhed as early as the time of the Argonautic expedition, in which he was himſelf an adventurer; and is ſaid by Apollodius Rhodius, not only to have incited the Argonauts to row by the ſound of his lyre, but to have vanquiſhed and put to ſilence the Sirens, by the ſuperiority of his ſtrains. The majority of reſpectable ancient authors agree, that Orpheus was the ſon of Oeager, by birth a Thracian, the father or chief founder of the mythological and allegorical theology amongſt the Greeks, and of all their moſt ſacred religious rites and myſteries: he is commonly ſuppoſed to have lived before the Trojan war, that is, in the time of the Iſraelitiſh judges, or at leaſt to have been ſenior both to Heſiod and Homer, and to have died a violent death, moſt affirming that he was torn in pieces by women. The family of Orpheus is traced by ſir Iſaac Newton for ſeveral generations: "Seſac, paſſing over the Helleſpont, conquers Thrace, kills Lycurgus king of that country, and gives his kingdom, and one of his ſinging-women, to Oeagrus, the ſon of Tharops, and father of Orpheus; hence Orpheus is ſaid to have had the muſe Calliope for his mother." He is allowed by moſt ancient authors to have excelled in poetry and muſic, particularly the latter; and to have early cultivated the lyre, in preference to every other inſtrument; ſo that all thoſe who came after him were contented to be his imitators; whereas "*he adopted no model*," ſays Plutarch; "for before his time no other muſic was known, except a few airs for the flute."

Profane authors look upon Orpheus as the inventor of that ſpecies of magic called evocation of the manes, or raiſing ghoſts; and indeed the hymns which are attributed to him are moſtly pieces of incantation, and real conjuration. Upon the death of his wife Eurydice, he retired to a place in Theſprotia, called Aornos, where an ancient oracle gave anſwers to ſuch as evoked the dead. He there fancied he ſaw his dear Eurydice, and at his departure flattered himſelf that ſhe followed him; but upon looking behind him, and not ſeeing her, he was ſo afflicted, that he ſoon died of grief. (Pauſanias, lib. ix.)

There were perſons among the ancients who made public profeſſion of conjuring up ghoſts, and there were temples where the ceremony of conjuration was to be performed. Pauſanias ſpeaks of that which was in Theſprotia, where Orpheus went to call up the ghoſt of his wife Eurydice. It is this very journey, and the motive which put him upon it, that made it believed he went down into hell. The poets have embelliſhed this ſtory, and given to the lyre of Orpheus, not only the power of ſilencing Cerberus, and of ſuſpending the torments of

Tartarus, but alſo of charming the infernal deities themſelves, whom he rendered ſo far propitious to his entreaties, as to reſtore to him Eurydice, upon condition that he would not look at her till he had quitted their dominions; a bleſſing which he ſoon forfeited, by a too eager and fatal affection.

Virgil beſtows the firſt place in his Elyſium upon the legiſlators, and "thoſe who brought makind from a ſtate of nature into ſociety;" *Magnanimi heroës, nati melioribus annis.* At the head of theſe is Orpheus, the moſt renowned of the European law-givers; but better known under the character of poet; for the firſt laws being written in meaſure, to allure men to learn them, and, when learnt, to retain them, the fable would have it, that by the force of harmony Orpheus ſoftened the ſavage inhabitants of Thrace:

——— *Threïcius longa cum veſte ſacerdos*
Obloquitur numeris ſeptem diſcrimina vocum:
Jamque eadem digitis jam pectine pulſat eburno. Æn. vi. 645.

The Thracian bard, ſurrounded by the reſt,
There ſtands conſpicuous in his flowing veſt;
His flying fingers, and harmonious quill,
Strike ſeven diſtinguiſh'd notes. *Dryden.*

The *ſeven ſtrings* given by the poet in this paſſage to the lyre of Orpheus, is a circumſtance ſomewhat hiſtorical. The firſt Mercurian lyre had, at moſt, but four ſtrings. Others were afterwards added to it by the ſecond Mercury, or by Amphion; but, according to ſeveral traditions preſerved by Greek hiſtorians, it was Orpheus who completed the ſecond tetrachord, which extended the ſcale to a heptachord, or ſeven ſounds, implied by the *ſeptem diſcrimina vocum;* for the aſſertion of many writers, that Orpheus added two new ſtrings to the lyre, which before had ſeven, claſhes with the claim of Pythagoras to the invention of the octachord, or addition of an eighth ſound to the heptachord, which made the ſcale conſiſt of two disjunct, inſtead of two conjunct, tetrachords, and of which almoſt all antiquity allows him to have been the inventor. Nor is it eaſy to ſuppoſe, that the lyre ſhould have been repreſented in ancient ſculpture with four or five ſtrings only, if it had had nine ſo early as the time of Orpheus, who flouriſhed long before ſculpture was known in Greece. What is here ſaid concerning the progreſſive improvements of inſtrumental muſic, muſt be wholly confined to Greece; for proofs have already been given of the Egyptians having been in poſſeſſion of more perfect inſtruments than thoſe juſt mentioned, long before the time when Orpheus is ſuppoſed to have flouriſhed.

We now come to the Trojan war, the ſecond important epoch in Grecian hiſtory. Antiquity has paid ſuch reſpect to the perſonages mentioned in the poems of Homer, as never to have doubted of the real exiſtence of any one of them. The poets and muſicians, therefore, who have been celebrated by this great ſire of ſong are ranked among the bards of Greece who flouriſhed about the time of the Trojan war, and of whoſe works, though nothing entire remains, yet the names, and even fragments of ſome of them, are to be found in ſeveral ancient authors poſterior to Homer. Homer flouriſhed 900 or 1000 years B. C.

Muſic we find mentioned with a degree of rapture in more than fifty places of the Iliad and Odyſſey. However, it is in ſuch cloſe union with poetry, that it is difficult to diſcriminate to which the poet's praiſes belong. The lyre indeed is conſtantly in the hands of the bard, but merely as an inſtrument of accompaniment to the voice. So that muſic and the lyre were frequently only vehicles through which Homer celebrated the power of poetical numbers. Singing there is without inſtruments; but of inſtrumental muſic without vocal, there does not appear the leaſt trace in the writings of Homer. Even dancing was accompanied by the voice, according to the following paſſage:

Then to the *dance* they form the *vocal* ſtrain,
Till Heſperus leads forth the ſtarry train. *Od.* v.

It ſeems as if nothing would convey to the reader a more juſt and clear idea of the ſtate of muſic in the time of the Trojan war, or at leaſt of Homer, than a liſt of the inſtruments mentioned in the original; theſe are the *lyre,* the *flute,* and the *ſyrinx.* The lyre has been called by tranſlators, lute, harp, cithara, and teſtudo, juſt as the convenience of verſification required; and, if theſe and the lyre were not in ancient times one and the ſame inſtrument, they were certainly all of the ſame kind. The flute and ſyrinx have already been ſaid to be of Egyptian origin, and of great antiquity. Theſe inſtruments are ſpecified by Homer in a paſſage where they do not appear in Pope's verſion: *Αυγων συριγγων τ᾽ ενοπην, ομαδον τ᾽ ανθρωπων.* Il. xx.

With reſpect to *military muſic,* the trumpet is mentioned by Homer in a ſimile; yet it is agreed by all the critics, that it was unknown to the Greeks during the Trojan war, though it was in common uſe in the time of the poet. According to archbiſhop Potter, before the invention of trumpets, the firſt ſignals of battle in primitive wars were lighted torches; to theſe ſucceeded ſhells of fiſhes, which were ſounded like trumpets. "Nothing was more uſeful, ſays Plutarch, than muſic to ſtimulate mankind to virtuous actions, particularly in exciting that degree of courage, which is neceſſary to brave the dangers of war. To this end ſome have uſed the flute, and others the lyre. The Lacedæmonians, in approaching the enemy, played upon the *flute* the air or melody that was ſet to the ſong or hymn addreſſed to Caſtor; and the Cretans played their military marches for many ages on the *lyre.*" The Thebans and Lacedæmonians had a flute upon their enſigns; the Cretans, a lyre; and many ancient nations and cities have impreſſed the lyre upon their coins, as their particular ſymbol. The city of Rhegium, for inſtance, had a woman's head on one ſide, and on the reverſe a lyre. In a medal inſcribed *Caleno,* the Minotaur is ſeen, with the addition of the lyre. The Theſpians had one of the Muſes and a lyre; the Lapithæ, a Diana, and on the reverſe a lyre; the iſle of Chios, Homer on one ſide, and on the other a ſphinx, with a lyre in its paw. The inhabitants of the iſle of Tenedos had on one ſide of their coins a head with two faces, and on the reverſe an axe, with a bunch of grapes, the ſymbol of Bacchus, near it on one ſide; and a lyre, the ſymbol of Apollo, on the other. The lyre with thirteen ſtrings is likewiſe to be ſeen on two Roman coins in Montfaucon.

We find, during the ſiege of Troy, that heralds gave the ſignals of battle, *viva voce.* Neſtor ſays to Agamemnon before an engagement;

Now bid thy heralds ſound the loud alarms,
And call the ſquadrons ſheath'd in brazen arms. *Iliad* ii.

The vociferous Stentor is celebrated by Homer as the moſt illuſtrious throat-performer, or herald, of antiquity:

Stentor the ſtrong, endued with brazen lungs,
Whoſe throat ſurpaſs'd the noiſe of fifty tongues. *Iliad* iv.

Pope obſerves on this paſſage, that "there was a neceſſity for cryers whoſe voices were ſtronger than ordinary, in thoſe ancient times, before the uſe of trumpets was known in their armies. And that they were in eſteem afterwards, may be ſeen from Herodotus, where he takes notice that Darius had in his train an Egyptian whoſe voice was louder and ſtronger than that of any other man of his age."

Fabricius has given a liſt of more than ſeventy poets who were ſuppoſed to have flouriſhed before the time of Homer. Of twenty among theſe, fragments of their writings are ſtill to be found diſperſed through Greek literature; and near thirty of them have been celebrated by antiquity as improvers of the art of muſic, and of muſical inſtruments. We might here inſert the names of all theſe ante-Homerian muſicians, and relate what has been recorded concerning them in ancient authors; but this would be encroaching on that place which muſt be reſerved for perſons and tranſactions of more modern times, and of greater certitude. Indeed ſeveral of them have been mentioned already; and, as the reſt will naturally appear in their places in the alphabet, we ſhall here notice only Thamyris and Demodocus.

Thamyris is called by Homer *κιθαριϛης*, "one who plays on the cithara." Plutarch, in his Dialogue on Muſic, tells us, that he was born in Thrace, the country of Orpheus, and had the ſweeteſt and moſt ſonorous voice of any bard of his time. He was the ſon of Philammon, of whom mention has already been made. Homer, in his Catalogue of Ships, where he ſpeaks of the cities under the dominion of Neſtor, mentions Dorion as the place where Thamyris contended with the Muſes, whom he had the arrogance to challenge to a trial of ſkill in poetry and muſic. The conditions and conſequences of this contention are fully deſcribed by the poet:

And Dorion, fam'd for Thamyris' diſgrace,
Superior once of all the tuneful race,
Till, vain of mortals' empty praiſe, he ſtrove
To match the ſeed of cloud-compelling Jove:
Too daring bard! whoſe unſucceſsful pride
Th' immortal Muſes in their art defy'd;
Th' avenging Muſes of the light of day
Depriv'd his eyes, and ſnatch'd his voice away:
No more his heav'nly voice was heard to ſing,
His hand no more awak'd the ſilver ſtring. *Iliad* ii.

Plutarch informs us alſo, that the painter Polygnotus, in his celebrated picture of Ulyſſes' deſcent into hell, which was preſerved in the temple of Delphos, had repreſented the wretched Thamyris with his eyes put out, his hair and beard long and diſhevelled, and his lyre, broken and unſtrung, lying at his feet. It is certain too, according to Pauſanias, that this bard was not only the ſubject of painting and poetry, but of ſculpture; for he tells us, that, among the ſtatues with which Mount Helicon was decorated, he ſaw one of Thamyris, repreſented blind, and holding a broken lyre in his hand. According to Diodorus Siculus, he learnt muſic at the ſchool of Linus. Pliny tells us that he was the firſt who performed on an inſtrument without the voice, i. e. the firſt *ſolo-player*; and, if we may credit Suidas, he was generally regarded as the eighth among the epic poets who preceded Homer. As to his works, which are wholly loſt, antiquity has preſerved the names of ſeveral. Tzetzes mentions a Coſmogony, or creation of the world, in five hundred verſes, and Suidas a Theogony in three thouſand; perhaps both theſe writers ſpeak of one and the ſame poem. He was ſaid chiefly to have excelled in the compoſition of hymns; on which account Plato compares him with Orpheus; and, as he makes the ſoul of this bard, after death, paſs into that of a ſwan, he fixes the reſidence of that of Thamyris in a nightingale. We only know his poem upon the War of the Titans by what Plutarch tells us of it from Heraclides of Pontus. Clemens Alexandrinus attributes to him the invention of the Dorian mode or melody, which, if it could be proved, would be of more importance to our preſent enquiries than the aſcertaining his poetical works. But this mode, it has been ſuggeſted already, was ſo ancient, that it may well be imagined to have been brought out of Egypt by the firſt invaders of Greece, who ſettled in that part of it which was called Doria.

In ſpeaking of Demodocus, Homer has taken occaſion to exalt the character of poet and bard to the ſummit of human glory; and it has been generally thought, ſays Pope, that Homer repreſented himſelf in the perſon of Demodocus. It is remarkable, at leaſt, that he takes very extraordinary care of his brother-poet, and introduces him as a perſon of great diſtinction. He calls him (Odyſſ. viii.) "the hero Demodocus:" he places him on a throne ſtudded with ſilver, and gives him an herald for his attendant. Nor is he leſs careful to provide for his entertainment: he has a particular table, and a capacious bowl ſet before him to drink from "as often as he had a mind," as the original expreſſes it. Some merry wits have turned the laſt circumſtance into raillery, and inſinuate that Homer in this place, as well as in the former, means himſelf in the perſon of Demodocus; an intimation that he would not be diſpleaſed to meet with the like hoſpitality. Homer ſeveral times in this book aſcribes the ſong of Demodocus to immediate inſpiration; but to cite all the praiſe beſtowed upon Demodocus, would be to tranſcribe the whole eighth book of the Odyſſey. It may be worth obſerving, that he ſung and played extempore: "The bard, advancing, meditates the lay." And again:

O more than man! thy ſoul the Muſe inſpires,
And Phœbus animates with all his fires:
For who, by Phœbus uninform'd, could know
The woe of Greece, and ſing ſo well the woe?
Juſt to the tale, as preſent at the fray,
Or taught the labours of the dreadful day;
The ſong recalls paſt horrors to my eyes,
And bids proud Ilion from her aſhes riſe. *Pope.*

Euſtathius obſerves, that Homer in this paſſage very artfully repreſents himſelf in the perſon of Demodocus: it is *he* who wrote the war of Troy with as much faithfulneſs as if he had been preſent at it; it is *he* who had little or no aſſiſtance from former relations of that ſtory, and conſequently receives it from Apollo and the Muſes. This is moreover a ſecret inſinuation, that we are not to look upon the Iliad as all fiction and fable, but in general as a real hiſtory, related with as much certainty as if the poet had been preſent at thoſe memorable actions.

Euſtathius adds, that poets were ranked in the claſs of philoſophers; and the ancients made uſe of them as preceptors in muſic and morality. But he tells us likewiſe, that theſe *αοιδοι* were ſaid by ſome writers to have had their names from this circumſtance, *ὡς αιδοια μη εχοντες*; exactly reſembling the Italian ſingers. "If this be true, (ſays Pope,) it makes a great difference between the ancient and modern poets, and is the only advantage that I know of which we have over them." This idea ſufficiently qualifies a bard for the office of guardian to the chaſtity of a frail princeſs, and puts him upon a footing with the chamberlains, the *ευνουχοι* of ancient Perſia, and other eaſtern countries. And accordingly, Demodocus is ſuppoſed by the ſame critic, and by others, to have been the bard, already mentioned at p. 296. with whom Agamemnon left Clytemneſtra in charge. He was blind, as well as Tireſias, Thamyris, and Homer. The inſtrument he played upon is called in the Odyſſey *phorminx*. Plutarch ſays, that he wrote the Deſtruction of Troy in verſe, and the Nuptials of Vulcan and Venus. And Ulyſſes is ſaid, by Ptolemy Hephæſtion, to have gained the prize at the Tyrrhene games, by ſinging the verſes of Demodocus.

Thaletas of Crete is the next poet-muſician upon record, after Heſiod and Homer. This bard has been confounded by ſome writers with Thales, the celebrated Mileſian philoſopher; but, according to Plutarch, he was cotemporary with Lycurgus, the Spartan legiſlator, and lived about three hundred years after the Trojan war. Plutarch alſo informs us, that, though Thaletas was only ſtyled a lyric poet and muſician, he was likewiſe a great philoſopher and politician; inſomuch that Lycurgus brought him from Crete, when he returned from his travels, to Sparta, in order to have aſſiſtance from him, in eſtabliſhing his new form of government. His Odes, continues Plutarch, were ſo many exhortations to obedience and concord, which he enforced by the ſweetneſs of his voice and melody. Plato, likewiſe, deſcribes his captivating manner of ſinging; and Plutarch, in his Dialogue on Muſic, aſcribes to Thaletas many muſical compoſitions and inventions: ſuch as *pæans*, and new meaſures in verſe, as well as rhythms in muſic, which he had acquired from the flute-playing of Olympus, whom he at firſt had imitated.

tated. Porphyry, in his Life of Pythagoras, ſays, that this philoſopher uſed to amuſe himſelf with ſinging the old Pæans of Thaletas; and Athenæus likewiſe tells us, that the Spartans long continued to ſing his airs; and, according to the ſcholiaſt on Pindar, this poet-muſician was the firſt who compoſed the *hyporchemes*, for the armed or military dance. The Greeks called *ὑπορχημα*, a kind of poetry compoſed, not only to be *ſung* to the ſound of flutes and cithara, but to be *danced* at the ſame time. The Italian term *ballata*, the French *ballade*, and the Engliſh word *ballad*, now *ballet* in French and Engliſh, had formerly the ſame import; implying, ſeverally, a ſong, the melody of which was to regulate the time of a dance. And the different meaſures of poetry being called *feet*, both in ancient and modern languages, ſuggeſts an idea that *dancing*, if not anterior to poetry and muſic, had a very early and intimate connection with them both. The poet Simonides defined Poetry *an eloquent dance;* and Dancing, *a ſilent poetry*.

There was another poet and muſician of the name of *Thaletas*, who was likewiſe a Cretan, that flouriſhed much later than the cotemporary and friend of Lycurgus. Sir Iſaac Newton has named him among the early victors at the Pythic games; and Dr. Blair places him 673 years B. C. This is the Thaletas whom Plutarch makes cotemporary with Solon; and of whom it is related, that he delivered the Lacedæmonians from the peſtilence by the ſweetneſs of his lyre.

Archilochus has been mentioned as the inventor of *dramatic melody*, or the melody uſed in declamation; which, in modern language, might be termed "Recitative to ſtrict meaſure," ſuch as the voice-part obſerves in many modern pieces of accompanied recitative. For his family, the time when he flouriſhed, and the manner of his death, ſee vol. ii. p. 60. Dr. Burney ſays, "There is a great reſemblance between the incidents of his life and thoſe of the poet Rouſſeau: both were equally unfortunate in love, friendſhip, and death; both were at war with the world, and the world with them; nor was either admired till he ceaſed to be feared. A peeviſh, ſatirical, and iraſcible diſpoſition ſoured the public, and embittered their own exiſtence. A general ſatiriſt, like Cocles on the bridge, ſtands alone, againſt a whole army of foes." Archilochus is generally ranked among the firſt victors at the Pythic games; and we learn from Pindar, that his muſe was not always a termagant: for though no *mortal* eſcaped her rage, yet ſhe was at times ſufficiently tranquil and pious to dictate hymns in praiſe of the *gods* and *heroes*. One, in particular, written in honour of Hercules, acquired him the acclamations of all Greece; for he ſung it in full aſſembly at the Olympic games, and had the ſatiſfaction of receiving from the judges the crown of victory, conſecrated to real merit. This hymn, or ode, was afterwards ſung in honour of every victor at Olympia who had no poet to celebrate his particular exploits.

The Lacedæmonians, though a military people, of auſtere manners, appear at all times, notwithſtanding their inhoſpitable law againſt the admiſſion of ſtrangers, to have invited eminent muſicians into their country, and to have encouraged muſic; not only in order to regulate their ſteps and animate the courage of their troops, but to grace their feſtivals, and fill their hours of leiſure in private life. Tyrtæus, an Athenian general, and muſician, is celebrated by all antiquity for the compoſition of military ſongs and airs, as well as the performance of them. He was called to the aſſiſtance of the Lacedæmonians, in the ſecond war with the Meſſenians, about 685 B. C. and a memorable victory which they obtained over that people is attributed, by the ancient ſcholiaſts upon Horace, to the animating ſound of a *new military flute*, or *clarion*, invented and played upon by Tyrtæus. Plutarch tells us that they gave him the freedom of their city; and that his military airs were conſtantly ſung and played in the Spartan army, to the laſt hour of the republic. And Lycurgus the orator, in his oration againſt Leocrates, ſays, "The Spartans made a law, that, whenever they were in arms, and going out upon any military expedition, they ſhould all be firſt ſummoned to the king's tent, to hear the ſongs of Tyrtæus;" thinking it the beſt means of ſending them forth with a diſpoſition to die with pleaſure for their country. He was likewiſe the author of a celebrated ſong and dance performed at feſtivals by *three choirs;* the firſt of which was compoſed of *old men*, the ſecond of ſuch as were arrived at *maturity*, and the third of *boys*. The firſt chorus began by this verſe:

In youth our ſouls with martial ardor glow'd.
The 2d. We preſent glory ſeek—point out the road.
The 3d. Though now with children we can only claſs,
We hope our future deeds will your's ſurpaſs.

The *trumpet* is firſt mentioned in Greece at the time of the Olympic games. We have the authority of Pauſanias (lib. vi.) for the horſe-race being accompanied by the trumpet; and many ancient writers tell us that the chariot-race was likewiſe accompanied by the flute. In the 96th Olympiad, 396 B. C. a prize was inſtituted at the Olympic games for the beſt performer on the trumpet. The firſt performer upon this inſtrument, who gained the prize at the Olympic games, was Timæus of Elis. His countryman, Crates, obtained one there the ſame year, on the cornet, or horn. Archias of Hybla, in Sicily, was victor on the trumpet at three ſeveral Olympiads, after this period. Theſe premiums ſeem not to have been temporary, but to have been continued long after their firſt eſtabliſhment; for Athenæus informs us, that the famous trumpeter, Herodorus of Megara, was victor at the Olympic games ten ſeveral times; Julius Pollux ſays fifteen. But theſe writers muſt mean that he obtained ſo many prizes at the *different* games of Greece; as Athenæus informs us that he was victor in the whole circle of ſacred games, having been crowned at the Olympian, Pythian, Nemean, and Iſthmian, by turns. As Herodorus is allowed to have been cotemporary with Demetrius Poliorcetes, he may be placed about the 120th Olymp. 300 B. C. According to the authors already cited, he was as remarkable for his gigantic figure and enormous appetite as for the ſtrength of his lungs, which were ſo powerful in blowing the trumpet, that he could not be heard with ſafety, unleſs at a great diſtance. But, upon theſe occaſions, the danger was not always confined to the *hearers;* the performers themſelves, ſometimes, ſeem to have exulted, and to have been very thankful, that they found themſelves alive and well when their *ſolos* were ended. An epigram of Archias, the Hyblæan trumpeter, mentioned above, is preſerved in Julius Pollux, in which he dedicates a ſtatue to Apollo, in gratitude for his having been enabled to proclaim the Olympic games with his trumpet three times, without burſting his cheeks or a blood-veſſel, though he ſounded with all his force, and without a *capiſtrum*. This will not be wondered at, after what has been related (p. 295.) of the dangers of the flute.

The Olympic games, according to St. Chryſoſtom, continued to be celebrated with ſplendour till the end of the fourth century.

The Pythic games were ſtill more ancient. For the occaſion of their inſtitution, ſee Apollo, vol. i. p. 804. They were celebrated at firſt once in eight or nine years; but in proceſs of time were repeated every four years. And if, as Ovid informs us, they owe their inſtitution to Amphictyon, the ſon of Deucalion, ſoon after the deluge which bears the name of his father, they were the moſt ancient of all the four great games of Greece: for Pauſanias tells us that the Olympic games were firſt celebrated by Clymenus, a deſcendant of Hercules, fifty years after the deluge of Deucalion. However, the ſame writer, who, in his travels through Greece, was particularly ſolicitous to inform himſelf of every circumſtance relative to theſe inſtitutions, tells us, that Diomedes, the ſon of Tydeus, having eſcaped a dangerous tempeſt in returning from Troy, dedicated a temple to Apollo, and founded the Pythian games in his honour. After being diſcontinued for ſome time, they were renewed by the brave Eurylochus of Theſſaly, whoſe valour and exploits acquired him the name of the *new Achilles.* This renewal of the Pythic games happened in the third year of the forty-eighth Olympiad, 586 before Chriſt; after which time they ſerved as an æra to the inhabitants of Delphos, and the neighbourhood.

"The Pythic games (ſays Pauſanias, lib. x. c. 7.) conſiſted, in ancient times, of only poetical and muſical conteſts; and the prize was given to him who had written and ſung the beſt hymn in honour of Apollo. At their firſt celebration, Chryſothemis of Crete, the ſon of Carmanor, who purified Apollo after he had killed the Python, was victor. After him, Philammon, the ſon of Chryſothemis, won the prize; and the next who was crowned, was Thamyris, the ſon of Philammon. Eleutherus is recorded to have gained the prize there, by the power and ſweetneſs of his voice; though the hymn which he ſung was the compoſition of another. It is ſaid, likewiſe, that Heſiod was refuſed admiſſion among the candidates, on account of his not having been able to accompany himſelf upon the lyre; and that Homer, though he went to Delphos to conſult the oracle, yet, on account of his blindneſs and infirmities, he made but little uſe of his talent of ſinging and playing upon the lyre at the ſame time." Hence it appears, that, though muſical conteſts were, perhaps, not ranked among the regular and eſtabliſhed exerciſes of the Olympic games, yet all antiquity agrees, that *no others* were admitted into the *Pythic,* during the firſt ages of their celebration.

Pauſanias, in his enumeration of the muſical conteſts that were added to the ancient Pythic games, at the cloſe of the Criſſæan war, tells us, that the Amphictyons propoſed prizes, not only for thoſe muſicians who ſung beſt to the accompaniment of the cithara, the only combat at the firſt inſtitution of theſe games, but others, both to ſuch as ſhould ſing beſt to the accompaniment of the flute, and to thoſe who, with the greateſt preciſion and taſte, played on that inſtrument alone, *without ſinging.* Here began the ſeparation of muſic and poetry. All the trials of ſkill, all the performances at banquets, feſtivals, and ſacrifices, have hitherto been confined to *vocal muſic,* accompanied by inſtruments indeed, but where poetry had an important concern; at leaſt, no inſtrumental muſic, without vocal, ſince the conteſt between Apollo and Marſyas, is mentioned in ancient authors, before this time, except that of the trumpet mentioned in the preceding page, the lyre and flute having, in public exhibitions, been mere attendants on the voice, and on poetry.

This was ſoon after the time when Sacadas is recorded to have played his Pythic air, on the flute, at Delphos, which reconciled Apollo (or his prieſt) to that inſtrument; who, till then, was ſaid to have had it in abhorrence ever ſince the conteſt with Marſyas. This muſician was not crowned the firſt time he played at the Pythic games, but in two ſubſequent Pythiads he obtained the prize; which furniſhes a proof that inſtrumental muſic, ſeparated from vocal, began now to be ſucceſsfully cultivated among the Greeks.

After this, the ſame games and combats were eſtabliſhed at Delphos as at Olympia. The Amphictyons retrenched the flute-accompaniment, on account of that inſtrument being too plaintive, and fit only for lamentations and elegies, to which it was chiefly appropriated. A proof of this, ſays Pauſanias, is given in the offering which Echembrotus made to Hercules of a bronze tripod, with this inſcription: "Echembrotus the Arcadian dedicated this tripod to Hercules, after obtaining the prize at the games of the Amphictyons, where he accompanied the elegies that were ſung in the aſſembly of the Greeks, with the flute."

At the 8th Pythiad, 559 years B.C. a crown was given to *players upon ſtringed inſtruments, without ſinging,* which was won by Agelaus of Tegea.

Strabo, ſpeaking of the different kinds of conteſts eſtabliſhed by the Amphictyons, at the firſt Pythic games after the Criſſæans were ſubdued, mentions a particular ſpecies of compoſition, which was ſung to the hymn in praiſe of Apollo, and accompanied by inſtruments. It was called the *Pythian nome:* and was a kind of long cantata, conſiſting of five parts, or movements, all alluding to the victory obtained by the god over the ſerpent Python. The firſt part was called the *prelude,* or preparation for the fight; the ſecond, *the onſet,* or beginning of the combat; the third, *the heat of the battle;* the fourth, *the ſong of victory,* or the inſults of Apollo over the ſerpent Python, compoſed of Iambics and Dactyls; and the fifth, *the hiſſing of the dying monſter.* This air, Pauſanias tells us, was compoſed, and firſt played at Delphos, by Sacadas, who, according to Plutarch, was an excellent poet, as well as muſician, and author of lyric poems, of elegies, and of a compoſition conſiſting of three ſtrophes or couplets, performed ſucceſſively in the three modes chiefly uſed in his time, the Dorian, Phrygian, and Lydian; and this air was called *trimeles,* on account of its changes of modulation. Both Plutarch and Pauſanias mention his having been celebrated by Pindar; but, as we are not in poſſeſſion of all that poet's works, this honourable teſtimony cannot be found at preſent. The reputation of Sacadas muſt doubtleſs have been very great: for Plutarch ſays, that his name was inſerted in the Pythic liſt of good poets; and Pauſanias, that he found his ſtatue, with a flute in his hand, on mount Helicon, and his tomb at Argos. We are the more particular in ſpeaking of this perſonage, as he is the firſt upon record who detached muſic from poetry, and who, though a good poet himſelf, engaged the public attention in favour of *mere inſtrumental muſic;* a *ſchiſm* (ſays Dr. Burney) that has been as ſeverely cenſured as any one in the church. The cenſurers, however, have forgotten that ſuch ſchiſms in the arts are as much to be deſired as thoſe of religion are to be avoided; ſince it is by ſuch ſeparations only, that the different arts, and different branches of the ſame art, becoming the objects of ſeparate and excluſive cultivation, are brought to their laſt refinement and perfection.

After Sacadas had pointed out the road to fame by means of inſtrumental muſic, it was ſo ſucceſsfully purſued by Pythocritus, of Sicyon, whoſe ſtatue was erected at Olympia, that he gained the prize of Delphos, as a ſolo-player on the flute, ſix different times.

Sir Iſaac Newton obſerves, that by the encouragement of the Pythic games, after their regular celebration was eſtabliſhed, ſeveral eminent muſicians and poets flouriſhed in Greece; and gives a catalogue of more than twenty, concerning ſeveral of whom particular mention has been made already, in the courſe of this article.

Alcman, the firſt of theſe ancient bards, was a native of Sardis, and flouriſhed about 670 years B.C. Heraclides of Pontus aſſures us, that he was a ſlave in his youth at Sparta; but that, by his good qualities and genius, he acquired his freedom, and a conſiderable reputation in lyric poetry. He was conſequently an excellent performer on the cithara; and, if he was not a flute-player, he at leaſt ſung verſes to that inſtrument. Clemens Alexandrinus makes him author of muſic for choral dances; and, according to Archytas Harmoniacus, quoted by Athenæus, Alcman was one of the firſt and moſt eminent compoſers of ſongs upon love and gallantry. If we may credit Suidas, he was the firſt who excluded hexameters from verſes that were to be ſung to the lyre, which afterwards obtained the title of *lyric poems.*

Alcæus was born at Mitylene, the capital of Leſbos He flouriſhed, according to the Chronicle of Euſebius, in the 44th Olympiad, that is to ſay, about 604 years B.C and was conſequently the countryman and cotemporary of Sappho, with whom, it is pretended, he was violently enamoured. He is generally allowed to have been one of the greateſt lyric poets in antiquity; and, as he lived before the ſeparation of the twin-ſiſters, poetry and muſic, this character muſt imply that he was the friend and favourite of both. His numerous poems, on different ſubjects, were written in the Æolian dialect, and chiefly in a meaſure of his own invention, which has ever ſince been diſtinguiſhed by the name of *Alcaic*. Of theſe only a few fragments remain. He compoſed hymns, odes, and epigrams, upon very different ſubjects; ſometimes railing at tyrants, and ſinging their downfall; ſometimes his own military exploits; his misfortunes; his ſufferings at ſea; his exile; and all, according to Quintilian, in a manner ſo chaſte, conciſe, magnificent, and ſententious, and ſo nearly approaching to that of Homer, that he well merited the *golden plectrum* beſtowed upon him by Horace. Sometimes he deſcended to leſs ſerious ſubjects, ſinging cheerfully the praiſes of Bacchus, Venus, Cupid, and the Muſes.

The adventures of Sappho, and the remains of her poetical works, will be the ſubject of a future article. A muſical invention has, however, been attributed to her, of which it ſeems neceſſary to take ſome notice in this place. This celebrated poeteſs is ſaid by Plutarch, from Ariſtoxenus, to have invented the *Mixo-Lydian mode*. Dr. Burney is of opinion, that the Lydian mode was the higheſt of the five original modes, having its loweſt ſound upon F♯, the fourth line in the baſs. The *Mixo-Lydian* was higher by half a tone; the *Hyper-mixo-Lydian* a minor third higher, and the *Hyper-Lydian* a fourth higher. Plato, deſirous of ſimplifying muſic, and of keeping the ſcale within moderate bounds, complains, in the third book of his Republic, of the licentiouſneſs of theſe acute modes. Now, if the only difference in the modes was the place they occupied in the great ſyſtem, with reſpect to gravity or acuteneſs, the *invention*, as it was called, of this mode, may have been ſuggeſted to Sappho, by her having a voice of a higher pitch than her predeceſſors; ſhe was, perhaps, the Agujari of her time, and could tranſcend the limits of all former ſcales with equal facility. But, though nature may have enabled this exquiſite poeteſs to ſing her verſes in a higher key than any one had done before, yet, as it is allowed but to few to ſurpaſs the common boundaries of human faculties and talents, it is probable that her ſucceſſors, by attempting, with inferior organs, to aſcend thoſe heights, had given offence to Plato, and determined him to prohibit the uſe of this mode in his republic, as indecorous, and too effeminate even for women. If, however, it be true, that the characteriſtic of the modes depended partly, if not principally, upon the *rhythm* or *cadence*, it ſeems not an improbable conjecture, that beſides the difference of pitch, the novelty of Sappho's mode might, in a great meaſure, conſiſt in her firſt applying to melody the meaſure called *Sapphic*, from her invention of it. This mode, as Plutarch informs us, was adopted by the tragic poets, as proper for pathos, and lamentation; a character for which it is not eaſy to account, without ſuppoſing other differences beſides thoſe of mere *rhythm*, or *pitch*; though both Plato and Plutarch evidently aſcribe this character, in part, at leaſt, to the circumſtance of acuteneſs.

Simonides was born in the 55th Olympiad, 538 years B.C. and died in his ninetieth year. He was a native of Ceos, one of the Cyclades, in the neighbourhood of Attica; and the preceptor of Pindar. Both Plato and Cicero not only give him the character of a good poet and muſician, but ſpeak of him as a perſon of great virtue and wiſdom. Such longevity gave him an opportunity of knowing a great number of the firſt characters in antiquity, with whom he was in ſome meaſure connected. It appears in Fabricius, from ancient authority, that he was cotemporary and in friendſhip with Pittacus of Mitylene; Hipparchus, tyrant of Athens; Pauſanias, king of Sparta; Hiero, tyrant of Syracuſe; with Themiſtocles; and with Aleuades, king of Theſſaly. He obtained the prize in poetry at the public games when he was fourſcore years of age. According to Suidas, he added four letters to the Greek alphabet; and Pliny aſſigns to him the eighth ſtring of the lyre; but theſe claims are diſputed by the learned. Among the numerous poetical productions, of which, according to Fabricius, antiquity has made him the author, are many ſongs of victory and triumph, for athletic conquerors at the public games. He is likewiſe ſaid to have gained there, himſelf, the prize in elegiac poetry, when Æſchylus was his competitor. His poetry was ſo tender and plaintive, that he acquired the cognomen of "*Melicertes*, ſweet as honey;" and the tearful eye of his muſe was proverbial.

Bacchylides was the nephew of Simonides, and the cotemporary and rival of Pindar. Both ſung the victories of Hiero at the public games. Beſides odes to athletic victors, he was author of Love Verſes; Proſodies; Dithyrambics; Hymns; Pæans; Hyporchemes; and Parthenia, or ſongs to be ſung by a chorus of virgins at feſtivals. The chronology of Euſebius places the birth of Bacchylides in the 82d Olympiad, about 450 B.C.

Pindar was born at Thebes in Bæotia, about 520 years B.C. He received his firſt muſical inſtructions from his father, who was a flute-player by profeſſion; after which, according to Suidas, he was placed under Myrtis, a lady of diſtinguiſhed abilities in lyric poetry. It was during this period, that he became acquainted with the poeteſs Corinna, who was likewiſe a ſtudent under Myrtis. Plutarch tells us, that Pindar profited from the leſſons which Corinna, more advanced in her ſtudies, gave him at this ſchool. Pindar, however, ſoon quitted the leading-ſtrings of theſe ladies, his poetical nurſes, and became the diſciple of Simonides, now arrived at extreme old age; after which he ſoon ſurpaſſed all his maſters, and acquired great reputation throughout Greece; but, like a true *prophet*, was leſs honoured in his own country than elſewhere; for at Thebes he was frequently pronounced to be vanquiſhed, in the muſical and poetical conteſts, by candidates of inferior merit. The cuſtom of having theſe public trials of ſkill, in all the great cities of Greece, was now ſo prevalent, that but little fame was to be acquired by a muſician or poet, any other way than by entering the liſts; and we find that both Myrtis and Corinna publicly diſputed the prize with him at Thebes. A public contention with Myrtis, his *alma mater*, and with his *ſiſter-ſtudent* Corinna, ſeems unnatural; but there are few ties which can keep ambition within due bounds. He obtained a victory over Myrtis; but was vanquiſhed five different times by Corinna. The judges, upon occaſions like theſe, have been frequently accuſed of partiality or ignorance, not only by the vanquiſhed, but by poſterity: and, if the merit of Pindar was pronounced inferior to that of Corinna five ſeveral times, it was, ſays Pauſanias, becauſe the judges were more ſenſible to the charms of beauty than to thoſe of muſic and poetry. Was it not ſtrange, ſaid the Scythian Anacharſis, that the Grecian artiſts were never judged by artiſts, their peers?

Thebes ſeems to have been the purgatory of our young bard; when he quitted that city, as his judgment was matured, he avoided moſt of the errors for which he had been chaſtiſed, and ſuddenly became the wonder and delight of all Greece. Every hero, prince, and potentate, deſirous of laſting fame, courted the muſe of Pindar. He ſeems frequently to have been preſent at the four great feſtivals of the Olympian, Pythian, Nemæan, and Iſthmian, games, as may be inferred from ſeveral circumſtances and expreſſions in the odes which he compoſed for the victors in them all. Thoſe at Olympia, who were ambitious of having their achievements celebrated by Pindar, applied to him for an ode, which was firſt ſung in the *Prytaneum*, or town-hall of Olympia, where there was a banquetting-room ſet apart for the entertainment of the conquerors. Here the ode was rehearſed by a chorus, accompanied by inſtruments. It was afterwards performed in the ſame manner at the triumphal entry of the victor into his own country, in proceſſions, or at the ſacrifices that were made with great pomp and ſolemnity on the occaſion.

Pauſanias ſays, that the character of poet was truly conſecrated, in the perſon of Pindar, by the god of verſe himſelf, who was pleaſed, by an expreſs oracle, to order the inhabitants of Delphos to ſet apart, for Pindar, one half of the firſt-fruit offerings brought by the religious to his ſhrine, and to allow him a conſpicuous place in his temple; where, in an iron chair, he uſed to ſit and ſing his hymns in honour of that god. This chair was remaining in the time of Pauſanias, ſeveral centuries after; and ſhown to him as a relic, not unworthy of the ſanctity and magnificence of that place. Such a *ſinger* as Pindar would be heard with the ſame rapture in a Pagan temple, as a Farinelli in an Italian church; and, as both would draw together crowded congregations, both would be equally careſſed and encouraged by the prieſts.

But, though Pindar's muſe was penſioned at Delphos, and well paid by princes and potentates elſewhere, ſhe ſeems, however, ſometimes to have ſung the ſpontaneous ſtrains of pure friendſhip. Of this kind were, probably, the verſes beſtowed upon the muſician Midas, of Agrigentum, in Sicily, who had twice obtained the palm of victory, by his performance on the flute, at the Pythic games. It is in the 12th Pythic Ode, that Pindar celebrates the victory of Midas over all Greece, "upon that inſtrument which Minerva herſelf had invented." This Midas is a very different perſonage from his long-eared majeſty of Phrygia, whoſe deciſion in favour of Pan, had given ſuch offence to Apollo; as is manifeſted, indeed, from his having been cotemporary with Pindar. The moſt extraordinary part of this muſician's performance, that can be gathered from the ſcholiaſt upon Pindar, was his finiſhing the ſolo, without a reed, or mouth-piece, which broke accidentally while he was playing. The legendary account given by the poet in this ode, of the occaſion upon which the *flute* was invented by Minerva, is diverting: "It was, ſays he, to imitate the howling of the Gorgons, and the hiſſing of their ſnakes, which the goddeſs had heard when the head of Meduſa (one of theſe three *Anti-Graces*) was cut off by Perſeus."

Plutarch, who on many occaſions ſeems to have conſulted the regiſters of the ſacred games, tells us, in his Life of Lyſander the Spartan general, that the muſician Ariſtonoüs, who had ſix times obtained the prize for ſinging to the *cithara* in the Pythic games, flattered Lyſander ſo far as to tell him, that, if ever he gained another victory, he would be publicly proclaimed his diſciple and ſervant. This was after the Spartan had taken the city of Athens, beaten down the walls, and burned all the ſhips in the harbour, *to the ſound of flutes;* an event which happened in the 94th Olympiad, 404 years B. C.

Indiſputable teſtimonies are to be found in ancient authors, of the continuation of muſical conteſts at theſe games, till their final abolition after the eſtabliſhment of the Chriſtian religion. We ſhall only mention the victory which Pauſanias informs us, was gained there by Pylades, upon the cithara, about the 94th Pythiad, 211 years before Chriſt; the *Pythic laurel,* which both Suetonius and Dio Caſſius inform us, Nero, as a *citharœdiſt,* who had been victor at thoſe games, brought out of Greece, 66 years after the ſame æra; and the two Pythic victories, recorded in the Oxford Marbles, among innumerable others, which C. Ant. Septimius Publius, the citharœdiſt, obtained during the reign of the emperor Septimius Severus, about the end of the ſecond century.

We paſs over the Nemæan and Iſthmian games, and come to the Panathenæan. There were two ſolemn feſtivals under this denomination at Athens, the greater and the leſs; both of which were celebrated there in honour of Minerva, the patroneſs of that city. They muſt have been of very high antiquity, as their firſt inſtitution was aſcribed to Orpheus, and to king Erichthonius; and their renewal and augmentation to Theſeus. The greater *Panathenæa* were exhibited every five years, the leſs every three, or, according to ſome writers, annually. Though the celebration of neither, at firſt, employed more than one day, yet in after-times they were protracted for the ſpace of many days, and ſolemnized with greater preparations and magnificence than at their firſt inſtitution.

The firſt who obtained the prize here, on the cithara, according to the Oxford Marbles, was Phrynis, of Mitylene, about 457 years B. C. But this muſician was not equally ſucceſsful when he contended with Timotheus, who boaſts, himſelf, of a victory he had obtained over him, in ſome verſes preſerved by Plutarch.

There were premiums likewiſe given to players on the flute, an inſtrument long in the higheſt eſtimation throughout all Greece, but in particular requeſt at Athens; perhaps from the legendary account of its invention by Minerva, the protectreſs of that city. Ariſtotle tells us, that the flute, after its firſt invention, was uſed by mean people, and thought an ignoble inſtrument, unworthy of a free man, till after the invaſion and defeat of the Perſians; when eaſe, affluence, and luxury, ſoon rendered its uſe ſo common, that it was a diſgrace to a perſon of birth not to know how to play upon it. Callias and Critias, celebrated Athenians, Archytas of Tarentum, Philolaüs, and Epaminondas, were able performers on the flute. Indeed muſic in general was in ſuch favour, and the ſtudy of it was thought ſo eſſential a part of education, at Athens, in the time of Pericles and Socrates, that Plato and Plutarch have thought it neceſſary to inform us of whom thoſe two great perſonages received inſtructions in that art. Damon, the Athenian, was the muſic-maſter of both. The philoſopher calls him his friend, in a Dialogue of Plato, where Nicias, one of the interlocutors, informs the company, that Socrates had recommended, as a muſic-maſter to his ſon, Damon, the diſciple of Agathocles, who not only excelled in his own profeſſion, but poſſeſſed every quality that could be wiſhed in a man to whom the care of youth was to be confided.

Strabo ſays, it was the general opinion, that the Greeks had the chief part of their muſic, and muſical inſtruments, from Aſia and Thrace. And, according to Athenæus, lib. xiii. muſic was thought a neceſſary female accompliſhment in the time of Darius; for this author tells us, that Parmenio wrote Alexander word, he had taken at Damaſcus three hundred and twenty-nine of the Perſian monarch's concubines, who were all ſkilled in muſic, and performers on the flute and other inſtruments.

It was thought diſgraceful for a gentleman not to be able to play upon the flute. Cornelius Nepos ranks it among the accompliſhments of Epaminondas, that he could dance well, and play on the flute. *But he was a Theban.* It ſeems that Theban flute-players, and Leſbian lyriſts, were always the moſt celebrated throughout Greece. The Thebans in general piqued themſelves much upon being great performers on the flute. This is manifeſt from a paſſage in Dion Chryſoſtom: "The pre-eminence, ſays he, which all Greece unanimouſly allows to the Thebans, in this particular, has been conſtantly regarded by them as a point of great importance, of which I ſhall give an inſtance. After the total ruin of their city, which has never yet been rebuilt, no part of it being now inhabited but the ſmall quarter called *Cadmea,* they gave themſelves but little trouble in reſtoring any of the public monuments that had been thrown down or deſtroyed, one ſtatue only of Mercury excepted, which they took great pains to dig out from among the rubbiſh, and to erect again, on account of the following inſcription: Ἑλλας μεν Θηβας νικαν πρεκρινεν αυλοις; "Greece has declared that Thebes wins the prize upon the flute." So that this ſtatue is ſtill ſtanding in the old public ſquare, among the ruins."

Pronomus, the inventor of a flute, upon which he could play in three different modes, was a Theban. Before his time, there was a particular flute for every mode or key; and ſo out of tune are the generality or modern flutes, (ſays Dr. Burney,) that it were almoſt to be wiſhed the cuſtom had ſtill continued.

Antigenides, one of the moſt renowned muſicians of antiquity, of whoſe life and talents ſuch honourable mention is made in ancient authors, was a native of Thebes in Bœotia. He was invited to Athens by Pericles, and made muſic-maſter to his nephew Alcibiades. But Aulus Gellius relates, from a Hiſtory of Muſic by Pamphila, that his ſcholar Alcibiades, ſetting up for a fine gentleman, and taking the utmoſt care of his perſon, was ſoon diſguſted with his inſtrument, as Minerva herſelf had been before; for, happening to ſee himſelf in a mirror while he was playing, he was ſo ſhocked at the diſtortion of his ſweet countenance, that he broke his flute in a tranſport of paſſion, and threw it away, which brought this inſtrument into great diſgrace among the young people of rank at Athens. However, this diſguſt did not extend to the ſound of the flute itſelf; ſince we find by Plutarch, that the great performers upon it continued long after to be much followed and admired. See ANTIGENIDES, vol. i.

Dorion is mentioned by Plutarch as a flute-player who had made ſeveral changes in the muſic of his time, and who was head of a ſect of performers, opponents to another ſect of practical muſicians, of which Antigenides was the chief; a proof that theſe two maſters were cotemporaries and rivals. It appears, from a paſſage in Xenophon, (Memor. iv.) that it was no uncommon thing for the Athenians to be divided into, what we ſhould call, *fiddling factions*. Socrates, diſcourſing upon the advantages of concord in a ſtate, ſays, "By concord, I mean that the city ſhould agree, not in chooſing the ſame poet, or praiſing the ſame flute-player, but in obeying the ſame laws."

How great a demand there was at this time for flutes, at Athens, may be conceived from a circumſtance mentioned by Plutarch, in his Life of Iſocrates. This orator, ſays he, was the ſon of Theodorus, a flute-maker, who acquired wealth ſufficient by his employment not only to educate his children in a liberal manner, but alſo to bear one of the heavieſt public burdens to which an Athenian citizen was liable; that of furniſhing a *choir*, or *chorus*, for his tribe, or ward, at feſtivals and religious ceremonies. Each tribe furniſhed their diſtinct *chorus;* which conſiſted of a band of vocal and inſtrumental performers, and dancers, who were to be hired, maintained, and dreſſed, during the whole time of the feſtival: an expenſe conſiderable in itſelf, but much increaſed by emulation among the richer citizens, and the diſgrace conſequent to an inferior exhibition.

The importance of the flute is manifeſted by innumerable paſſages in ancient authors; among which there is one in Pliny that is diverting and curious. In ſpeaking of comets, he ſays, that there were ſome *in the ſhape of flutes*, which were imagined to forebode ſome ill to muſic and muſicians. And Montfaucon proves by ſeveral inſcriptions from ancient marbles, that the ſacrificial tibicen, at Athens was always choſen, and his name recorded, with the officers of ſtate. This muſician was called *Auletes*, and, ſometimes *Spondaula*. His office was to play on the flute, cloſe to the ear of the prieſt during ſacrifice, ſome pious air, ſuitable to the ſervice, in order to keep off diſtraction and inattention during the exerciſe of his function. Indeed there is no repreſentation of a ſacrifice, proceſſion, banquet, or feſtive aſſembly, either in ancient painting or ſculpture, without a muſician. And the attendance of flute-players at ſacrifices was ſo common in Greece, that it gave riſe to a proverb, which was uſually applied to ſuch as lived at the tables of others: "You live the life of a flute-player." Becauſe, as Suidas ſays, theſe performers being conſtantly employed at ſacrifices, where the victims furniſhed them with a dinner, were at little or no expenſe in houſekeeping.

The liſt of illuſtrious flute-players in antiquity is too numerous to allow a ſeparate article to each. However, a few, beſides thoſe already mentioned, ſtill hold their heads above the crowd, and ſeem to demand attention. And among theſe, as a particular reſpect ſeems due to *inventors*, who, by genius or ſtudy, have extended the limits of theoretical or practical muſic, *Clonas* muſt not be paſſed by unnoticed. Plutarch, the only author by whom he is mentioned, tells us, that Clonas lived ſoon after the time of Terpander, and was the firſt who compoſed *nomes for the flute*, of which he ſpecifies three that were much celebrated in antiquity, under the names of *Apothetos, Schœnion,* and *Trimeres.* This laſt air, which was ſung by a chorus, muſt have been much celebrated; as Plutarch ſays, that, though the Sicyon Regiſter gave it to Clonas, yet others, among whom was Plutarch himſelf, had aſcribed it to Sacadas. The antique cuſtom of giving names to tunes, has long been adopted in France; all the harpſichord-leſſons of Rameau, and ſeveral other compoſers in that country, having particular denominations affixed to them; ſuch as *La Timide, la Pantomime, l'Indiſcrette, la Complaiſante*, &c. And the ſame abſurd cuſtom now prevails in England; thus we have *le Retour de Windſor, le Retour de Hampſtead*, &c.

Polymneſtus, of Colophon in Ionia, was a compoſer for the flute, as well as an improver of the lyre; and it appears to have been no uncommon accompliſhment for theſe ancient muſicians to perform equally well upon both theſe inſtruments. Polymneſtus is ſaid to have invented the Hypo-Lydian Mode. This mode, being half a tone below the Dorian, which was the loweſt of the five original modes, was, perhaps, the firſt extenſion of the ſcales *downwards*, as the Mixo-Lydian was *upwards*. Plutarch, who aſſigns to him this invention, accuſes him of having taken greater liberties with the ſcale than any one had done before, though it is not now eaſy to diſcover in what thoſe liberties conſiſted.

After ſpeaking of ſo many flute-players of the male ſex, it is but juſtice to ſay that they did not monopolize the whole glory ariſing from the cultivation of that inſtrument; as the performing upon it was ranked, in high antiquity, among female accompliſhments. Its invention was aſcribed by the poets to a goddeſs; it was the ſymbol of one of the muſes; and it was never omitted in the repreſentation of the ſirens.

The moſt celebrated female flute-player in antiquity was LAMIA; ſee vol. xii. p. 107. and p. 295 of this article. —Athenæus has recorded the names of a great number of celebrated *tibicinæ*, whoſe talents and beauty had captivated the hearts of many of the moſt illuſtrious perſonages of antiquity; and yet the uſe of the flute among females ſeems to have been much more general in Perſia than in Greece, by the account which Parmenio gives to Alexander of the female muſicians in the ſervice of Darius. See the preceding page.

Horace ſpeaks of bands of female flute-players, which he calls *Ambubaïrum Collegia*, and of whom there were ſtill colleges in his time. But the followers of this profeſſion became ſo numerous and licentious, that we find their occupation prohibited in the Theodoſian Code; however, with little ſucceſs: for Procopius tells us that in the time of Juſtinian, the ſiſter of the empreſs Theodora, who was a *tibicina*, appeared on the ſtage without any other dreſs than a ſlight ſcarf thrown looſely over her. And theſe performers had at length become ſo common in all private entertainments, as well as at public feaſts, obtruding their company, and placing themſelves at the table, frequently unaſked, that, at the latter end of this reign, their profeſſion was regarded as infamous, and utterly aboliſhed.

We have entered much more into biographical detail in the preſent ſection than our intention was when we began it. Our apology is this—It had been objected to us by ſome of our muſical readers, that we had omitted, in the alphabetical order, the names of many eminent muſicians; and, as we admit the charge to be juſt, we have now endeavoured to ſupply thoſe omiſſions. Among other eminent names which ſhould have appeared in former parts of the alphabet, is that of Epigonius, a mathematician of Sicyon, and native of Ambracia, celebrated by the ancients for the invention of an inſtrument of forty ſtrings, which was called after his name, *epigonium*. When he lived is uncertain; but, as it was in times of ſimplicity, we may ſuppoſe that theſe ſtrings did not form a ſcale of forty different ſounds, but that they were either tuned in uniſons and octaves to each other, or accommodated to different modes and genera. The twelve ſemitones of our three-ſtopt octave-harpſichords include thirty-ſix different ſtrings. The *magadis* of twenty ſtrings, mentioned by Anacreon, had probably a ſeries of only ten different ſounds, the name of the inſtrument implying a ſeries of octaves; for *magadizing* was a term uſed, when a boy, or a woman, and a man, ſung the ſame part. The *ſimicum* of thirty-five ſtrings mentioned by Athenæus muſt have been of this kind, like the arch-lute, double-harp, or double-harpſichord.

Crexus, perhaps, ſhould have an honourable place here, being recorded by Plutarch as the author of a conſiderable invention; that of "an inſtrumental accompaniment under the ſong," (κρουσις ὑπο την ωδην;) whereas, before, ſays Plutarch, the accompaniment was "note for note," (προσχορδα.) As Plutarch plainly oppoſes this accompaniment to that which was in uſe before the time of Crexus, it can only be underſtood as a kind of *bourdon*, or *drone-baſs*, under the voice part: a ſenſe which appears to be ſupported by the uſe of the ſame phraſe, in a problem of Ariſtotle, (the 40th,) where he ſpeaks of *this* accompaniment and the voice *ending together*. It could not therefore have been a mere *ritornello*, or echo to the voice part, as M. Burette interprets it, taking ὑπο to mean *after*, not *under*, the voice.

Phrynis has already been mentioned, p. 359. as the firſt who gained the prize on the cithara at the Panathenæan games. According to Suidas, he was originally king Hiero's cook; but this prince, chancing to hear him play upon the flute, placed him for inſtruction under Ariſtoclides, a deſcendant of Terpander. Phrynis may be regarded as one of the firſt innovators upon the cithara. He is ſaid to have played in a delicate and effeminate ſtyle, which the comic poets, Ariſtophanes and Pherecrates, ridiculed upon the ſtage. The former in his comedy of the Clouds, and the latter in the piece quoted at p. 294. Plutarch, who frequently applies the ſame ſtory and apophthegm to different perſons, tells us, that, when Phrynis offered himſelf as a candidate at the public games in Sparta, he had two ſtrings cut off his lyre by the magiſtrates, in order to reduce them to the ancient number. A ſimilar diſgrace to that which had happened to Terpander before, and to which Timotheus was forced to ſubmit ſoon after.

Between the time of Alexander the Great and the conqueſt of Greece by the Romans, but few eminent muſicians are upon record. The Grecian ſtates never enjoyed true liberty and independence after the victory obtained over them at Cheronea, by Philip, the father of Alexander: the chief of theſe ſtates remaining, after the death of theſe princes, under the Macedonian yoke, till they called in the Romans to their aſſiſtance; who, under Flaminius, reſtored to them the ſhadow of liberty, which was gradually diminiſhed by the victories and devaſtations of Mummius, Sylla, and other commanders, till the time of Veſpaſian, who reduced all Greece to a Roman province.

In deſcribing the muſic and muſical inſtruments of the Greeks, thoſe of the Romans have been included; yet, in order to preſerve a kind of hiſtorical chain, and becauſe we diſmiſſed the ſubject of Roman muſic with too much brevity at p. 295. we ſhall here collect a few paſſages from the beſt hiſtorians to ſupply that omiſſion: for, although the Romans were obliged to the Greeks for moſt of their arts, ſciences, and refinements; yet, as there is no country ſo ſavage, where men aſſociate together, as to be wholly without muſic, it appears that the Romans had in very high antiquity a rude and coarſe muſic of their own, and had imitated the Etruſcan muſical eſtabliſhments, both in their army and temples.

Dionyſius Halicarnaſſenſis, ſpeaking of the antiquity of the Pelaſgians, the inhabitants of Falerii and Feſcennia, two ancient cities of Etruria, built in the Greek form, ſays, "the manner of their religious ceremonies was the ſame as thoſe of Argos. Holy women ſerved in the temple, and a girl unmarried, called *canephoros*, or baſket-bearer, began the ſacrifice, beſides choruſes of virgins, who hymned the goddeſs in ſongs of their country." Now, as the Romans had an earlier communication with the Etruſcans than with the Greeks, this paſſage renders it very probable that they were obliged to the people of Etruria for their religious ceremonies, and for *vocal muſic*. And the ſame author informs us, that "the Arcadians were the firſt who brought into Italy the uſe of Greek letters, and *inſtrumental muſic*, performed on the lyre, and thoſe inſtruments called the trigon and the lydian; for the ſhepherd's pipe was the only inſtrument in uſe before that time."

Plutarch mentions it as a prevailing opinion, that the Greek language which was ſpoken by the Romans in the time of Romulus, was not corrupted by Italian words. From theſe accounts it appears that the Romans had not only vocal and inſtrumental muſic, as well as other arts and ſciences, from Greece, but even their alphabet, language, religion, and all the learning of which they were poſſeſſed during the time of their kings, and the firſt ages of their republic; theſe having been originally Greek, though the Romans had them through Etruſcan ſtrainers.

The firſt Roman triumph, according to Dionyſius, was that of Romulus over the Cæninenſes; in which, clad in a purple robe, he was drawn in a chariot by four horſes. The reſt of the army, both horſe and foot, followed, ranged in three ſeveral diviſions, *hymning* their gods in ſongs of their country, and celebrating their general with *extemporary verſes*. This account affords a very venerable origin to the *Improviſatori* of Italy; as the event happened in the fourth year of Rome, 749 years before Chriſt, and fourth year of the ſeventh Olympiad. The ſame author ſays, that the Roman prætors, in worſhipping the Idæan goddeſs, performed annual ſacrifices and celebrated annual games in her honour, according to the *Roman, not Grecian*, cuſtoms: though the prieſt and prieſteſs of the goddeſs were Phrygians. Theſe carried her image in proceſſion about the city, aſking alms in her name, according to their cuſtom, and wearing figures upon their breaſt, and ſtriking their cymbals, while their followers played tunes upon their flutes, in honour of the mother of the gods.

Theſe are the chief inſtances to be found in ancient hiſtory of original *Roman Muſic;* or at leaſt of muſic that was not immediately derived from Greece. M. Rouſſeau, ſpeaking of the *Scolia*, or Grecian ſongs, ſays, "This kind of ſongs paſſed from the Greeks to the Romans, and many of the Odes of Horace are Bacchanalian and love ſongs. But this nation, more military than ſenſual, for a long while made but a very groſs uſe of muſic and ſongs, and never approached in theſe particulars the voluptuous grace and elegance of the Greeks. It ſeems as if melody always remained in a coarſe and rude ſtate among the Romans. Their hymeneal odes were rather noiſe and clamour than ſongs, and it is hardly to be preſumed that the ſatirical ſongs of the ſoldiers, in the triumphs of their generals, conſiſted of a very agreeable melody."

Numa began his reign in the middle of the ſixteenth Olympiad, 715 years before Chriſt, about the time when Pythagoras was in Italy. And, according to Dionyſius, the ſixth branch of his religious inſtitutions was the eſtabliſhment of the *Salii*, whom Numa himſelf appointed out of the patricians, chooſing twelve young men of the moſt graceful appearance. Theſe Salii were a kind of dancers and ſingers of hymns in praiſe of the god of war. The feſtivals were celebrated about the time of the Panathenæa at Athens, in the month of March, and at the public

public expenſe; they continued ſeveral days, during which they proceeded dancing through the city to the Forum, and the Capitol, and to many other public and private places, beating time upon the *ancilia*, or ſacred ſhields. The Romans called them *Salii* from their violent motions. And for the ſame reaſon, they called all other dancers *Saltatores*, becauſe their dancing, alſo, was attended with frequent ſpringing and leaping, in imitation of the *Salii:* " In the evolutions which they perform in arms, keeping time to a flute, ſays Dionyſius, ſometimes they move all together, ſometimes by turns; and, in dancing, ſing certain hymns, after the manner of their country. They ſeem to be the ſame as the Greek curetes." This account affords no very ſplendid idea of the Roman dancing, any more than it does of their muſic. Singing and dancing together, during ſuch violent exertions of activity and agility, muſt have enfeebled both.

Servius Tullius, who began his reign 578 B. C. in forming the people into claſſes and centuries, is related by the Roman hiſtorians to have ordained that two whole centuries ſhould conſiſt of *trumpeters, blowers of the horn*, &c. and of ſuch as, *without any other inſtruments, ſounded the charge*. This ſhows the number and the importance of military muſicians in the Roman ſtate near 600 years before Chriſt.

And in the laws of the Twelve Tables, inſtituted about the time that the power of the Decemvirs was aboliſhed, 450 B. C. among thoſe concerning religious rites, we find the two following: I. Let the cryer proclaim the funeral. Let the maſter of the funeral, in the games, make uſe of a public officer, and lictors. Let it be lawful for him to make uſe of three ſquare mantles in the funeral, a purple fillet for the head, and *ten players on the flute*. Let him do no more than this. XII. Let the praiſes of honoured men be diſplayed in an aſſembly of the people; and let mournful ſongs, accompanied with a flute, attend thoſe praiſes.

According to Servius, Macrobius, and Horace, nuptial ſongs, which were afterwards refined and poliſhed into epithalamiums, were firſt uſed by the people of Feſcennia, a city of Etruria, and therefore called *Verſus Feſcennini*. This kind of poetry, in its original, was groſs and obſcene, though long authoriſed by cuſtom. Young people, inſtead of throwing the ſtocking, in the manner of our villagers, ſung the *Feſcennina* before the apartment of the new married pair.

Livy gives a kind of hiſtory of the Roman drama, which, as well as the Grecian, was inſeparable from muſic. The paſſage is ſo curious, that we ſhall inſert it entire. " The plague continued, ſays Livy, to rage this year (364 B. C.) and the following. The moſt remarkable occurrence during this period was, that, in order to obtain mercy of the gods, a public feaſt called *Lectiſternium* was celebrated for them, which was the third entertainment of this kind that had been made ſince the building of the city. But the magiſtrates, finding that the violence of the peſtilence was neither abated by human prudence nor divine aſſiſtance, and having their minds filled with ſuperſtition, among other means which were tried in order to appeaſe the incenſed deities, are ſaid to have inſtituted the games called *Scenici*, which were amuſements entirely new to a warlike people, who, before this time, had none but that of the circus. Theſe theatrical repreſentations, like the beginnings of moſt other things, were at firſt inconſiderable, and borrowed from foreigners; for actors were ſent for from Etruria, who, without verſes, or any action expreſſive of verſes, danced, not ungracefully, after the Tuſcan manner, to the flute. In proceſs of time the Roman youth began to imitate theſe dancers, intermixing raillery in unpoliſhed verſes, their geſtures correſponding with the ſenſe of the words. Thus were theſe plays received at Rome; and, being improved and refined by frequent performances, the Roman actors acquired the name of *hiſtriones*, from the Tuſcan word *hiſter*, which ſignifies a ſtage-player. But their dialogue did not conſiſt of unpremeditated and coarſe jeſts, in ſuch rude verſes as were uſed by the *Feſcennini;* but of ſatires, accompanied with muſic, ſet to the flute, and recited with ſuitable geſtures. And ſome years after, Livius Andronicus firſt ventured to abandon ſatires, and write plays with a regular and connected plot. After ſatires, which had afforded the people ſubject of coarſe mirth and laughter, were, by this regulation, reduced to form, and acting, by degrees, became an art, the Roman youth left it to players by profeſſion, and began, as formerly, to act farces at the end of their regular pieces. Theſe dramas were ſoon after called *Exodia*, and were generally interwoven with the *Atellane* comedies. Theſe were borrowed from the Oſci, and always acted by the Roman youth, who would not allow them to be diſgraced by profeſſed actors. Hence it has been a rule for thoſe who performed in ſuch pieces not to be degraded from their tribe, and they were allowed to ſerve in the army as if they never had appeared on the ſtage." Book vii. c. 2.

The circumſtance of theſe plays having been firſt repreſented on account of the plague, proves theatrical exhibitions to have been originally *religious inſtitutions* among the Romans, as well as the ancient Greeks; and the importance of muſic in religious ceremonies is put out of all doubt by another curious paſſage in Livy, where he has recorded the effects of reſentment in the Roman muſicians, who uſed to perform at ſacrifices, and who, upon an imaginary affront, left the city in a body. The relation of the hiſtorian ſeems to merit a place here without abridgment. " I ſhould omit a circumſtance, ſays he, hardly worth mentioning, if it did not ſeem connected with religion. The *tibicines*, or flute-players, taking offence at the preceding cenſors refuſing them the privilege of eating in the temple of Jupiter, according to traditional cuſtom, withdrew in a body to Tibur, ſo that there were no performers left to play before the ſacrifices. This created religious ſcruples in the minds of the ſenators; and ambaſſadors were ſent to Tibur, to endeavour to perſuade the fugitives to return to Rome. The Tiburtines readily promiſed to uſe their utmoſt endeavours to this end, and, firſt ſummoning them before their ſenate, exhorted them to return to Rome; but, finding them deaf to reaſon or intreaty, they had recourſe to an artifice well ſuited to the diſpoſitions of theſe men. For, upon a certain feſtival, they were all invited by different perſons, under pretence of aſſiſting in the celebration of a feaſt. As men of this profeſſion are generally much addicted to wine, they were ſupplied with it, till, being quite intoxicated, they fell faſt aſleep, and in this condition were flung into carts, and carried to Rome; where they paſſed the remaining part of the night in the Forum, without perceiving what had happened. The next day, while they were full of the fumes of their late debauch, upon opening their eyes they were accoſted by the Roman people, who flocked about them; and, having been prevailed upon to ſtay in their native city, they were allowed the privilege of ſtrolling through all the ſtreets in their robes, three days in every year, playing upon their inſtruments, and indulging themſelves in thoſe licentious exceſſes which are practiſed upon the ſame occaſion to this day. The privilege of eating in the temple was alſo reſtored to ſuch of them as ſhould be employed in playing before the ſacrifices." Book ix. c. 30. This adventure happened 309 years B. C. while the Romans were preparing for two very dangerous wars.

But, notwithſtanding the importance of theſe flute-players to the celebration of religious rites, muſic ſeems to have arrived at no very great degree of refinement or perfection, or to have been much in uſe on other occaſions, till after the conqueſt of Antiochus the Great, king of Syria; and it is mentioned by Livy, as a memorable æra of luxury, that the cuſtom was then firſt introduced at Rome of having *pſaltriæ*, or female muſicians, to attend and perform at feaſts and banquets in the Aſiatic manner.

Indeed the Romans were later in cultivating arts and ſciences than any other great and powerful people; and none of them ſeem to have been the natural growth of the ſoil, except the art of war: all the reſt were brought in by conqueſt. For it has been ſhown already, that before their acquaintance with the Greeks they had all their refinements from the Etruſcans, a people very early civilized and poliſhed. Cicero, in his ſecond Book of Laws, tells us, that before Greece and her arts were well known to the Romans, it was a cuſtom for them to ſend their ſons for inſtruction into Etruria. And thence they had the firſt ideas, not only of religion but of poetry, painting, ſculpture, and muſic, according to the confeſſion even of their own hiſtorians.

With reſpect to *Etruſcan muſic*, whoever regards the great number of inſtruments repreſented in the fine collection of antiquities publiſhed under the patronage of ſir William Hamilton, as well as in that publiſhed at Rome, ſince, by Paſſerio, muſt be convinced that the ancient inhabitants of Etruria were extremely attached to muſic; for every ſpecies of muſical inſtrument that is to be found in the remains of ancient Greek ſculpture is delineated on the vaſes of theſe collections; though the antiquity of ſome of them is imagined to be much higher than the general uſe of the inſtruments repreſented upon them was, even in Greece.

Beſides the obligations which the Romans had to the Etruſcans and Greeks for their taſte and knowledge in the fine arts, the conqueſt of Sicily 200 years before the Chriſtian æra, contributed greatly to their acquaintance with them. Indeed there was no ſtate of Greece which produced men of more eminence in all the arts and ſciences than *Sicily*, which was a part of Magna Græcia, and which, having been peopled 719 years B.C. by a colony of Greeks from Corinth, their deſcendants long after cheriſhed and cultivated ſcience of all kinds, in which they greatly diſtinguiſhed themſelves, even under all the tyranny of government with which they were oppreſſed. Fabricius gives a liſt of ſeventy Sicilians who have been celebrated in antiquity for learning and genius, among whom we find the well known names of Æſchylus, Diodorus Siculus, Empedocles, Gorgias, Euclid, Archimedes, Epicharmus, and Theocritus. To the Sicilians is given not only the invention of paſtoral poetry, but of the wind-inſtruments with which the ſhepherds and cowherds uſed to accompany their rural ſongs.

After the conqueſt of Greece, the Romans had the taſte to admire and adopt the Grecian arts. And Monteſquieu remarks, that one of the chief cauſes of the Roman grandeur, was their method of abandoning their ancient cuſtoms, and adopting thoſe of the people whom they had vanquiſhed, whenever they found them ſuperior to their own.

With reſpect to the muſical inſtruments uſed by the Romans, as they invented none themſelves, all that are mentioned by their writers, can be traced from the Etruſcans and Greeks. Indeed the Romans had few authors who wrote profeſſedly upon the ſubject of muſic, except St. Auguſtine, Martianus Capella, Boethius, and Caſſiodorus; who, though they lived in the decline of the empire, yet made uſe of Greek principles, and explained thoſe principles by Greek muſical terms. Of theſe, St. Auguſtine was born in Africa, A.C. 354, and died 430. Beſides the ſix books written by him upon muſic, which are printed in the folio edition of his works at Lyons, 1586, there is a MS. tract of his writing, in the Bodleian Library at Oxford, entitled *De Muſica;* but it is nothing more than a ſermon in praiſe of church-muſic; nor do his ſix books contain any other rules than thoſe of metre and rhythm. Martianus Capella, who flouriſhed in 470, was likewiſe an African. He, as well as St. Auſtin, wrote upon the ſeven liberal arts. His ninth book, the only one which concerns muſic, has been commented by Meibomius, at the end of the third Book of Ariſtides Quintilianus, from whom it is almoſt wholly taken. Boethius was born at Rome, in 470, and put to death by order of Theodoric, the Goth, in 525. He wrote five books on muſic, which were firſt printed in black letter, with his Treatiſes on Arithmetic and Geometry, at Venice, 1499. Caſſiodorus flouriſhed in the time of Theodoric, in the ſixth century, and died in 562, at the age of 93. He wrote of the Seven Liberal Arts, *De ſeptem Diſciplinis.* The whole of his muſical work, which is hardly the ſkeleton of a treatiſe, is a repetition of what his predeceſſors have ſaid on the ſubject; and all theſe Latin muſical tracts are but bullets of the ſame caliber. They teach no part of muſic but the alphabet, nor can any thing be acquired by the moſt intenſe ſtudy of them, (ſays Dr. Burney,) except deſpair and the head-ach.

Vitruvius, in his Treatiſe upon Architecture, has inſerted a chapter upon muſic, in which he has given the harmonical ſyſtem of Ariſtoxenus; but he introduces it with a complaint of the unavoidable obſcurity of muſical literature, on account of the deficiency of terms in the Latin tongue to explain his ideas. "The ſcience of muſic, in itſelf obſcure, ſays he, is particularly ſo to ſuch as underſtand not the Greek language." This writer, therefore, who ſeems to have been the firſt that had treated of muſic in the Roman language, confeſſes the neceſſity he was under of uſing Greek appellatives, not only for the notes, but for other parts of the art; which ſhows, if not the low ſtate of muſic at Rome when he wrote, which was in the Auguſtan age, at leaſt whence their muſic came; and *borrowing* implies *inferiority.* Indeed, the writings of Cicero ſhow that philoſophy, and all the arts and ſciences, were wholly furniſhed to the Romans from Greece, even in the moſt enlightened time.

Muſic was, however, in great favour at Rome, during the latter end of the republic, and the voluptuous times of the emperors: the ſtage then flouriſhed; the temples were crowded; feſtivals frequent; and banquets ſplendid: ſo that we may ſuppoſe it to have been very much uſed both upon public and private occaſions, in ſo rich, populous, and flouriſhing, a city as Rome, the miſtreſs of the world.

Livy mentions a hymn compoſed by P. Licinius Tegula, in the 552d year from the building of the city, on occaſion of ſome prodigies which, from a ſuppoſition that the gods were angry, had greatly alarmed the citizens. This hymn was ſung by twenty-ſeven virgins in proceſſion through the ſtreets of Rome. The *Carmen Seculare* of Horace, more eſpecially his *Dianam teneræ*, are very curious relics of *vocal* poetry; of verſes written *for muſic;* and, as the form and meaſures of his odes are Greek, the muſic may fairly be ſuppoſed to have been in the Greek ſtyle. Catullus's Hymn to Diana is another remain of the ſame kind.

A paſſage in Cicero would incline us to imagine that the laws of contraſt, of light and ſhade, of loud and ſoft, of ſwelling and diminiſhing ſounds, were underſtood by the muſicians of his time as well as by thoſe of the preſent. For, after ſpeaking of the uſe of *contraſt* in oratory, poetry, and theatrical declamation, he adds: "Even muſicians have known its power; as is manifeſt from the care they take to leſſen the ſound of inſtruments, in order to augment it afterwards: to diminiſh, to ſwell, to vary, and to diverſify." De Oratore, lib. iii. c. 102.

This orator frequently mentions, in his Familiar Letters, Philoſophical Works, and even Orations, the keeping a band of muſicians as a general practice among perſons of rank: theſe were called *ſervi ſymphoniaci*, and *pueri ſymphoniaci.* In his Oration *in Q. Cæcilium*, quæſtor to Verres, ſpeaking of the extortions and abuſes of Verres and his quæſtor, he mentions Cæcilius protecting the admiral of Anthony, who had by violence taken from a Sicilian lady, named Agonis, her *ſervos ſymphoniacos*, in order to make uſe of them on-board his fleet.

The ſhepherd's oaten pipe, among the Romans, ſeems to have been ſometimes made uſe of in their public aſſemblies to expreſs diſapprobation: it was certainly louder and more powerful than hiſſing could be, and gave a harſh, jarring, ungrateful, noiſe: "Stridenti miſerum ſtipulâ diſpendere carmen." Cicero calls it *fiſtula paſtoricia*, which might be Engliſhed, "a Roman catcall."

According to Apuleius, who diſcovers himſelf in many parts of his writings to have been an excellent judge of muſic, it muſt have been much cultivated, and well underſtood, in his time, which was the ſecond century. He deſcribes the ſeveral parts of a muſical entertainment in the following manner: "She ordered the cithara to be played, and it was done: ſhe aſked for a concert of flutes, and their mellifluous ſounds were immediately heard: ſhe, laſtly, ſignified her pleaſure that voices ſhould be joined to the inſtruments, and the ſouls of the audience were inſtantly ſoothed with ſweet ſounds." Book xi.

The ſame author likewiſe deſcribes a muſical performance at the celebration of a great feſtival in honour of Ceres, or Iſis, at the time of his own initiation into the Eleuſinian myſteries, in ſuch a manner as would ſuit many modern performances. "A band of muſicians now filled the air with a melodious concert of *flutes and voices.* They were followed by a chorus of youths, dreſſed in white robes, ſuitable to the ſolemnity, who alternately ſung an ingenious poem, which an excellent poet, inſpired by the muſes, had compoſed, in order to explain the ſubject of this extraordinary feſtival. Among theſe, marched ſeveral players on the flute, conſecrated to the great Serapis, who performed many airs dedicated to the worſhip of the god in his temple. After this, the venerable miniſters of the true religion ſhook with all their force the ſiſtrums of braſs, ſilver, and gold, which produced tones ſo clear and ſonorous, that they might have been heard at a great diſtance from the place of performance." Book v.

One great impediment to the progreſs of muſic among the Romans was, that they wholly abandoned to their ſlaves the practice of the liberal arts; and the greater their talents, the more ſeverely were they in general treated. Whereas the Greeks, on the contrary, confined the exerciſe of thoſe arts, as the epithet *liberal* implies, to *free men*, and perſons of birth and rank, forbidding their ſlaves the ſtudy and uſe of them. Whence it is eaſy to imagine which of theſe two nations would bring them to the greateſt degree of perfection. "What Nature was to the Greeks, ſays the abbé Gedoyn, the Greeks were to the Romans, as the natives of Greece had no other example than Nature herſelf to follow; for no nation, with which they had any intercourſe, was learned and poliſhed before them. The Romans, on the contrary, had the Greeks for models."

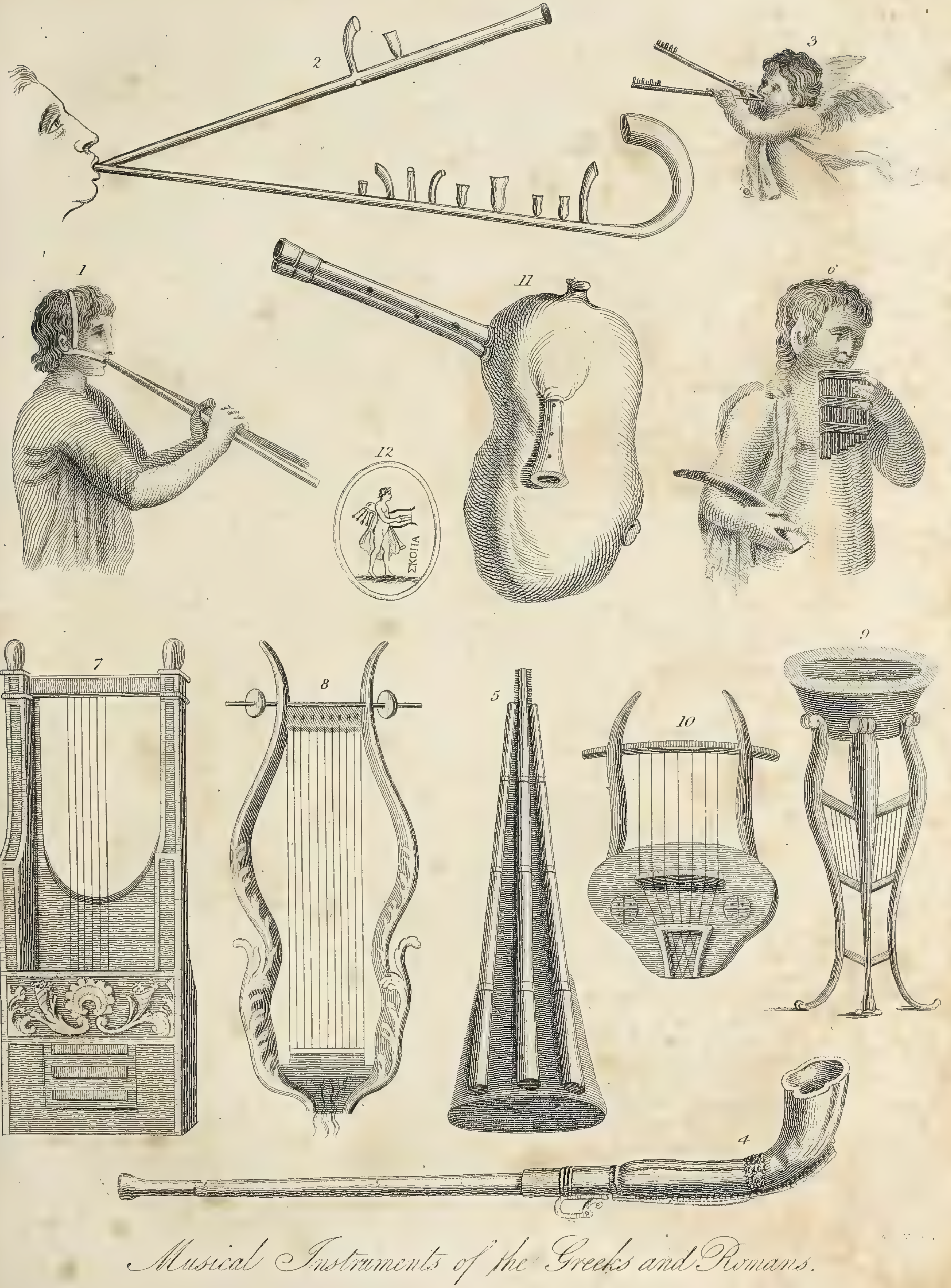
Notwithſtanding all the aſſiſtance which the Romans received from the Greeks in the polite arts, and all the encouragement of theſe inſtitutions, they never advanced ſo far in them as the modern Italians have done; who, without any foreign help, have greatly ſurpaſſed not only their forefathers the ancient Romans, but even the Greeks themſelves, in ſeveral of the arts, and in no one ſo much as that of muſic, in which every people of Europe have, at different times, conſented to become their ſcholars.

We now proceed to give a deſcription of the inſtruments repreſented on the annexed Plate XV. moſt of which have been alluded to, and their origin pointed out, in the preceding enquiry, which, though it has extended to a much greater length than we intended, has not, we hope, been found unintereſting. The only obſervation we have now to make, is one which has probably already occurred to the reader; namely, that the different claimants among the Greeks to the ſame muſical diſcoveries, only prove that muſic was cultivated in different countries; and that the inhabitants of each country invented and improved their own inſtruments, ſome of which happening to reſemble thoſe of other parts of Greece, rendered it difficult for hiſtorians to avoid attributing the ſame invention to different perſons. Thus the ſingle flute was given to Minerva, and Marſyas; the ſyrinx, or fiſtula, to Pan, and to Cybele; and the lyre, or cithara, to Mercury, Apollo, Amphion, Linus, and Orpheus. Indeed, the mere addition of a ſtring or two to an inſtrument without a neck, was ſo obvious and eaſy, that it is ſcarcely poſſible not to conceive many people to have done it at the ſame time.

Fig. 1. repreſents the head of a *tibicen*, or flute-player, to ſhow the *capiſtrum*, or bandage, uſed for the purpoſe of augmenting the force of the wind, and for preventing the ſwelling of the cheeks of the performer. See p. 295 and 352. Theſe flutes are equal in diameter and length; and, as no holes are viſible in them, they muſt have been of the trumpet-kind. The drawing of this was made from a vaſe in Sir William Hamilton's Collection of Etruſcan Antiquities, vol. i.

The two inſtruments of the flute kind which Nature has conſtructed, and from which mankind, taught perhaps by the whiſtling reeds, firſt tried to produce muſical ſounds, ſeem to have been the ſhells of fiſhes, and the horns of quadrupeds; and the μοναυλος, or ſingle pipe, appears in ſculpture to have been a mere *horn* in its natural form. Then ſucceeded the *avena*, or ſingle oaten ſtalk; the *calamus*, or ſingle reed, or cane; and afterwards the *ſyrinx*, or *fiſtula*, compoſed of a number of reeds, of different lengths, tied together. Theſe ſimple inſtruments preceded the invention of *foramina*, or holes, by which different ſounds could be produced from the ſame pipe. The *tibia* was originally a flute made of the ſhank, or ſhin-bone, of an animal; and it ſeems as if the wind-inſtruments of the ancients had been long made of ſuch materials as Nature had hollowed, before the art of boring flutes was diſcovered. That once known, they were formed of box-tree, laurel, braſs, ſilver, and even of gold.

There are certain epithets applied to the theatrical flutes in the titles to the comedies of Terence, which have extremely embarraſſed the critics: ſuch as *pares*, *impares*, *dextræ*, *ſiniſtræ*; and it has been long doubted, whether *pares* and *impares* meant double and ſingle flutes, or equal and unequal in point of length and ſize. Dr. Burney inclines to the latter: for in none of the repreſentations in ancient painting or ſculpture, which he had ſeen, does it appear that the tibicen, either at ſacrifices or in the theatre, plays on a ſingle flute, though we as often ſee double flutes of different lengths in his hands as of the ſame length; and, as harmony, or muſic in different parts, does not appear to have been practiſed by the ancients, the flutes of *equal* length may naturally be ſuppoſed to imply uniſons; and *unequal*, ſuch as are octaves to each other. But, as to the diſtinction between *right-handed* and *left-handed* flutes, the doctor owns himſelf far from being poſſeſſed of any clear and deciſive idea concerning it. And, indeed, the flute had ſo many different names in the claſſics, and is applied to ſo many different purpoſes, that M. le Fevre, who had undertaken their explanation, ended his fruitleſs labours by a copy of Latin verſes in praiſe of Minerva, for throwing the flute into the ſea, (ſee p. 351.) and anathematiſing thoſe who ſhould take it out. It has been imagined by the abbé du Bos, that, when the theatrical flutes were unequal, a drone-baſs was performed on the largeſt; but the neceſſity of a clear and undiſturbed elocution on the ſtage, joined to the tenderneſs of the ancients for poetry, would have rendered the noiſe and confuſion of a drone-baſs more offenſive to ſuch as attended to the intereſt of the drama, than the moſt florid and complicated counterpoint. It is no uncommon thing to ſee one of the unequal flutes uſed upon theſe occaſions ſtraight, and the other curved at the end, as at fig. 2. Heſychius, as quoted by Bartholinus, ſays that the horned-flute was for the left hand, the ſtraight one for the right. That the *longeſt* of the two inſtruments was for the left hand, Pliny ſeems to prove, when he ſpeaks of cutting the reeds with which they were made; for he ſays the part next the ground, being the wideſt, ſerves for the left-hand flutes, &c. Theſe paſſages, however, furniſh no proofs of their being deſtined for different parts, or any thing more than octaves to



Musical Instruments of the Greeks and Romans.

Engraved for the Encyclopaedia Londinensis, 1818.

to each other. Moſt of the double flute-players repreſented in ſculpture appear to graſp the inſtruments, without any motion of the fingers; nor indeed in many of them are there any holes in ſight to employ them; which makes it probable that they were modulated by the mouth, like trumpets and horns.

Another difficulty occurs about theſe flutes being *always double*, as in fig. 1, 2, 3. that is, two ſingle tubes held in different hands, or uniting in one mouth-piece. But, as we never ſee more than *one* performer at a time repreſented in painting or ſculpture, accompanying the actors on the ſtage, or the prieſt at the altar, where theſe double or Phrygian flutes were chiefly uſed, they may perhaps have been preferred for their ſuperior loudneſs; for force muſt not only be neceſſary to the voice in a large temple or theatre, but alſo to the inſtruments that accompanied it, in order to the being heard by ſuch a numerous audience as was uſually aſſembled there; juſt as the actor's voice was augmented by a maſk, and his height increaſed by ſtilts. The muzzles and bloated cheeks in repreſentations, correſponding with verbal deſcriptions, prove that *quantity* of ſound was the principal object of the ancients. Hence the neceſſity of the *capiſtrum*, or head-ſtall, as it appears in the preſent figure.

The defects peculiar to wind-inſtruments ſeem to have been as well known to the ancients as the moderns; and Ariſtoxenus complains of them in ſuch ſtrong terms as would be very applicable to the flutes of modern times: "Flutes are continually ſhifting their pitch, and never remain in the ſame ſtate." Among many expedients to which he ſays performers had recourſe, in order to palliate theſe defects in the intervals, the uſe of *wax*, occaſionally, in the holes of their inſtruments ſeems to have been one; at leaſt Meibomius, in his note on the paſſage, underſtands *wax* to be meant as one method; for Ariſtoxenus, ſpeaking of wind-inſtruments, talks of *adding* and *taking away*. This expedient muſt, however, have been uſed in order to ſupply the want of ſkill in boring flutes; and the wax, in warm climates, would be too ſubject to fuſion for a performer to depend much upon its aſſiſtance in the *heat* of action.

That the ancients uſed *natural* reeds and canes in the conſtruction of their flutes, we are certain; but whether they had any ſuch *artificial* reeds as we uſe for our hautbois, baſſoons, &c. is doubtful. We find, indeed, in Plutarch's Dialogue, mention of a *ſyrinx*, or ſmall pipe, that was ſometimes affixed to flutes; which M. Burette tranſlates *hanche*, a word equivalent to our *reed*. But the impropriety of the tranſlation is fully proved by a paſſage in another treatiſe of Plutarch, where he gives it as a muſical problem, "Why the flute, when the ſyrinx is *drawn up*, becomes ſharpened *in all its ſounds*; that is, has its whole pitch raiſed; and when it is *let down*, or rather *laid down*, κλινομενης, as if it was fixed to the inſtrument by a kind of hinge, is again flattened." The purpoſe, therefore, of this pipe or ſyrinx, was totally different from that of our reeds, and was merely to alter the *pitch* of the flute. Nor was it at all neceſſary to the inſtrument, as our reeds are; for Plutarch relates, in the part of his Dialogue abovementioned, that Telephanes "had ſuch an averſion to theſe pipes, he would never ſuffer the flute-makers to apply them to his inſtruments;" which was the principal reaſon why he never entered the liſts at the public games, where theſe additional pipes ſeem to have been much in vogue; and, indeed, if their effect rendered the intervals as falſe as thoſe of our flutes are by drawing out the middle pieces, it was a proof of his judgment, and delicacy of ear. If any part of the ancient flutes anſwered to our reeds, it muſt have been what they called "the tongue," γλωττις, *lingula*. This appears to have been eſſential to the uſe of the inſtrument, as our reeds are. The flutes could ſcarcely be made to *ſpeak* without it; hence the ſaying of Demades, the Athenian orator, who compared his countrymen to flutes, "they were good for nothing without their tongues." (Stob. Ser. 2.) Theſe *lingulæ* were alſo *movable*, and carried about by the performers in little boxes, which were called γλοττοκομεια, or tongue-caſes," as our reeds are at preſent. "The reſemblance of theſe tongues and reeds in conſtruction, as well as in uſe, may perhaps appear the more probable to the reader from an engraving, (ſays Dr. Burney,) of a medal in the Numiſmata Pembrochiana, which was pointed out to me by the Hon. Daines Barrington. On one ſide is Cleopatra; and on the other, a winged muſician playing on an inſtrument which ſeems to be furniſhed with an artificial reed; of which I ſhall only obſerve, that it is the ſtrongeſt proof I have met with, in coins or in ſculpture, of the uſe of ſuch an expedient among the ancients, and that there cannot be a more ſtriking likeneſs of a modern hautbois."

Fig. 2. is a double flute of an uncommon kind, on a bas-relief in the Farneſe collection at Rome. Theſe tubes, of different lengths, with keys or ſtopples, are blown at once by a female Bacchanal. Voſſius, De Poemat. Cant. p. 110. ſays, from Proclus, that every hole of the ancient flute furniſhed at leaſt three different ſounds; and, if the παρατρυπηματα, or ſide-holes, were opened, ſtill more than three. Arcadius Grammaticus ſays, that the inventors of the holes of the flute contrived a method of ſtopping and opening them at pleaſure, by certain horns, or pegs, which, by turning them in and out, and moving them up and down, multiplied ſounds, according to Voſſius, like different ſtrings upon a lyre. But that could not be the caſe in this inſtrument, at leaſt *during performance*, as moſt of the plugs or ſtopples were out of the reach of the muſician's hand; beſides, the hands were employed in ſupporting the inſtrument; and though, in our baſſoon, and even hautbois and German flute, we are able, by means of keys, to open and cloſe holes which the fingers cannot reach; yet, as no ſuch expedients appear in the repreſentations of ancient wind-inſtruments, it is difficult to aſſign any other uſe to theſe plugs or ſtopples than that already mentioned, of adjuſting the ſcale to ſome particular mode or genus, *before performance*, as our trumpets or horns are tuned to keys of different pitch by means of crooks, and our flutes by middle-pieces of different lengths. It ſeems as if the longeſt of the two tubes in this figure, had a horn joined to the end of it, which gives it the form of a *lituus*. Bartholinus, De Tib. Vet. makes this curvature at the end the characteriſtic of the Phrygian flute: he gives two flutes of this kind, with plugs, one ſtraight and the other curved; and tells us, from Ariſtotle's Acouſtics, that loudneſs and clearneſs were acquired by the addition of the horn.

Fig. 3. repreſents a Cupid, playing on two flutes with ſtopples, or plugs, like the preceding, but without the horn at the end. From an ancient painting in the Muſeo at Portici.

An inſtrument of the baſſoon kind, called the *courtaut*, with two rows of projecting apertures, reſembling thoſe in fig. 2 and 3, is deſcribed by Merſennus, De Inſtrum. Harmon. lib. ii. who tells us that the *tetines*, (or nipples,) as he calls the projections, were not movable, but fixed; and that, when thoſe on one ſide were uſed, thoſe on the other were ſtopped with wax.

Fig. 4. repreſents the ancient *lituus*, or octave trumpet, in the poſſeſſion of ſir Joſeph Banks, of which a full deſcription has been given at the word Lituus, vol. xii. p. 830.

Fig. 5. An ancient inſtrument, of a very peculiar kind, lately dug out of Pompeia, a city that was deſtroyed by an eruption of Mount Veſuvius, at the ſame time as Herculaneum. It is a trumpet or large tube of bronze, ſurrounded by ſeven ſmall pipes of bone or ivory, inſerted in as many of metal: theſe ſeem all to terminate in one point, and to have been blown through one mouth-piece. The ſmall pipes are all of the ſame length and diameter, and were probably uniſons to each other, and octaves to the great tube. There is a ring to faſten a chain to, by which it was flung over the ſhoulder of the performer.

The inſtrument was found in the corps de garde of this ſubterraneous city, and ſeems to have been the true military *clangor tubarum.*

Fig. 6. Pan playing on the *ſyrinx*, from an ancient baſſo-relievo of Greek ſculpture, in the Giuſtiniani palace at Rome, repreſenting the nurſing of Jupiter by Amalthea. This figure holds in one hand the ſyrinx, and in the other a horn, reſembling the *ſhawm* repreſented upon the arch of Titus, among the Hebrew inſtruments ſuppoſed to have been copied from thoſe which this emperor had brought from Jeruſalem.

The pipes of the *fiſtula Panis*, or ſyrinx, being compoſed of reeds or canes cut juſt below the joint, were all ſtopped-pipes, like thoſe in the ſtopped diapaſon of the organ, in which the wind is emitted at the ſame place where it enters; and, as it has a double motion to make, twice the length of the tube, the tone is an octave lower of a ſtopped-pipe than of an open one of the ſame length and diameter. The *fiſtula Panis* of the iſland of New Amſterdam, in the South Seas, is made of canes cut below the joints, and conſequently of ſtopped-pipes; and the pipes of an Arabian inſtrument of the ſame kind, which Dr. Burney received from Aleppo, are all ſtopped at the end with wax. See p. 350, 1.

Fig. 7. A *hexachord*, or lyre with ſix ſtrings, in the hand of a Grecian Apollo, in the Capitoline Muſæum at Rome. The three openings at the bottom ſeem deſigned to anſwer the purpoſe of ſound-holes in the belly of the inſtrument.

Fig. 8. A lyre in the famous ancient picture dug out of Herculaneum, upon which Chiron is teaching the young Achilles to play. See p. 353.

Fig. 9. The tripodian lyre of Pythagoras the Zacynthian, from a bas-relief in the Maffei palace at Rome, repreſenting the whole choir of the Muſes. Athenæus gives the following account of this extraordinary inſtrument: "Many ancient inſtruments are recorded, ſays Artenon, of which we have ſo little knowledge, that we can hardly be certain of their exiſtence; ſuch as the tripod of Pythagoras the Zacynthian, which, on account of its difficulty, continued in uſe but a ſhort time. It reſembled in form the Delphic tripod, whence it had its name. The legs were equidiſtant, and fixed upon a moveable baſe that was turned by the foot of the player; the ſtrings were placed between the legs of the ſtool; the vaſe at the top ſerved for the purpoſe of a ſound-board, and the ſtrings of the three ſides of the inſtrument were tuned to three different modes, the Doric, Lydian, and Phrygian. The performer ſat on a chair made on purpoſe. Striking the ſtrings with the fingers of the left-hand, and uſing the plectrum with the right, at the ſame time turning the inſtrument with his foot to whichever of the three modes he pleaſed; ſo that, by great practice, he was enabled to change the modes with ſuch velocity, that thoſe who did not ſee him, would imagine they heard three different performers playing in three different modes. After the death of this admirable muſician, no other inſtrument of the ſame kind was ever conſtructed."

Fig. 10. An Etruſcan lyre, with ſeven ſtrings, in the Collection of Etruſcan, Greek, and Roman, Antiquities, publiſhed from the cabinet of ſir William Hamilton, vol. i. With reſpect to this inſtrument, it is worthy of obſervation, that, though the vaſe upon which it is repreſented is of ſuch indiſputable and remote antiquity, the tail-piece, bridge, belly, and ſound-holes, have a very modern appearance, and manifeſt a knowledge in the conſtruction of muſical inſtruments among the Etruſcans, ſuperior to that of the Greeks and Romans in much later times. The lower part of the inſtrument has much the appearance of an old baſs-viol, and it is not difficult to diſcover in it more than the embryo of the whole violin family. The ſtrings lie round, as if intended to be played on with a bow; and even the croſs-lines on the tail-piece are ſuch as we frequently ſee on the tail-pieces of old viols.

Fig. 11. The *tibia utricularis*, or bagpipe, taken from a bas-relief in the court of the Santa Croce palace at Rome. This inſtrument appears not to have been wholly unknown to the Greeks, who, according to Montfaucon, called it ασκαυλος. Dr. Burney alſo ſaw the repreſentation of one in marble, of ancient Greek ſculpture, in the poſſeſſion of Mr. Morriſon, at Rome. It ſeems, however, to have been a Roman invention to which a Greek name was given; a piece of affectation that was generally practiſed upon every occaſion, about the time of Nero. Greek was the *French* of the Romans. The term does not occur, however, in H. Stephens, Scapula, Meurſius, Suicer, nor in Scott. In Faber's and Martin's Latin Dictionaries, *aſcaules* is to be found, with a reference to Seneca, Vopiſcus, and Martial. The two former uſe *pithaules*, the one in Epiſt. lxxvi. and the other in the Life of Carinus, vol. ii. where the word is explained and illuſtrated by an elaborate note of Salmaſius. Martial, lib. x. ep. 3. gives *canus aſcaules.* From the ſilence of lexicographers, we may conclude that the word appears in no Greek author. Iſaac Voſſius ſtrenuouſly denies that *utricularius* means a player on a *bagpipe:* the inſtrument in queſtion was, according to him, an organ blown by bellows, as diſtinguiſhed from the hydraulic or water organ; "but to ſuppoſe," ſays he, "that the *utricularius* was like our wretched mendicants that ſtroll about, is moſt ridiculous!" A paſſage, however, in Dion Chryſoſtom, clearly proves this enthuſiaſtic admirer of ancient muſic to have been miſtaken. For, ſpeaking of Nero, the Greek writer ſays, that he played on the flute "*with a bladder, or leathern bag of wind, under his arm.*" And for this he aſſigns a reaſon which is curious; "that he might avoid making the ugly faces with which Minerva was ſo much offended." Nothing can deſcribe a modern bagpipe more deciſively. According to Suetonius, when Nero heard of the revolt by which he loſt his empire and life, he made a ſolemn vow, that, if it ſhould pleaſe the gods to extricate him from his preſent difficulties, *he would perform in public on the bagpipe.* Suet. in Nerone, 54.

On an ancient gem in the poſſeſſion of Sig. Lellari at Cortona, of which an impreſſion was ſent to Joſ. C. Walker, eſq. of Dublin, who favoured Dr. Burney with a drawing of it, there is engraved an Apollo, crowned, after vanquiſhing Marſyus, with a lyre in his hands, and a bagpipe behind him. The name of the artiſt appears on the gem; an uncommon circumſtance, as the workmanſhip is not of the firſt claſs. This gem is repreſented at fig. 12.

It is probable that the union of the bagpipe with the ſyrinx ſuggeſted the firſt idea of an organ. We ſhall therefore aſſume this as the connecting link between ancient inſtruments and modern. The correct figure we have preſented of the ancient utricularis will give a very good idea of the common bagpipe of our days. It conſiſts of two principal parts: The firſt, a leathern bag, which is blown up like a foot-ball, by means of a port-vent, or little tube, fitted to it, and ſtopped by a valve. The other part conſiſts of three pipes or flutes; the firſt, called the great pipe, or *drone;* and the ſecond, the little one, which paſſes the wind only out at the bottom; the third has a reed, and is played on by compreſſing the bag under the arm when full, and opening or ſtopping the holes, which are eight, with the fingers. The little pipe is ordinarily a foot long; that played on, thirteen inches; and the port-vent ſix. The bagpipe takes in the compaſs of more than three octaves; namely, from A on the firſt ſpace in the baſs, to D in alt, above the ſeventh line, or ſecond leger line, in the treble.

IV. Musical Instruments of the Moderns.

Muſical inſtruments may be claſſed, generally, under the following heads: ſtringed inſtruments, wind-inſtruments, and inſtruments of percuſſion; according to the three ways of producing ſound; namely, by the vibration of ſtrings, by the colliſon of air encloſed in pipes or tubes, and by the vibration of elaſtic bodies. Dr. Crotch divides modern inſtruments into—1ſt, keyed inſtruments, whether wind or ſtringed; 2d, ſtringed inſtruments played on by the bow; 3d, wind-inſtruments without keys; 4th, inſtruments of percuſſion. But this diviſion is confeſſedly imperfect, becauſe the harp, guitar, &c. are ſtringed inſtruments which do not anſwer either of the above deſcriptions, as they neither have keys nor are played by the bow. But, as they are ſeldom uſed in concerts, except in ſolo concertos, it did not come within the object of Dr. Crotch's work to give a particular account of them. But, in any arrangement that we can make, the firſt place will of courſe be occupied by that moſt noble and comprehenſive inſtrument,

The ORGAN.—This largeſt and moſt harmonious of all inſtruments, is called the organ, *οργανον*, or "the inſtrument," by way of excellence.

That organs are the invention of remote antiquity has been argued, and ſeems now to be generally allowed; but the particular time and country in which the diſcovery was made, appears to be loſt amidſt the ruins of time. In ancient authors, there is a variety of paſſages where mention is made of the *organ*; but it is at leaſt *poſſible* that an inſtrument is meant very different from that which now goes by the ſame name. From St. Auguſtin's commentary on the 4th verſe of the 150th Pſalm, we learn, that the Greeks had another name for thoſe inſtruments in which bellows were employed; that the name *organ* was appropriated to this particular inſtrument merely from the uſage of the Latin tongue; and that it was indifferently given to all inſtruments uſed to accompany the voice in concert. We mention this, not becauſe we doubt of the antiquity of the organ, but merely to ſhow that the time of its invention cannot be determined by the era of the authors where its name occurs.

The moſt ancient proof of an inſtrument reſembling a modern organ blown by bellows, and played by keys, very different from the *hydraulicon*, or water-organ, (which is of much higher antiquity,) is a Greek epigram in the Anthologia, attributed to the emperor Julian the Apoſtate, who flouriſhed about A. D. 360.

Αλλοιην οροω δονακων φυσιν' ηπου απ' αλλης
Χαλκειης ταχα μαλλον ανεβλαστησαν αρουρης.
Αργιοι, ουδ' ανεμοισιν υφ' ημετεροις δονεονται,
Αλλ' υπο ταυρειης προθορων σπηλυγγος αητης
Νερθεν εϋτρητων καλαμων υπο ριζαν οδευει.
Και τις ανηρ αγερωχος, εχων θοα δακτυλα χειρος,
Ισταται αμφαφοων κανονας συμφραδμονας αυλων
Οι δ' απαλον σκιρτωντες αποθλιβουσιν σοιδην.

Reeds ſtrike my wond'ring eyes, unknown before,
Sprung from ſome brazen ſoil, ſome foreign ſhore;
Fruitleſs our efforts, for in vain we blow
Till, from a cave of leather, winds below
To hollow pipes harmonious powers impart:
Then, if ſome maſter, in th' Orphéan art
Experienc'd, touch the well-according keys,
Inſtant they warble, and reſponſive pleaſe.

Merſennus has inſerted a Latin tranſlation of this epigram, in his lib. iii. De Organis; and Zarlino, who wrote in 1571, is of opinion, that the organ here mentioned was eſſentially the ſame with the organ of his time. But, though we have already given a poetical tranſlation, we think it right to give a literal one alſo, ſince the meaning of a particular word is often of importance in an enquiry wherein a point of great antiquity is concerned. "I ſee reeds of a new ſpecies, the growth of another and a brazen ſoil; ſuch as are not agitated by our winds, but by a blaſt that ruſhes from a leathern cavern beneath their roots; while a tall ſturdy fellow, [alluding to the force neceſſary for beating down the clumſy keys of this rude inſtrument of new invention,] running with ſwift fingers over the rulers of the pipes, [i. e. the keys,] makes them, as they ſmoothly dance, utter concordant ſounds."

However, certain muſical inſtruments whoſe melody is produced by wind, had been known at Rome long before. Witneſs that agreeable poem of Capa, which, for its elegance, has been aſcribed to Virgil; where we find that the muſician introduces the wind into her pipes by means of a pair of bellows, which ſhe holds under her arms and blows. In the hydraulic organ, the water moves the air, inſtead of bellows. Cornelius Severus, in his "Ætna," has given an exact deſcription of it. And, though there were two kinds of hydraulic and pneumatic inſtruments, the firſt of which played by the inſpiration and action of bellows, and the other by the action of water; it is certain, nevertheleſs, that both of them were pneumatic, being inſpired by the wind; and Heron of Alexandria, in his Pneumatics, has treated of hydraulics as belonging to pneumatics. This Heron lived in the time of Ptolemy Evergetes, king of Egypt. When Suetonius ſays that, Nero *organa hydraulica novi et ignoti generis circumduxit*, he did not mean that they were unknown at Rome before Nero, but that thoſe of Nero were of a new conſtruction. Thoſe were the hydraulics of a new fabric, which he exhibited to the people at the public games, as Suetonius relates a little after. Heliogabalus, one of the worthy ſucceſſors of Nero, like him was fond of theſe hydraulics; and Alexander Severus, his couſin and ſucceſſor, had the ſame inclination. Claudian, who lived ſome time after, has left us this elegant deſcription of them:

Et qui magna levi detrudens murmura tactu
Innumeras voces ſegetis moderatur aënæ;
Intonet erranti digito, penituſque trabali
Vecte laborantes in carmina concitat undas.

This very conſtruction, which is obſerved in the pipes of an organ, gradually decreaſing in magnitude, has been repreſented in an epigram of Optatianus Porphyrius, who lived in the time of Conſtantine. This epigram, which is quoted in Pithon's collection of ancient epigrams, is compoſed of verſes of an unequal length, ſucceſſively increaſing. This correſponds with thoſe words of the old ſcholiaſt on Juvenal, Sat. viii. ver. 270. *Tunicá Galli utuntur in ſacris in modum organi utrinque decreſcentibus virgulis purpureis.*

At the time of Caſſiodorus, who flouriſhed under king Vitigas the Goth, in 514, the hydraulicon, or water-organ, blown by hand-bellows, became common; of which he gives the following deſcription: "The organ, ſays he, is an inſtrument compoſed of divers pipes, formed into a kind of tower, which, by means of bellows, is made to produce a loud ſound; and, in order to expreſs agreeable melodies, there are, in the inſide, movements made of wood, that are preſſed down by the fingers of the player, which produce the moſt pleaſing and brilliant tones."

On the whole, then, the antiquity of organs, or of inſtruments of a very ſimilar nature, can ſcarcely be diſputed; but nothing very particular reſpecting the time, place, or manner, of the invention, can poſſibly be determined from thoſe incidental obſervations which occur in the writings of the ancients. It appears, indeed, to have been borrowed by the Latins from the Greeks, but not to have been in general uſe till the eighth century; and it has been affirmed, that, in France, it was not known till the time of Louis *le Debonair*, i. e. A. D. 815, when an Italian prieſt taught the uſe and conſtruction of it, which he himſelf had learned at Conſtantinople. By ſome, however, it has been carried as far back as Charlemagne, and by others as far as Pepin. Vitruvius deſcribes an organ in his tenth book; and St. Jerome mentions one with twelve pair of bellows, which might be heard a thouſand paces, or a mile; and another at Jeruſalem, which might be heard to the Mount of Olives.

It has been a ſubject of debate, when the uſe of organs was introduced into the church. Bellarmine ſays, that they began to be uſed in the ſervice of the church, in the time of pope Vitalian, about the year 660, as Platina relates out of the Pontifical; or, as Aimonius thinks, after the year 820, in the time of Louis the Pious. Venerable Bede, who died in 735, ſays nothing of the uſe of organs, or other inſtruments, in our churches or convents, when he is very minutely deſcribing the manner in which the pſalms and hymns were ſung.

Perhaps the learned Bingham is our ſureſt guide in determining this point. He poſitively aſſerts, that there were no ſuch things as organs in uſe in the ancient church; and that, though church-muſic was as old as the apoſtles, inſtrumental muſic was not ſo. He alſo ſays that it was the general opinion of the learned in his days, that organs were not introduced into churches till after the time of Thomas Aquinas, A. D. 1250; and for this opinion, as far as the authority of Aquinas will go, we have a poſitive proof in theſe words: "Our church does not uſe muſical inſtruments, as harps and pſaltries, to praiſe God withal, that ſhe may not ſeem to Judaize." From hence it has reaſonably been concluded, particularly by the learned Gregory, that they were not uſed in churches in his time. Mr. Wharton has alſo obſerved, that Marinus Sanutas (who flouriſhed A. D. 1290) firſt introduced wind-organs into churches: from this circumſtance he derived the name *Torcellus*, the name for organ in the Italian language. About this ſame time Durandus, in his Rationale, ſpeaks of them as generally received in the church; and he, in Mr. Gregory's opinion, is the firſt author who takes notice of it.

Theſe authorities are ſtrong; and the opinions founded on them by the learned, render them ſtill more convincing. It appears, however, from the teſtimony of Gervas, the monk of Canterbury, who flouriſhed in 1200, that organs had been introduced upwards of one hundred years before that time; for, in his deſcription of Lanfranc's church, as it was before the fire in 1174, he mentions an organ that ſtood over St. Michael's chapel, *(ubi organa ſolent eſſe;)* and the foundation of its loft remains to this day. We do not ſay that this invalidates the reaſoning of the learned Bingham. Of that our readers are to judge; and, in forming their judgment, they will be determined by the credit of the teſtimonies which are here oppoſed to each other.

But, however we are diſpoſed to determine this matter (which is in itſelf but of little conſequence), it is certain that the uſe of the organ was very common in the latter ages of the church, and the propriety of it was undiſputed. In the 17th century, however, during the civil wars, organs were removed from the churches in England; and ſo generally reprobated, that, at the reſtoration, there could ſcarcely be found either organiſts, organ-builders, or ſingers. The lawfulneſs of uſing organs in churches, has, however, been ably defended by an appeal to the uſe which the Jews made of inſtruments of muſic in divine ſervice; and with much reaſon; for, were the uſe criminal in us, as was aſſerted by many well-meaning men of the laſt century, and as it is ſtill thought by ſome in this, it would unqueſtionably have been equally unlawful for the Jews. The Chriſtians in Aquinas's time, however, acted wiſely in avoiding the uſe of them, if ſuch uſe would have given offence to their weaker brethren. For, though they are highly ornamental, and in ſome churches may be productive of good effects, yet the uſe of them is far from being eſſential, and may be diſpenſed with. Certain it is, that in one of the "Homilies," ſet forth by authority of queen Elizabeth, mention is made of "filthy organs, diſpleaſing to God," &c. &c.

Organs have never yet been uſed in the eſtabliſhment of Scotland, ſince that became Preſbyterian; but they are uſed in Holland, where that form of church-government alſo obtains. Biſhop Horne, in a Sermon which he preached at the opening of the new organ at Canterbury, in 1784, ſays, that he believes ſome Preſbyterian diſſenters in England have adopted it in their places of worſhip.

The church-organ conſiſts of two chief parts; the main body, called the *great organ*, and the *choir-organ*. The ſize of an organ is generally expreſſed by the length of its largeſt pipe: thus they ſay, an organ of 8, 16, 32, feet, &c. The organ in the cathedral-church at Ulm in Germany, is 93 feet high and 28 broad; its largeſt pipe is 13 inches diameter, and it has 16 pair of bellows.

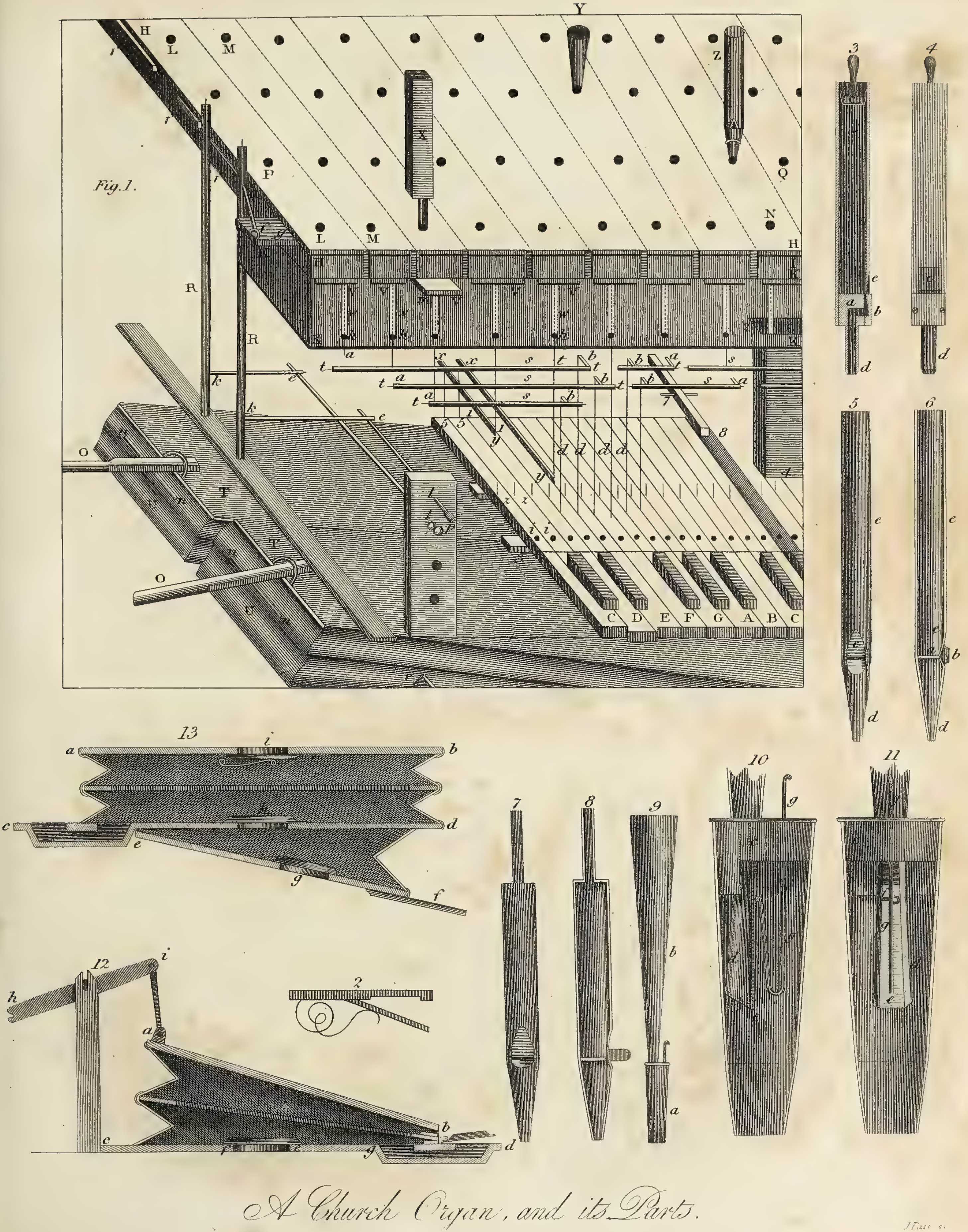
The great organ is commonly placed in the fore-part of the caſe, for the convenience of planting the largeſt pipes in the ornamental front, and that it may appear louder. The choir-organ is ſometimes placed on one ſide within the caſe of the great organ, and ſometimes in a ſeparate caſe, at the back of the player. Hence, it is not unfrequently called the *chair organ*.

Plate XVI. The ſeveral parts of the church-organ are as follow: HIH, fig. 1. is the ſound-board; which is compoſed of two parts, the upper board or cover HHH, and the under board HI, which is much thicker than the other: each of theſe conſiſts of ſeveral planks laid with their edges to each other, and joined very cloſe together. In the under ſide of the lower board there are made ſeveral channels, which run in the direction LL, MM, &c. and are continued as far as there are ſtops in the organ, and come almoſt to the edge HK. Theſe channels are covered over very cloſe with parchment or leather, all the way, except a hole that is commonly at the fore-end next HK, upon which a valve or puff is placed. Theſe channels are called *partitions*. When this valve or flap is ſhut, it keeps out the air, and admits it when open. On the upper ſide of the lower board, there are likewiſe cut ſeveral broad ſquare channels, lying croſs the former, but not ſo deep as to reach them: theſe lie in the direction LN, PQ, &c. To fit theſe channels, there is the ſame number of wooden ſliders or regiſters, *f, f, f,* &c. running the whole length; and theſe may be drawn out or thruſt in at pleaſure. The number of theſe is the ſame as that of the ſtops in the organ.

IKKK is the wind-cheſt, which is a ſquare box fitted cloſe to the under ſide of the lower board, and made air-tight, ſo that no air can get out but what goes through the valves along the partitions. VV are the valves or puffs which open into the wind-cheſt: they are all incloſed in it, and may be placed in any part of it, as occaſion ſhall require. One of theſe valves, with the ſpring that ſhuts it, and the wire that opens it, is repreſented at fig. 2.

C, D, E, F, &c. are the keys on which the fingers are placed when the organ is played: theſe keys lie over the horizontal bar of wood W, in which are ſtuck an equal number of wire-pins, *z, z,* on which the keys are fixed; and the keys move up and down on the bar, as on a centre. There is another bar, againſt which the keys fall when put down, and which is here marked 3: on this alſo are ſeveral wires, which go through the keys, to guide them; and on this bar a liſt is faſtened to hinder the keys from knocking againſt the wood. The keys are made to communicate with the valves ſeveral ways, as we ſhall now deſcribe. Firſt, *s, s, s,* are the key-rollers, moving on the pivots, *t, t:* theſe rollers lie horizontally, one above another, and are of ſuch a length as to reach from the valve to the key: *a, a, a,* are arms or levers fixed to the key-rollers: *w, w,* the valve-wires fixed to the arms *a, a,* and to the valves V, and to go through the holes *h, h,* in the bottom of the wind-cheſt: *b, b, b,* are likewiſe arms fixed to the key-rollers: *d, d, d,* the key-wires, fixed to the arms *b, b,* and to the keys C, D, E. Now, when the end of any one of the keys C, D, E, is put down, it pulls down the arm *b,* by the wire *d,* which turns about the roller *s* with the arm *a,* that pulls down the wire *w,* which opens the valve that is ſhut by the ſpring, as ſoon as the preſſure is taken off the key. In this conſtruction there muſt be a worm-ſpring faſtened to the key, and to the bar W on the further ſide, to keep down the end 5 of the key.

Another method of opening the valves is thus: *x y, x y,* are ſlender levers, movable on the centres 1, 1; 5 *x,* 5 *x,* are wires going from the further ends of the keys to the ends *x* of the levers; *y* V, *y* V, are other wires, reaching from the ends *y* of the levers, through the holes *h,* to the valves V. So that putting down the key C, D, &c. raiſes the



A Church Organ, and its Parts.

J. Pass sc.

Engraved for the Encyclopaedia Londinensis 1818

the end 5, which thruſts up the end *x* of the lever, by the wire 5 *x*; this depreſſes the end *y* of the lever, which pulls down the wire *y* V, and opens the valve V.

A third way of opening the valve is this: At the end of the key *b*, is a lever 8, 9, moving in the centre 7. This makes, with the key, a compound lever. From the end 9, a wire goes to the valve. Now, the putting down the end 6 of the key raiſes the end 8, which depreſſes the end 9 of the lever 8, 9, pulls down the wire, and opens the valve. There is only one of theſe drawn in the ſcheme, and but a few of the others, to avoid confuſion.

R, R, are the rollers, to move the ſliders, by help of the arms *cf*, *cf*, which are fixed horizontally in theſe rollers: *ke*, *ke*, are alſo levers fixed in the rollers; *le*, *le*, are the handles, which lie horizontally, and paſs through the holes *ll*; they are faſtened to the lever *ke*, being movable about a joint at *e*.

Now, any handle *lp*, being drawn out, pulls the end *e* towards *l*, which turns about R*k*, along with the arm *cf*; and the end *f* pulls out the ſlider *fg*; and, when *p* is thruſt in, the arm *cf* likewiſe thruſts in the ſlider *fg*.

Upon the ſeveral rows of holes which appear on the top of the upper board, there are ſet up an equal number of rows of pipes. The *pipes* of an organ are of four kinds, ſtopped, half-ſtopped (with a funnel or chimney at the top), open, and reed, pipes. Various materials have been uſed for their conſtruction; but the moſt common practice is to make the ſtopped pipes of wood, and the open and reed pipes of a metal compoſed of tin and lead.

Figs. 3 and 4. repreſent the front and ſection of a ſtopped wooden pipe. In fig. 4. *a* is a ſquare block of wood, correſponding with the interior diameter of the pipe, upon which the back and two ſides are glued. In this a channel is cut, in the direction of the ſhaded line, for the paſſage of the wind, which, entering at the foot *d*, paſſes through the channel in the block, and the cavity of the lip or top piece *b*, and ſtrikes upon the ſharp edge of the front at *e*, the mouth: *c* is a movable wooden tompion, covered with leather to make it air-tight. When this is drawn outwards, the tone of the pipe is flattened, and, when puſhed inwards, ſharpened. Figs. 5 and 6. repreſent the front and ſection of an open metal pipe. Fig. 6. *d* is the foot, which is a hollow cone, and is ſeparated from the cylindrical body of the pipe *c*, by a partition called the *langue*, or tongue, *a*, which anſwers the purpoſe of the block in the wooden pipe. The wind paſſes through a narrow aperture at *b*, and ſtrikes upon the upper ſide of the mouth at *e*. A ſmall ear is uſually affixed on each ſide of the mouth, for the purpoſes of enriching the tone, and to tune ſuch pipes as ſtand in the ornamental front of the organ. Metal open pipes are tuned by opening the tops with a braſs cone, to ſharpen them; and by cloſing them with the inſide of the cone, to flatten them. Figs. 7 and 8. are the front and ſection of an half-ſtopped pipe, or pipe *à la cheminée*. Theſe pipes are tuned by opening or cloſing the ears, which are made very large for this purpoſe. Fig. 9. is the exterior of a reed-pipe, conſiſting of two parts; the foot, *a*, and the tube or body of the pipe, *b*. The tube is ſoldered to a block of metal, *c*, (figs. 10 and 11.) which exactly fits into the upper end of the foot. In this is fixed a hollow demi-cylinder, *d*, of braſs, called the reed, ſtopped at the lower extremity, and communicating at the other with the body of the pipe. The open ſide of the reed (the edges of which are filed perfectly flat and parallel) is covered with a thin plate of hard braſs, called the tongue; one end of which is kept in its poſition by a ſmall wooden wedge *f*, and the other left at liberty to vibrate with the action of the wind. The degree of acuteneſs or gravity of a reed-pipe, depends jointly on the length of the tongue and that of the pipe, meaſured from the extremity of the reed to the extremity of the tube. It is, therefore, neceſſary to have ſome method of altering the length of the reed, in order to tune the pipe. This is effected by pulling up, or puſhing down, the wire-ſpring *g*; which, preſſing the tongue cloſely againſt the reed, ſhortens or lengthens the vibrating portion of it. The degree of gravity, or acuteneſs, of any pipe, depends upon the length; meaſured, in an open pipe, from the edge of the mouth to the extremity of the tube; and, in a ſtopped pipe, from the edge of the mouth to the interior ſurface of the tompion. A ſtopped pipe is half the length of an open pipe of the ſame pitch.

We now return to fig. 1. where X repreſents a ſtopped-pipe of wood, Z a flute-pipe of metal, Y a trumpet-pipe of metal, ſtanding in their places in the rows we have mentioned. The pipes, to prevent them from falling, paſs through holes made in boards placed upon the upper board. The pipes are made to communicate with the wind-cheſt in the following manner: There are holes bored that go through the upper and lower boards, and through the ſlider (when it is drawn out), into the partition below; ſo that any pipes placed upon thoſe holes will then communicate with the partition, which, by its valve, communicates with the wind-cheſt. But, when the ſlider is thruſt in, its holes do not anſwer to thoſe in the upper and lower boards; therefore, the communication is ſtopped, ſo that no wind can get to the pipe.

To every large organ there muſt be at leaſt two pair of bellows, which are marked in fig. 1. by T U, T U. O, O, are the handles, moving upon the axis *nn*, *nn*. Each of theſe bellows conſiſts of two boards, the loweſt of which is immovable; and in this there is a valve *r*, opening inwards, and a tube leading to it, called the *conveying tube*. There is alſo a hole in this under board, from which a tube leads to the port-vent, which is a ſquare tube marked 4, riſing upward, and inſerted into the under ſide of the wind-cheſt at 2. In the tube leading to the port-vent, there is a valve that opens towards the port-vent, and ſuffers the air to go up the port-vent, but not to return. Now the handle O, being pulled down, raiſes the upper board T, and the air enters through the valve *r*; and, when the handle is let go, the weight of the upper board, which carries three or four pounds to every ſquare foot, continually deſcending, drives the air through the port-vent to the ſound-board; and, as the bellows work alternately, one pair is conſtantly deſcending, which occaſions a continual blaſt through the port-vent.

The bellows are ſhown ſeparately at figs. 12 and 13. Single-bellows, for a chamber-organ, conſiſt of two oblong boards, *ab*, *cd*, fig. 12. connected at *b* by a joint of leather or web, and at the other three ſides by thin folds of wood joined together with leather. The lower board is fixed, the upper movable. In the lower board, at *ef*, is an aperture covered with a valve (called by the organ-builders a pallet) opening inwards. At *g* is another aperture, covered with a hollow box *gd*, communicating with the wind-trunk; upon the mouth of which is another pallet opening outwards. When the upper board, *ab*, is raiſed by preſſing down the handle of the lever *hi*, the air enters the bellows at the aperture *ef*, and, upon letting go the lever, is forced into the wind-trunk at *d*, by the preſſure of weights placed upon the upper board. The pallet at *d* prevents the return of the wind from the wind-trunk, when the upper board is raiſed. Double bellows are made with three boards; *ab*, (fig. 13.) the riſer; *cd*, the middle; and *ef*, the feeder boards. At *g*, in the feeder, is an aperture, and pallet to receive the air; at *h*, in the middle board, is the pallet of communication; and at *i*, in the riſer, the waſte pallet, which is contrived to open, when the bellows are ſufficiently full. The riſer empties itſelf into the wind-trunk at *c*. In old bellows of this kind, the riſer is connected with the middle board, in a manner ſimilar to the ſingle bellows; but it is now uſual to join them with folds of an equal breadth in all parts, ſo that the upper board, in riſing, is always parallel to the middle board. Theſe are called *horizontal bellows*, in contradiſtinction to thoſe which riſe diagonally. Their action is very ſuperior to thoſe of the old form. They afford a greater quantity of wind, in proportion to the caſe-room they occupy; the preſſure is more equal; and they are not liable to jerk or quiver. Though lately brought into common uſe, they are by no means a modern invention, as Père Merſenne deſcribes them under the name of bellows *à la lanterne.*

All the internal ſtructure of the organ is concealed from ſight by the front of the inſtrument, which ſtands upon the part between the numbers 3 and 6 (fig. 1.) In every organ, the number of partitions L L, M M, &c. that are in the ſound-board (fig. 1.) that of the valves VV, that of the rollers *ss*, or of the levers *xy* or 8 9 and their wires, and that of the keys A B C, &c. muſt be always equal. The keys are placed between G G, but the ſcheme could not contain them all. There are alſo as many handles *l*, *l*, &c. rollers R R, &c. ſliders *f*, *f*, &c. as there are ſtops upon the organ; and it muſt be obſerved, that between the ſliders *f*, *f*, &c. there are as many ſliders on the right hand, and the ſame number of handles and rollers, and other rows of pipes placed between L N, P Q, which could not be expreſſed in the figure. The leaſt pipes and partitions are placed toward the middle of the organ, and the greateſt on the outſide. The ſtops of an organ have various denominations, according to the ſounds they are to produce; ſome of which are diapaſon, principal, fifteenth, twelfth, tierce, cornet, trumpet, French horn, vox humana, flute, baſſoon, cremona, &c. The foreign organs, eſpecially thoſe of Germany, have many more: particularly that in the abbey-church of Weingarten, a town in the Upper Palatinate, which has 66 ſtops, and contains no fewer than 6666 pipes. The organ at Haerlem is ſaid to have 60 ſtops, many of them but little known to the Engliſh workmen, and diſtinguiſhed by names that expreſs the ſounds which they produce.

When this magnificent inſtrument is played, the handle O of the bellows is firſt put down, which raiſes the upper board T, and gives room for the air to enter by the valve *r*. Then the other handle O is put down: in the mean time the board T, belonging to the firſt handle, deſcending, and ſhutting the valve *r*, drives the air through the other valve, up the port-vent, and into the wind-cheſt. Then drawing out any handle, as that of the flute-ſtop *p l*, which draws out the ſlider *f g*, all the pipes in the ſet L N are ready to play, as ſoon as the keys C, D, E, &c. are put down; therefore, if the key D be put down, it opens the correſponding valve *m* V, through which the air enters into the pipe X, and makes it ſound. In the ſame manner any other pipe in the ſet L N, will ſound when its key is put down; but no pipe, in any other ſet, will ſound till the ſlider be drawn out by its correſponding handle.

The number of keys, or compaſs of the organ, in the time of father Schmidt, was commonly confined to four octaves; from double C in the baſs, to C in alt. To theſe, two notes, G G and A A, were ſometimes added to the loweſt octave. An organ of this compaſs is ſaid to have *ſhort octaves.* When the keys are extended to G G in regular ſucceſſion, the organ is ſaid to have *long compaſs.* The modern builders have extended the keys upwards to F in altiſſimo.

Beſides the *manuals*, or keys for the hand, there are, in ſome large church-organs, *pedals*, or keys played with the feet; ſaid to be the invention of Bernard, a German, about the year 1400. Theſe command certain pipes, which, to increaſe the harmony, are tuned an octave below the diapaſon. It is much to be lamented, that the Engliſh builders have not followed ſome certain and invariable rule for the poſition of their pedals, as they do for their keys. Scarcely two organs in the kingdom have their pedals alike, either with reſpect to number or poſition; ſo that every performer, who comes to an organ with which he is not previouſly acquainted (be he ever ſo ſkilful in the uſe of pedals), has the whole of his buſineſs to learn again. The diſpoſition of the pedals of the fine organ in St. Paul's cathedral, might ſerve as a model for all other Engliſh organs. Each octave of the pedal occupies the ſpace of two octaves of the finger-keys; and the C's are placed under each other.

Among the modern improvements of the organ, the moſt remarkable are the ſwell and the tremblant. The ſwell is ſaid to be an Engliſh invention; and Dr. Burney, in his Tour through Germany, ſays that he found only one organ in which a ſwell had been attempted, and that in a very imperfect manner. The ſwell has its pipes incloſed in a ſtout wooden box, with a ſliding door; which, being gradually opened by the preſſure of the performer's foot, the ſound is increaſed, and is diminiſhed by a contrary motion. The ſwell organ is commonly placed in the upper part of the caſe, either over the great organ, or over the choir-organ. The tremblant is a contrivance by means of a valve in the port-vent, or paſſage from the wind-cheſt, to check the wind, and admit it only by ſtarts; ſo that the notes ſeem to ſtammer, and the whole inſtrument to ſob, in a very ſingular manner. There is a tremblant in the organ at the German chapel in the Savoy.

Thoſe who wiſh to be further informed in the hiſtory and practice of organ-building, are referred to L'Harmonie Univerſelle, folio, Paris, 1636; Harmonicorum Libri Duodecimi, folio, Paris, 1648; Facteur d'Orgues, Paris, 1766; and Mr. Maſon's Eſſays on Engliſh Church Muſic.

The organs in our churches, that have been well preſerved, of father Schmidt's make, ſuch as St. Paul's, the Temple, St. Mary's, Oxford, Trinity-college, Cambridge, &c. are far ſuperior in tone to any of more modern conſtruction; but the mechaniſm has been improved during the laſt century, by Byfield, Snetzler, Green, Gray, &c. The touch is lighter, the compaſs extended, and the reed-work admirable. The dulciana-ſtop, brought hither by Snetzler, is a tall, delicate, narrow, pipe, of an exquiſite ſweet tone, without a reed; on which account it ſtands in tune equally well with the open diapaſon. Though the beſt keyed-inſtruments in England have been made by Germans, they work here better than in their own country in ſize and number of ſtops: they greatly ſurpaſs us in the ſize of their organs, but the mechaniſm is infinitely inferior; which is accounted for by the workmanſhip being better paid here than in the German dominions, where labour is cheap.

The long keys of our old church-organs were made of box or ebony, and the ſhort, or flats and ſharps, of ivory. But at preſent, the long keys, or natural notes, like thoſe in harpſichords and piano-fortes, are of ivory, and the flats and ſharps of ebony, or dyed pear-tree wood.

An organ, when complete for cathedrals, is of threefold conſtruction, and furniſhed with three ſets of keys; one for what is called the great organ, and which is the middle ſet, a ſecond (or lower ſet) for the choir-organ, and a third (or upper ſet) for the ſwell. In the great organ, the principal ſtops are: the two diapaſons, the principal, the twelfth, the fifteenth, the ſeſquialtera, the mixture or furniture, the trumpet, the clarion, and the cornet. The choir-organ uſually contains the ſtopt diapaſon, the dulciana, the principal, the flute, the baſſoon, and the vox humana. The ſwell compriſes the two diapaſons, the principal, the hautboy, trumpet, and cornet.

In attempting to deſcribe the requiſites of a good organ, we ſhall begin with the bellows; which, beſides being of a ſize fully adequate to ſupply the chorus, ſhould at all times give an equal weight of wind. This may be known, by holding down two notes of the diapaſon, or any other ſtop, when the bellows are nearly full, and obſerving whether they continue in the ſame relative ſtate of tune, until the bellows are nearly empty. If they do, the wind is equal; without which, no organ can ever be in tune: alſo, when carefully blown, no difference ſhould be heard from the action of blowing. In like manner, a ſingle note of the diapaſon ſhould continue unaltered in its pitch, and ſmooth in its tone, while the other ſtops are added in ſucceſſion, until the whole chorus be drawn. This proves that the wind meets with no impediment in its courſe to the pipes: a requiſite of no leſs importance than the former.

The draw-ſtops ſhould move with ſufficient eaſe and ſmoothneſs; and ſhould ſtop ſo decidedly, as to leave no doubt of their being completely drawn, or ſhut. The touch of the keys ſhould be free and elaſtic, and exactly the ſame preſſure ſhould be requiſite to put down every key throughout the ſcale. No better proof can be given of a good touch, than that a turned ſhake can be executed with equal facility in every part of the ſcale, except perhaps in the loweſt octave, where it is not to be expected or deſired. If all theſe things act without noiſe, the mechanical parts of the organ may be conſidered good, and in order.

The goodneſs of the pipes is not ſo eaſily deſcribed, becauſe much depends upon the quality of the tone, of which little idea can be given in words. A fine quality and great ſtrength can hardly be expected from the ſame pipe: it therefore depends ſomewhat on choice which to prefer; though it does not follow that all ſoft-toned pipes are of a fine quality. But, be the quality what it may, it ſhould be uniform from the top to the bottom: a requiſite which cannot be too ſtrongly inſiſted on in all inſtruments, ſo as to give the idea of all the notes coming from the ſame pipe or ſtring.

It is indiſpenſable to an organ, that it have a good ſtopped diapaſon, as that ſtop is the foundation of the organ, and is never ſhut, except when the dulciana or flute are uſed as ſolo-ſtops. It is of great importance that it be ſufficiently full and bold in the baſs, particularly in thoſe chamber-organs which have an open diapaſon; as that ſtop is ſeldom extended lower than G-gamut. And in large church-organs, where the open diapaſon goes through the ſcale, the lower notes are feeble, if not ſupported by the ſtopped diapaſon; and it may be obſerved, that no ſtop ſhould be loudeſt at the top. Of the open diapaſon, little more need be ſaid, than that it ſhould be full, ſmooth, and articulate. In ſmall organs it is entirely diſpenſed with; and in thoſe which are larger, it is in the treble only, or more or leſs extended into the baſs, according to the ſize of the organ, or choice of the builder; and it may be proper to obſerve, it is better that the loweſt pipes ſhould not be ſo loud as to make the break very perceptible. In large church-organs there are frequently two open diapaſons through; and nothing can be a greater recommendation to an organ than its having good diapaſons. What has been already ſaid will apply to all other ſtops generally, when taken ſingly; but their relative ſtrength is of great importance to the goodneſs of the chorus. As a ſingle ſtop ſhould not be loudeſt at the top, ſo the chorus-ſtops ſhould not predominate over the diapaſons; a fault very general in the old organs, ariſing from the bad taſte of the times in which they were made. The chorus ſhould be rich, brilliant, and articulate; and the twelfth and tierce, and their octaves, ſhould not be heard, except when liſtened for. The trumpet-ſtop, when good, adds greatly to the majeſty, as well as to the ſtrength of the chorus; and its octave, the clarion, increaſes its brilliancy.

The goodneſs of theſe, and all other reed-ſtops, beſides the requiſites already mentioned, depends upon their ſpeaking readily and quickly; and being free from the naſal tone, ſuch as is produced by bad players on the clarionet or hautboy. And it had been well if the trumpet had never been uſed as any other than a chorus-ſtop; for its uſe, as an imitation of a real trumpet, has given riſe to the introduction of a variety of imitation-ſtops; moſt of them a diſgrace to the noble inſtrument in which they are ſuffered to intrude; and its conſequence, a trifling and vitiated ſtyle of performance equally diſgraceful to the taſte of this country, where only it is cultivated.

We have mentioned (p. 368.) the ſcarcity of organ-builders at the time of the reſtoration. Harris, ſen. and Renatus Harris, his ſon, two eminent organ-builders, called hither from France, ſoon after the reſtoration, to ſupply our churches with inſtruments, (which, during the time of the republic, had been injured, baniſhed, or deſtroyed,) were excellent workmen, only inferior to father Schmidt, to whom Renatus, after the death of his father, in 1672, became a formidable rival. The contention between theſe eminent artiſts, at the time of erecting the admirable organ which ſtill ſtands in the Temple-church, was carried on with ſuch ſpirit, not to ſay violence, as perhaps never happened before or ſince on a ſimilar occaſion.

About the latter end of the reign of Charles II. the maſter of the Temple and the benchers, being determined to have as complete an organ erected in their church as poſſible, received propoſals from both theſe eminent artiſts, backed by the recommendation of ſuch an equal number of powerful friends and celebrated organiſts, that they were unable to determine among themſelves which to employ. They therefore told the candidates, if each of them would erect an organ in different parts of the church, they would retain that which, in the greateſt number of excellencies, ſhould be allowed to deſerve the preference. Schmidt and Harris agreeing to this propoſal, in about eight or nine months, each had, with the utmoſt exertion of his abilities, an inſtrument ready for trial. Dr. Tudway living at the time, the intimate acquaintance of both, ſays that Dr. Blow and Purcell, then in their prime, performed on father Schmidt's organ, on appointed days, and diſplayed its excellence; and, till the other was heard, every one believed that this muſt be choſen. Harris employed M. Lullie, organiſt to queen Catharine, a very eminent maſter, to touch his organ, which brought it into favour; and thus they continued vying with each other for near a twelvemonth. At length, Harris challenged father Schmidt to make additional reed-ſtops in a given time; theſe were the vox-humana, cremorne, the double courtel, or double baſſoon, and ſome others. Theſe ſtops, then newly-invented, or at leaſt new to Engliſh ears, gave great delight to the crowds who attended the trials; and the imitations were ſo exact and pleaſing on both ſides, that it was difficult to determine who had beſt ſucceeded. At length, the deciſion was left to lord chief-juſtice Jefferies, afterwards king James II's pliant chancellor, who was of that ſociety, and he terminated the controverſy in favour of Schmidt; ſo that Harris's organ was taken away without loſs of reputation, having ſo long pleaſed and puzzled better judges than Jefferies. The Hon. Roger North, who was in London at the time of the contention at the Temple-church, ſays, in his Memoirs of Muſic, that the competition between father Schmidt and Harris, the two beſt artiſts in Europe, was carried on with ſuch violence by the friends of both, that they "were juſt not ruined." Indeed old Roſeingrave aſſured Dr. Burney, that the partiſans for each candidate, in the fury of their zeal, proceeded to the moſt miſchievous and unwarrantable acts of hoſtilities; and that, in the night preceding the laſt trial of the reed-ſtops, the friends of Harris cut the bellows of Schmidt's organ in ſuch a manner, that, when the time came for playing upon it, no wind could be conveyed into the wind-cheſt. Harris's organ, after its rejection at the Temple, was part of it erected at St. Andrew's, Holborn, and part in the cathedral of Chriſt-church, Dublin.

Beſides this complete organ, there are other organs of ſmaller ſizes and more limited powers, adapted to church, chapel, and chamber, uſe. There is alſo the *barrel-organ*, which has the parts of other organs, with the addition of a cylinder, or barrel, revolving on pivots: on the circumference of this, by means of wires, pins, and ſtaples, are ſet the tunes it is intended to perform. Theſe pins and ſtaples, by the revolution of the barrel, act upon the keys, and give admiſſion to the wind, from the bellows to the pipes. The barrel-organ is frequently made portable, and ſo contrived, that the ſame action of the hand which turns the barrel ſupplies the wind, by giving motion to the bellows.

Of all muſical inſtruments, the barrel-organ is the moſt eaſy of performance, as it merely requires a regular motion given to it by a handle. On this account, it is an inſtrument of very general uſe; and the recent improvements of ſome Engliſh artiſts, have rendered the barrel capable of producing an effect equal to the fingers of the firſt-rate performers. Barrels are now very generally added to chamber-organs, operating on the ſame pipes as the finger-keys, though by a different ſet of keys; ſo that either barrel or finger-keys may be uſed independently of each other. Many barrel-organs are conſtructed on an extremely ſmall ſcale, motion being given to them by clock-work. The whole inſtrument is frequently concealed in ſome piece of furniture; and the clock, being previouſly wound up, is put in motion at pleaſure, by diſcharging a trigger, producing a very agreeable effect to thoſe unacquainted with the concealment.

A moſt powerful and grand inſtrument of this kind, called the Apollonicon, is now exhibiting at Flight and Robſon's, St. Martin's-lane, London. This inſtrument has attracted, in a conſiderable degree, the curioſity and attention of the muſical world. As a high reſult of mechanical ſkill, and as a mode of producing muſical ſounds, it deſerves high ecomium. It is eſſentially an organ, on a very large ſcale, and of an extenſive compaſs, compriſing every ſhade and gradation of ſound from great power to extreme ſoftneſs and ſweetneſs; and poſſeſſes moreover the capacity of being played on by five performers at the ſame time. To the notion, however, which appears to have obtained currency, that it is equal in effect to the variety and richneſs of a full orcheſtra, to the union and contraſt of voices and inſtruments, we cannot lend our ſanction: from no *one* inſtrument, however perfect and complicated, will ſuch a reſult ever be obtained; and this is not altogether free from the defects which are inherent in inſtruments of this character, the organ ſpecies, of monotony, the want of the *ſtaccato*, and of the perfect and gradual *creſcendo* and *diminuendo*. It is but juſtice, at the ſame time, to obſerve, that in this latter reſpect it has improved on, and exceeded the powers of, organs in general. On the whole we may venture to ſay, that the Apollonicon, in its preſent mode of exhibition, is deſerving a viſit; and will rank the higher, if its admirers do not injudiciouſly extol it for qualities which it does not poſſeſs.

The *hydraulic organ*, already mentioned, is a machine that plays by water inſtead of wind. Of theſe there are ſeveral in Italy, in the grottoes of vineyards. Cteſebes of Alexandria, who lived in the time of Ptolemy Evergetes, is ſaid to have invented organs that played by compreſſing the air with water, as is ſtill practiſed. Archimedes and Vitruvius have left us deſcriptions of the hydraulic organ. In the cabinet of queen Chriſtina is a beautiful and large medallion of Valentinian, on the reverſe whereof is ſeen one of theſe hydraulic organs, with two men, one on the right, the other on the left, ſeeming to pump the water which plays it, and to liſten to its ſound. It has only eight pipes, placed on a round pedeſtal. The inſcription is PLACEA SPETRI, if it be not wrong copied, which we ſuſpect to be the caſe.

The SPINET.—The ſpinet is a ſtringed inſtrument, but played with keys like the organ. The name is derived from *ſpina*, a thorn, or quill, the tone being produced by a crow-quill inſerted in the tongue of a little machine called a jack. The inſtrument conſiſts of a cheſt, or belly, made of the moſt porous and reſinous wood to be found, and a table of fir faſtened on rods, called the *ſound-board*, which bears on the ſides: on the table are raiſed two little prominences or bridges, in which are fixed as many pins as there are ſtrings on the inſtrument.

The keys, when preſſed down at the end by the finger, on the principle of the lever, make the other end throw up jacks, which ſtrike the ſtrings, and cauſe the ſound by means of the quills with which they are armed. The thirty thickeſt ſtrings are of braſs; the others, for the more delicate tones, are of ſteel or iron wire, faſtened at one end by hooks, and at the other on pins, by which they receive their tenſion over the bridges already mentioned.

The figure of the ſpinet is like that of a horizontal harp, and the harp an inverted ſpinet. It is tuned in the ſame manner as other keyed inſtruments, by 5ths and 8ths, with or without bearings, as the tuner or the owner of the inſtrument ſhall pleaſe. There have been ſpinets and harpſichords made for curious people with ſome or all the keys ſplit or cut in two, and furniſhing a different tone for F♯ and G♭, D♯ and E♭, &c. to perfect ſome of the moſt offenſive keys in common tuning. Zarlino had an inſtrument of this kind made at Venice, and it was afterwards ſent to England; but the mechaniſm and tone were ſo bad, that no tuning could render its ſounds agreeable. There are quarter-notes, as they are called, in the Temple organ, to three of the five ſhort keys; but, except in pſalmody, or very ſlow movements, Stanley never ventured to touch them. The ſpinet has but a ſingle ſtring to each note. We believe that very few ſpinets have been made ſince the middle of the laſt century.

The *virginal* was a keyed inſtrument of one ſtring, jack, and quill, to each note, like a ſpinet; but in ſhape reſembling the preſent ſmall piano-forte. It has been imagined to have been invented in England during the reign of queen Elizabeth, and to have been thus denominated in honour of that virgin princeſs; but Dr. Burney has brought a proof of its uſe in this kingdom before ſhe was queen; and a drawing and deſcription of it appeared in Luſcinius's Muſurgia, before ſhe was born. Dr. Johnſon imagines that this inſtrument had its name from being chiefly uſed by young ladies.

A virginal which had belonged to queen Elizabeth is ſtill extant, and in good preſervation. It was purchaſed at lord Spencer Chicheſter's ſale at Fiſherwick, about fourteen years ago, by Mr. Jonah Child, a painter, at Dudley in Worceſterſhire. The caſe is of cedar, covered with crimſon Genoa velvet, upon which are three ancient gilt locks, finely engraved: the inſide of the caſe is lined with ſtrong yellow tabby ſilk. The whole is in a high ſtate of preſervation, light and portable, not exceeding twenty-four pounds in weight; being five feet long, ſixteen inches wide, and ſeven inches deep. The front is covered entirely with gold; having a border round the inſide two inches and a half broad. There are fifty keys, with jacks and quills; thirty of them ebony, tipped with gold; and the ſemitone keys (twenty in number) are inlaid with ſilver, ivory, and different kinds of wood, each key conſiſting of about two hundred and fifty pieces. The royal arms of Elizabeth, at one end, are moſt exquiſitely emblazoned: at the other end a dove, riſing Luna, crowned, holding in its right foot a ſceptre, and ſtanding upon an oak-tree, couped, and eradicated. It is impoſſible to give an adequate idea of the ornaments and workmanſhip of the whole. The painting is done upon gold, with carmine, lake, and fine ultramarine, and the ornaments are minutely engraven upon the gold, which give it a moſt beautiful appearance.

Speaking of this ſingularly-curious inſtrument, the late Mr. Shaw, in his Hiſtory of Staffordſhire, vol. i. p. 369, article *Fiſherwick*, ſays, "The muſic-rooms, which are elegantly fitted up, contain an excellent collection of inſtruments by the firſt makers: but the greateſt curioſity, in this line, is a virginal; which his lordſhip purchaſed ſome years ſince in London, and which has lain ſome time in obſcurity. It is covered with crimſon velvet, and richly decorated in front with japan and gilt ornaments, among which are the arms and ſupporters of queen Elizabeth at one end, and at the other, a bird, crowned, holding in its right paw a ſceptre. It is in ſhape and ſize much like a ſpinet, but opens on the oppoſite ſide, and then reſembles a common piano-forte. The beauty and elegance of the ornaments, together with the above arms and badge, leave little room to doubt that it was, what tradition ſtates it to have been, an inſtrument once belonging to that great queen."

Dr. Burney ſays, that Elizabeth, as well as the reſt of Henry the Eighth's children, and indeed all the princeſſes of Europe at that time, had been taught muſic early in life; for Camden, in giving an account of her ſtudies, ſays, "that ſhe underſtood well the Latin, French, and Italian, tongues; and was indifferently well ſeen in the Greek. Neither did ſhe neglect muſic, ſo forthe as might become a princeſſe; being able to ſing, and play upon the lute, prettily and ſweetly." There is reaſon to conclude that ſhe continued to amuſe herſelf with muſic many years after ſhe aſcended the throne. Sir James Melvil gives an account of a curious converſation which he had with this princeſs, to whom he was ſent on an embaſſy, by Mary queen of Scots, in 1564. After her majeſty had aſked how his queen dreſſed? what was the colour of her hair? whether that or hers was beſt? which of the two was faireſt? and which of them was higheſt in ſtature? then ſhe aſked him, what kind of exerciſe ſhe uſed? "I anſwered," ſays Melvil, "that, when I received my diſpatch, the queen was lately come from the Highland-hunting; that, when her more ſerious affairs permitted, ſhe was taken up with reading of hiſtories; that ſometimes ſhe recreated herſelf in playing upon the lute and virginal." She aſked if ſhe played well? I ſaid, "Reaſonably for a queen."—"The ſame day, after dinner, my lord of Hunſden drew me up to a quiet gallery, that I might hear ſome muſick (but ſaid he durſt not avow it), where I might hear the queen play upon the virginal. After I had harkened awhile, I took by the tapeſtry that hung before the door of the chamber, and, ſeeing her back was towards the door, I entered within the chamber, and ſtood a pretty ſpace; but ſhe left off immediately, ſo ſoon as ſhe turned about and ſaw me; appearing to be ſurpriſed to ſee me; and came forward, ſeeming to ſtrike me with her hand, alleging that ſhe uſed not to play before men; but when ſhe was ſolitary, to ſhun melancholy. She aſked how I came there? I anſwered, 'As I was walking with my lord Hunſden, as we paſſed by the chamber-door, I heard ſuch a melody that raviſhed me; whereby I was drawn in, ere I knew how; excuſing my fault of homelineſs, as being brought up in the court of France, where ſuch freedom was allowed; declaring myſelf willing to endure what kind of puniſhment her majeſty ſhould be pleaſed to inflict upon me, for ſo great an offence.' Then ſhe ſate down low upon a cuſhion, and I upon my knees by her; but, with her own hands, ſhe gave me a cuſhion to lay under my knees; which at firſt I refuſed, but ſhe compelled me to take it. She enquired whether my queen or ſhe played beſt? In that I found myſelf obliged to give *her* the praiſe." Gent. Mag. 1815.

The oldeſt book of leſſons that we know of as compoſed expreſsly for the virginal, is a thin folio, engraved on copper, and publiſhed in the reign of king James I. under the following title: "*Parthenia*, or the Maidenhead of the firſt Muſicke that ever was printed for the Virginalls. Compoſed by three famous maſters: William Byrd, Dr. John Bull, and Orlando Gibbons, Gentilmen of his Majeſties moſt illuſtrious Chappel." Bird being here called "Gentilman of his Majeſties Chappel," ſeems to imply, that he was ſtill living when it was publiſhed. King James died in 1525, and Bird in 1523. The three firſt movements in this collection, conſiſting of a *Preludium; Pavana*, Sir William Peder; and *a Galiardo;* are in G minor, and may be called a *Suite* of Leſſons. The fourth and fifth movements, *Preludium;* and *Galiardo*, Mrs. Marye Brownlo, in C; and the ſixth, ſeventh, and eighth, *Pavana*, the Earle of Saliſbury; *Galiardo primo;* and *Galiardo ſecundo*, Mrs. Marye Brownlo, in A minor; conſtitute what may likewiſe be regarded as two other *Suites de Pieces*, or Sets of Leſſons.

The *clavichord*, or *manichord*, is a keyed inſtrument ſomewhat of the nature of the ſpinet or virginal, but of an oblong form. It is not known in England, but is ſtill much uſed in Germany. Its form is that of a ſmall piano-forte: it has no quills, jacks, or hammers. The ſtrings are all muffled with ſlips of red cloth, and the tone is produced by little braſs wedges, placed at the ends of the keys, which, when put down, preſs againſt the middle of the ſtrings, acting as a bridge to each. When this inſtrument is touched by a good maſter, it is capable of great expreſſion, though of a melancholy kind, ſomething like the effect of the old cloſe-ſhake on the violin. It is ſometimes called the *dumb ſpinet.* The antiquity of this keyed inſtrument in Germany is very great among modern muſical inventions; as there is a deſcription and a repreſentation of it cut in wood, in the Latin Muſurgia of Ottomarus Luſcinius, printed at Straſburg in 1536. But we find mention made of it, as a common inſtrument, in England, under the name of *clarichord*, by Taverner, ſtill more early. The ſcale of theſe three inſtruments is the ſame as that of the old organs.

The HARPSICHORD.—As the harp was derived from the cithara, ſo was the harpſichord from the harp, being indeed a horizontal harp, except that it is ſtrung entirely with wire. Its tone is produced by jacks quilled with crow or raven quills. A *ſingle harpſichord* of two uniſons and one ſet of keys, was, in effect, a double ſpinet or virginal. But a *double harpſichord* uſed to have two ſets of keys, and three ſtrings, two uniſons and an octave, to each note. Merlin, we believe, was the firſt who changed the octave-ſtop to a third uniſon, about the year 1770, which rendered the inſtrument equally powerful, and leſs ſubject to go out of tune; the octave-ſtop being ſo much affected by the leaſt change in the temperature of the air, that it almoſt inſtantly diſcovered when there was a change in the wind. Beſides arming the tongues of the jacks with crow or raven quills, ſeveral other means were tried by which to produce a ſofter tone, and to be more durable; as the quilling a harpſichord with three ſtops was nearly a day's work: leather, ivory, and other elaſtic ſubſtances, were tried; but what they gained in ſweetneſs was loſt in ſpirit. The beſt harpſichords of the eighteenth century were made by Ruckers of Antwerp, and his family; Geronimo of Florence, Couſhette, Tabel, and Kirkman and Shudi, Tabel's foremen.

The harpſichord is now ſo entirely out of uſe, that one of Kirkman's double-keyed inſtruments may be had for ſix or eight guineas. We therefore proceed to ſpeak of the *hammer-harpſichord*, or

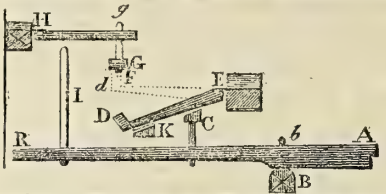
PIANO-FORTE.—About the beginning of the laſt century, hammer-harpſichords were invented at Florence, of which there is a deſcriptiou in the Giornale d'Italia, 1711. The invention made but a ſlow progreſs. The firſt that was brought to England was made by an Engliſh monk at Rome, father Wood, for an Engliſh friend, (the late Samuel Criſp, eſq. of Cheſington, author of Virginia, a tragedy,) a man of learning, and of exquiſite taſte in all the fine arts. The tone of this inſtrument was ſo ſuperior to that produced by quills, with the additional power of producing all the ſhades of *piano* and *forte* by the finger, that, though the touch and mechaniſm were ſo imperfect that nothing quick could be executed upon it, yet the Dead March in Saul, and other ſolemn and pathetic ſtrains, when executed with taſte and feeling by a maſter a little accuſtomed to the touch, excited equal wonder and delight in the hearers. Fulk Greville, eſq. purchaſed this inſtrument of Mr. Criſp for 100 guineas, and it remained *unique* in this country for ſeveral years, till Plenius made a piano-forte in imitation of that of Mr. Greville. Of this inſtrument the touch was better, but the tone very much inferior. Backers, a harpſichord-maker of the ſecond rank, conſtructed ſeveral piano-fortes, and improved the mechaniſm in ſome particulars; but the tone, with all the delicacy of Schroeter's touch, loſt the ſpirit of the harpſichord, and gained nothing in ſweetneſs.

After the arrival of John Chr. Bach in this country, and the eſtabliſhment of his concert, in conjunction with Abel, all the harpſichord-makers tried their mechanical powers at piano-fortes; but the firſt attempts were always on the large ſize, till, about the year 1766, Zumpé, a German, who had long worked under Shudi, conſtructed ſmall piano-fortes of the ſhape and ſize of the virginal, of which the tone was very ſweet, and the touch, with a little uſe, equal to any degree of rapidity. Theſe, from their low price, and the convenience of their form, as well as power of expreſſion, ſuddenly grew into ſuch favour, that there was ſcarcely a houſe in the kingdom, where a keyed inſtrument had ever had admiſſion, but was ſupplied with one of Zumpé's piano-fortes, for which there was nearly as great a call in France as in England. In ſhort, he could not make them faſt enough to gratify the craving of the public. Pohlman, whoſe inſtruments were very inferior in tone, fabricated an almoſt infinite number for ſuch as Zumpé was unable to ſupply. Large piano-fortes afterwards receiving great improvement in the mechaniſm by Merlin, and in the tone by Broadwood and Stoddard, the harſh ſcratching of the quills of a harpſichord can now no longer be borne.

We are informed by a correſpondent in the Monthly Magazine for Dec. 1810, that a very ingenious muſical-inſtrument maker, a native of Saxony, claims the invention for a member of the academy of Dreſden. In corroboration of which, he has furniſhed an extract from a recent German publication, entitled *Muſikaliſches Lexikon, von H. C. Koch.* The following is a tranſlation: "The piano-forte was invented by J. C. Schröder, of Dreſden in Saxony, in the year 1717. He had a model made of this invention, and preſented it to the court of Dreſden for inſpection. The hammers recoiled, and were covered with leather. Some time after, Mr. G. Silvermann, a muſical-inſtrument maker, began to manufacture ſome, and ſucceeded in bringing them to a tolerable degree of perfection. It has been queſtioned, however, whether Schröder, or B. Caſtofali, an inſtrument-maker of Florence, had the firſt idea of it; but the moſt authentic accounts eſtabliſh indiſputably the claim of Schröder to this ingenious invention." For a particular deſcription of its mechaniſm, ſee Mizler's Muſikaliſche Bibliothek, vol. iii. "The *fortbien*, called here the ſquare piano-forte, was invented by Freiderici, an organ-builder, of Gera in Saxony, about the year 1758."

Theſe extracts would ſeem to eſtabliſh the fact, that we owe the invention of the piano-forte to Germany. Mr. Capel Lofft, however, is of a different opinion; and gives the invention, as well as the introduction of it into this country, to Zumpé. "The introduction of this elegant and expreſſive inſtrument, which ſeems to me, and to many, to have ſo much improved on the harpſichord, took place in this country probably, and almoſt certainly, in 1766, and was completed in 1768. Its improvement in two years, ſeems to make it probable that it was even invented here. And this appears the more likely, as I find no indication that Rouſſeau was acquainted with it. If he had, I preſume he would have been too greatly intereſted in it to have paſſed it in ſilence. During his ſtay in England, he ſpent ſo much of his time at a diſtance from the metropolis, and I believe in ſociety not particularly muſical, that it was very likely that he ſhould not hear of it. But, if it had been introduced firſt in Germany, and before 1766, it is almoſt impoſſible that Rouſſeau, who died July 4, 1778, ſhould not have heard of it. It could hardly have failed to have been known in Paris, through France, and even in Swiſſerland, many years before his death, if it had been ſo long previouſly to that event in uſe in Germany."

By whomſoever invented, however, the piano-forte was ſo much improved by our celebrated poet Maſon, that, added to the probability of its having been invented here, it has been called a "national inſtrument." Mr. Maſon had obſerved, that the piano-fortes which had been made here by Zumpé and other Germans, were all conſtructed on one principle, and required a particular touch of the finger, which was of difficult acquiſition, and which ſpoiled it for harpſichord-practice; as they were alſo deficient in delicacy and juſtneſs, and as the performer was by no means certain of producing the very ſtrength of ſound intended, Mr. Maſon removed all thoſe imperfections, by detaching the mallet entirely from the key, and giving them only a momentary connection. It is by this improvement that the *Engliſh piano-forte* is diſtinguiſhed from all others. Mr. Maſon's general principle may be fully underſtood by the following deſcription. In the annexed figure, the parts are repreſented in their ſtate of inaction.



The key A B K turns, as uſual, on the round edge of the bar B; and a pin *b*, driven into the bar, keeps it in its place. The dot F repreſents a ſection of the ſtring. E D is the mallet, having a hinge of vellum, by which it is attached to the upper ſurface of the bar E. At the other end is the head D, of wood, covered with ſome folds of prepared leather. The mallet lies in the poſition repreſented in the figure, its lower end reſting on a cuſhion-bar K, which lies horizontally under the whole row of mallets. The key A R has a pin C, tipt with a bit of the ſofteſt cork or buckſkin. This reaches to within $\frac{1}{20}$th of an inch of the ſhank of the mallet, but muſt not touch it. The diſtance E C is about $\frac{1}{3}$d or $\frac{1}{4}$th of the length of the ſhank. When the end A of the key is preſſed down on the ſtuffing (two or three thickneſſes of the moſt elaſtic woollen liſt), it raiſes the mallet, by means of the pin C, to the horizontal poſition E *d*, within $\frac{1}{8}$th or $\frac{1}{10}$th of an inch of the wire F; but it cannot be ſo much preſſed down as to make the mallet touch the wire. At the ſame time that the key raiſes the mallet by means of the pin C, it alſo lifts off the damper G (a bit of ſpunge) from the wire. This damper is fixed on the end of a little wooden pin G *g*, connected with the lever *g* H, which has a vellum hinge at H. This motion of the damper is cauſed by the pin I, which is fixed into the key near to R. Theſe pieces are ſo adjuſted, that the firſt touch of the key lifts the damper, and, immediately after, the pin C acts on the ſhank of the mallet. As it acts ſo near to its centre of motion, it cauſes the head D to move briſkly through a conſiderable arch D *d*. Being made extremely movable, and very light, it is thus *toſſed* beyond the horizontal poſition E *d*, and it ſtrikes the wire F, which is now at liberty to vibrate up and down, by the previous removal of the damper G. Having made its ſtroke, the mallet falls down again, and reſts on the ſoft ſubſtance on the pin C. It is of eſſential importance that this mallet be extremely light. Were it heavy, it would have ſo much force, after rebounding from the wire, that it would rebound from the pin C, and again ſtrike the wire. For it will be recollected, that the key is, at this time, down, and the pin C raiſed as high as poſſible, ſo that there is very little room for this rebound. Leſſening the momentum of the mallet by making it very light, making the cuſhion on the top of the pin C very ſoft, and great preciſion in the ſhape and figure of all the parts, are the only ſecurities againſt the diſagreeable rattling which theſe rebounds would occaſion. In reſpect to the ſolidity and preciſion of workmanſhip, the Britiſh inſtruments are unrivalled, and vaſt numbers of them have been ſent to all parts of the continent.

The compaſs of the grand piano-fortes, with additional keys, is equal to the general ſcale of notes at Ex. 3. Plate I. including, of courſe, all the half-tones.

The *Claviol*, or Finger-keyed Viol.—The firſt notice of this inſtrument is in the American newſpaper True Briton for Aug. 9, 1802, where it is announced as the invention of a Mr. Hawkins of New York. By the deſcription in this paper, it ſeems much to reſemble the lyrichord of Plenius, that was exhibited for two or three years in the middle of the laſt century; the tones of which were produced by roſined wheels, which in their revolution acted as ſo many fiddle-bows; the ſtrings being brought into contact with the wheel by the preſſure of the fingers on the key. One peculiarity in the lyrichord was, that the ſtrings were tuned by weights. The baſſes were very fine, but the treble ſcreamed intolerably. Plenius was a German, and the firſt who attempted to make large piano-fortes in England.

The inſtrument called a *claviol* by Mr. Hawkins, produces its effects from bowel-ſtrings, by a roſined horſe-hair bow, and is played with finger-keys, like the piano-forte. The tones of this inſtrument are ſtated to poſſeſs "the ſweetneſs of the harmonica, the richneſs of the violin, and the grandeur of the organ." Theſe indeed are high pretenſions; and, if they ſhould be juſt, the invention would be a moſt valuable diſcovery. However, we do not find that the inſtrument has come into uſe, or is much known, even among profeſſors. Mr. Hawkins afterwards came to London; and exhibits his invention, with ſome other mechanical contrivances, more curious than uſeful, at a muſeum (and oil-ſhop) which he has opened in Tichfield-ſtreet.

The inſtrument contains 68 gut-ſtrings, ſtretched in a vertical poſition, and arranged in four ſeries, of 17 ſtrings each. The firſt ſeries, correſponding to the double baſs, conſiſts of ſeventeen large ſtrings, thirteen of which are covered with wire; the longeſt ſtring is thirty-eight inches, and the ſhorteſt twenty-eight inches: the ſecond ſeries, producing the tones of the violoncello, from twenty-eight to fifteen inches in length: the third, the viola, from fifteen inches to ſeven long, and the fourth, the violin, are from ſeven to three inches long. The frame containing the ſtrings is of equal height in all parts, though the effective lengths of the ſtrings are only to be reckoned from their reſpective bridges to the keys. Each ſtring is provided with a finger-key, which keys are arranged in the ſame order as in the piano, &c. and each ſtring is adjuſted to ſound the proper note for the key to which it belongs; the adjuſtment is made at the upper end of the ſtring by a ſcrew. To keep the inſtrument in tune through all variations of the atmoſphere, each ſtring is ſtretched by a helical ſpring, attached to the lower part of the frame at one end, and to the ſtring at the other; by this means the tenſion of the ſtring is always equal, notwithſtanding its variations of length from the ſtate of moiſture in the air, as the force of the ſpring will not be ſenſibly changed by ſuch minute alterations of length.

The next parts to be ſpoken of are the *roſined horſe-hair bows*, which are the moſt ingenious parts of this invention; they are four in number, one to each ſeries of ſtrings. The horſe-hairs are arranged within a circular ring of braſs, which ring is ſuſtained by three wheels within it, which admit of its rotative motion, and at the ſame time allow the ſtrings to paſs down through another ring, and to be as near to the hairs as poſſible, without touching them: for this purpoſe, each ſeries of the ſtrings is arranged in a circular form, to correſpond with the curvature of the bows. The circular bows are put in motion by a pulley on the axes of the wheels; and a ſtrap or band, paſſing round this, communicates motion from a vertical axis which is common to the whole, and is put in motion by a wheel, on the axis of a crank, which is turned by a treadle, and provided with a fly-wheel, to regulate the motion, and continue it while the treadle is aſcending. The communication between the horizontal axis of the crank and fly-wheel, and the vertical axis giving motion to the bows, is made by two conical wheels, covered with ſoft leather, touching each other in their circumferences: this is an excellent ſubſtitute for toothed wheels, both with reſpect to the freedom and ſilence of the motion, as the toothed wheels, being neceſſarily conſtructed of metal, could not be diveſted of an unpleaſant ſound, hardly ot be endured in a muſical inſtrument.

The keys move on a fulcrum; and, when preſſed down by the fingers, the oppoſite end elevates one arm of a bent lever; at the ſame time the other arm is drawn back, and a wire moves one arm of a ſecond angular lever; the other arm ends in a hook, which is engaged with the ſtring correſponding to the keys. From this arrangement, when the key is forced down, the ſtring is drawn in contact with the hairs of the bow, ſituated juſt above the ſecond lever; and the friction cauſes the ſtring to vibrate in the ſame manner as the violin. It is ſcarcely neceſſary, after this, to ſay any thing reſpecting the action of the inſtrument: the performer keeps the bows in continual motion by the treadle, which moves with ſuch eaſe as to be no impediment to the freedom of motion requiſite for a performer on a keyed inſtrument: an increaſe of preſſure on the keys is ſaid to cauſe that fulneſs of tone which is ſo much admired in the violin; but the delicate ſoftneſs produced by lightly touching the keys is a principal advantage in this inſtrument; and it is a great recommendation, that by its aſſiſtance theſe excellencies of the violin are ſecured to every good performer on keyed inſtruments. The velocity of the bows is another circumſtance to be attended to at the ſame time with the preſſure: when moved ſlowly, the tones will be ſoft and delicate; but, when the velocity is increaſed, the tones are full, and adapted for grandeur of effect: the alteration in velocity is eaſily made. Mr. Hawkins has alſo adapted a balance-weight to the treadle, which acts to turn the wheel while the treadle is aſcending, ſo that by this aſſiſtance the wheel can be made to revolve exceedingly ſlow, without danger of *pitching*, or ſtopping at the higheſt or loweſt points of the cranks. In this manner the velocity of the bows is completely manageable by the greater or leſs preſſure upon the treadle, and the performer may eaſily make a ſudden tranſition from quick to ſlow, by reſiſting the aſcent of the treadle when he wiſhes to retard it, or preſſing the treadle while it is deſcending to accelerate the motion of the wheel. It is worthy of notice that each bow moves with a different velocity, as is beſt adapted to produce the vibration of the ſtrings it is applied to. This is effected by the different diameters of the four pulleys on the vertical axis, which turns the bows: theſe are in ſuch proportion, that, when the double-baſs bow revolves at the rate of 25 times per minute, the others make 35, 50, and 75, revolutions, in the ſame period. The inſtrument is provided with pedals, one of which, when preſſed down, brings a piece of roſin in contact with the hairs of each bow, ſo as to cauſe no interruption for this neceſſary operation. Another pedal elevates the bows all together, and cauſes them to act nearer the bridge than when it is not in uſe, producing the effect well known to performers on the violin when they bow near the bridge: for this purpoſe the frame containing the three wheels of the bow terminates in a ſtem, which ſlides in a ſocket, and can be elevated or depreſſed by the pedal juſt mentioned. A third pedal brings a piece of leather lightly in contact with the middle of each ſtring, which cauſes it to vibrate in two portions, and ſound the octave in a beautiful tone, ſimilar to the muſical glaſſes.

The above inſtrument appears to have been an improvement on Clagget's *aieuton*, which the inventor did not live to bring to perfection. Some very reſpectable profeſſors have expreſſed a very high opinion of the merit of this laſt inſtrument. It was ſtated to have had, in power, dignity, and ſolemnity of tone, a great reſemblance to the organ; and to have been free, by its conſtruction, from the only characteriſtic imperfection of that delightful and ſublime inſtrument. The inventor gave it the name which has been mentioned, from its being αιει ευτονον, "always in good tune." The celeſtina mechaniſm of the inſtrument, acted by preſſure on a ſyſtem of metallic bars, (or pitch-forks.) It is evident, that the maſs of metal exempted theſe from any ſenſible change of tone, ſuch as the changes of the atmoſphere muſt always produce in wires or ſtrings. At the ſame time, the very nature of the conſtruction would cauſe the inſtrument to have a ſomewhat hard tone, and to ſpeak ſlowly; but for andante, adagio, and largo, movements, ſuch as are generally the ſublimeſt and moſt pathetic in the ſerious opera, and the moſt admirable in oratorio-muſic, (the two higheſt departments of this divine art,) it ſeems probable that this inſtrument would have had the advantage over every other. Mr. Capel Lofft ſays, "The clearneſs, purity, and fullneſs of tone, the beauty of ſwell and diminution, which diſtinguiſhed it, were inconceivable." But Mr. Lydiatt, who "was engaged with Mr. Clagget, in an attempt to remove thoſe mechanical difficulties in its conſtruction, which retarded the approximation to perfection of an invention which, by its novelty, attracted ſome approbation and encouragement from the ſcientific world," has given a leſs favourable but more juſt account, which we extract from the Monthly Magazine before quoted.

"The effects produced by this inſtrument in pathetic compoſitions, were extremely ſublime, but very equivocal; as will be eaſily conceived by a reference to the mechaniſm, which I ſhall briefly attempt to give ſome idea of. The tones were produced from forks made of ſteel, in the manner of the pitch-fork uſed for tuning inſtruments, except thoſe to produce the baſs, the prongs of which were hollow tubes inſtead of ſolid maſſes of metal. Theſe were preſſed by the touch of the key on a revolving belt of ſeal-ſkin, about an inch broad. The hair-ſide, which received the preſſure of the fork, was rubbed with a preparation of roſin, and the forks themſelves were thinly coated with the ſame ſubſtance. From this, it will be ſeen, that the tones were drawn from theſe metallic forks in the ſame manner as from the ſtrings of a violin by the bow; but by no means ſo inſtantaneouſly. It was indeed, as has been obſerved, *ſlow to ſpeak:* and by the friction of the belt againſt the metal, in the performance of a few bars, the roſin was in a great meaſure taken off, and its imperfections conſequently became more evident. This was the ſtate of the aieuton at the death of its inventor; the misfortune of whoſe life it was, to have ideas theoretically ſublime, but deficient in practical utility."

The imperfections of both theſe inſtruments, aroſe from the impoſſibility of ſupplying the fiddle-bows regularly and equally with roſin. Clagget's had the additional inconvenience of the metallic forks, which could never produce a very pleaſing tone. Clagget was, however, a man of very intereſting manners, and reſpectable character, who diſintereſtedly devoted many years of his life to the improvement both of keyed and wind inſtruments; whoſe merit in both was acknowledged by unqueſtionable judges; whoſe ſcience, and taſte, and judgment, accompanied him to the grave, with little earthly reward.

While we are upon the ſubject of curious inventions, we muſt not omit to mention, that Meſſrs. Kauffman, ſenior and junior, of Dreſden, have lately exhibited four inſtruments compoſing an orcheſtra, which they call the ***Belloneon***, the ***Cordalaudion***, the ***Automaton Trumpeter***, and the ***Harmonicord***. The upper part of the Belloneon exhibits a trophy of arms, in the midſt of which are placed twenty-four trumpets reverſed; and the lower part incloſes two kettle-drums with their ſticks. It executes flouriſhes and marches with extraordinary perfection. If it contained other wind-inſtruments, it might be compared with Maelzl's Panharmonicon, now exhibiting in London. The Cordalaudion produces together and ſeparately the ſounds of the piano-forte and four flutes, which play with ſuch preciſion and accuracy, that the illuſion is complete. The Automaton gives out trumpet-notes with double ſounds. But theſe inſtruments, though highly curious, are ſurpaſſed by the Harmonicord. It is ſhaped like an upright piano-forte: a cylinder is adapted to it, and turns at a very ſmall diſtance from the ſtrings, which are the ſame as thoſe of the piano. By preſſing down the keys, which embrace four octaves and a half, the friction is effected. Two pedals ſerve to make the rotation of the cylinder quicker or ſlower, and to render the vibration ſtronger or weaker. Under the hands of Meſſrs. Kauffmann, this inſtrument is ſaid to give out ſweeter tones than the harmonica, and to produces a truly celeſtial harmony.

Of the Tuning of Keyed Inſtruments.—The ſtriking improvements which have been made in modern times in the manufacture of keyed inſtruments, will be admitted by every one who is in any degree converſant with muſic; and we have been credibly informed, that one very eminent piano-forte maker has for years paſt expended a thouſand pounds annually in experiments. But this branch of the art ſeems to be ſo circumſtanced as naturally to defy all attempts at perfection. It is well known that our piano-fortes and organs have, in general, only 12 notes in every octave; but that, mathematically ſpeaking, there are a great many more. Convenience will not permit the number now in uſe to be much augmented, though in ſome inſtruments the number of finger-keys in every octave exceeds 12; but none could poſſibly extend to comprehend *all* the neceſſary notes, without being abſolutely unmanageable by the performer. Attempts have therefore been made of late to adapt the uſual number and ſcale of finger-keys to a larger number of notes, by means of ſhifting pedals: a very ſimple contrivance for this purpoſe, has been deviſed by Mr. Loëſchman, of Newman-ſtreet; and ſomething of the ſame kind has been invented by the Rev. Mr. Liſter. Some of the defects, however, will never be completely removed; and to cure them in part is to have a part more perfect, and the remainder more imperfect, than in the generality of inſtruments: ſo that it is perhaps beſt, under all circumſtances, to reſt contented with the means which have been long ſince adopted for removing, or rather compromiſing, the difficulty. This is what is denominated ***temperament;*** and it conſiſts in dividing the mathematical diſcrepances between different notes ſo that they may approximate to each other: for inſtance, where an interval would occur between D※ and E♭ in the key of C, and both might be wanted in that or in ſome key: it is cuſtomary to raiſe the lower, and ſink the higher, of thoſe two notes in a trifling degree, ſo as to make them ſerve for each other. The ear ſcarcely appreciates this management in any caſe, and therefore no unpleaſant effect is produced. Some ſingers, indeed, complain that the voice is not ſo tractable in this reſpect; but it is perhaps not evident that any good foundation exiſts for the aſſertion; and it ſeems probable, that the voice is not more accurate than the ear. The objection, however, is made clearly perceptible by the monochord, to the deſcription of which contrivance Dr. Crotch has allotted the laſt chapter of his work on Muſical Compoſition. That inſtrument is merely a ſingle ſtring ſtrained to any given degree of tenſion over two bridges, in the manner of a violin-ſtring. When ſounded open, it gives a certain note; when divided into two equal parts by preſſure in the middle, it gives the octave of the firſt; at two thirds, a fifth, and ſo on; as explained at p. 323 of this article. As the ſcale becomes more refined, the numbers are either not reducible to any fractional denomination, or require very extended denominators; and, to give the whole their tones with perfect accuracy even to the extent to which compoſition is ſometimes practiſed, 24 notes would be required in every octave, and ſtill it would not be mathematically perfect. Mr. Loëſchman, in a perſpicuous little pamphlet publiſhed by him in explanation of his improved piano-fortes, has ſtated the exact relative values of the notes in the following numbers: C 3600; C※ 3445; D♭ 3364; C※※ 3297; D 3220; D※ 3081; E♭ 3009; E 2880; F♭ 2811; E※ 2756; F 2691; F※ 2576; G♭ 2515; F※※ 2465; G 2407; G※ 2304; A♭ 2250; A 2153; B♭♭ 2102; A※ 2061; B♭ 2012; B 1926; C♭ 1881; B※ 1843;

1843: and the values of them, according to the uſual mode of temperament, as follows: C 3600; $C^{\sharp}$ 3445; D 3220; E^{b} 3009; E 2880; F 2691; $F^{\sharp}$ 2576; G 2407; $G^{\sharp}$ 2304; A 2153; B^{b} 2012; B 1926. This is according to what is termed the equal or mean-tone temperament. Dr. Crotch approves that method of tuning, and it is moſt commonly in uſe. Other modes, however, have been ſuggeſted, as calculated to bring the inſtrument nearer to the deſired mathematical perfection; and the late earl Stanhope (the extent of whoſe contributions to all the mechanical arts is generally known) has explained a new mode of tuning: the principal feature of which conſiſts in its taking two intervals in the ſcale, without reference, in the uſual manner, to the foundation or key-note. For inſtance, after having tuned the other notes on the inſtrument by perfect intervals, his lordſhip recommends that A^{b} or $G^{\sharp}$ ſhould be tuned exactly half-way between E and C, forming, with thoſe notes, what he terms two bi-equal thirds; and that the interval between G and its E double octave ſhould be divided into three equal portions, called tri-equal quints: thoſe portions to be occupied by D and A. The effect of this arrangement is to make the two bi-equal thirds ſomething ſharper than perfect thirds, ſo that one perfect third and two bi-equal thirds ſhall form a perfect octave, and the tri-equal fifths rather flatter than perfect fifths. Our muſical readers know that, if an octave be made by tuning the thirds ſucceſſively, the upper note will be too flat; and that, if ſeven octaves be made by tuning the fifths in ſucceſſion perfectly, the higheſt note will be too ſharp. The difference in the latter caſe is technically called *the great wolf*, and in the former *a little wolf*. We underſtand, however, from an ingenious artiſt, that, on an experiment of the Stanhope mode of tuning, it was not found ſo agreeable as the ordinary mode; from which we may infer, that it is not eligible to take the relative values of the notes arbitrarily, even in the ſmalleſt degree. It alſo ſeems to follow, that it is unſafe, on this ſubject, to truſt to any other guide than the ear.

After all that has been ſaid on tuning, it does not appear to us that any ſatisfactory reſult has been produced, except that the defects exiſting on keyed inſtruments can never be completely removed; and, although for ſome particular occaſions the new improvements may be found uſeful, or it may even be deſirable that ſpecial modes of tuning ſhould be adopted, yet the inſtruments ordinarily in uſe, and the common mode of tuning, will be amply ſufficient and moſt adviſable for general purpoſes. Thoſe, however, who wiſh to tune according to lord Stanhope's method, will find ample directions in his lordſhip's pamphlet, and in the New Monthly Magazine, vol. iii. p. 453. and vol. iv. p. 56.

The Harp.—The harp, generally ſpeaking, is an inſtrument of a triangular figure, ſtrung with catgut, and placed upright between the legs of the perſon who plays it.

Papias, and Du Cange after him, will have the harp to have taken its name from the *Arpi*, a people of Italy, who were ſuppoſed the firſt that invented it; and from whom they ſay it was borrowed by other nations. Menage, &c. derive the word from the Latin *harpa*, and that from the German *herp*, or *harp*. Others bring it from the Latin *carpo*, becauſe touched or thrummed with the fingers. Dr. Hickes derives it from *harpa*, or *hearpa*, which ſignify the ſame thing; the firſt in the language of the Cimbri, the ſecond in that of the Anglo-Saxons. The Engliſh prieſt who wrote the life of St. Dunſtan, and who lived with him in the tenth century, ſays, cap. ii. "Sumpſit ſecum ex more citharam ſuam, quam *paterna lingua* hearpam vocamus;" which intimates the word to be Anglo-Saxon.

This inſtrument is ſtruck with the finger and thumb of both hands. Its muſic is much like that of the ſpinet, all its ſtrings going from ſemitone to ſemitone; whence ſome call it an *inverted ſpinet*.

In Strutt's "Saxon Antiquities," vol. i. we have repreſentations of antique harps, one with nine ſtrings, and another with eleven, copied from illuminated MSS. in the Britiſh Muſeum; and a lyre of four ſtrings of the middle ages, "beaten with a ſmall inſtrument for that purpoſe;" meaning a *plectrum*. The early muſical inſtruments of all countries, like thoſe of Greece and Rome, are of ſmall compaſs:

Tibia non, et nunc, orichalco juncta tubæque
Æmula; ſed tenuis, ſimplexque foramine vacuo
Aſpirare.

Fortunatus, (lib. vii. carm 8.) calls the harp an inſtrument of the barbarians:

Romanuſque lyra, plaudat tibi *barbarus harpa*,
Græcus Achilliacha, *crotta* Britanna canat.

The *crotta* is the *crwth* Latinized, in all probability an original Britiſh or Welſh inſtrument, as it is never mentioned in any claſſical author.

In days of chivalry, the harp paſſed for the moſt noble and majeſtic of inſtruments; and on this account the romancers place it in the hands of their greateſt heroes, as the ancient Greek bards did the lyre. This inſtrument was in ſuch general favour, that an old poet has made it the ſubject of a poem called "*Le Dict. de la Harpe*; The Ditty, or Poem, upon the Harp;" and praiſes it as an inſtrument too good to be profaned in taverns or places of debauchery, ſaying, that it ſhould be uſed by knights, eſquires, clerks, perſons of rank, and ladies with plump and beautiful hands; and that its courteous and gentle ſounds ſhould be heard only by the elegant and good.

The Welſh harp ſeems of very high antiquity in our iſland under the Druidical government. Before the invaſion of Julius Cæſar, the Britons had muſic; and the bards, like the levites among the Hebrews, were the ſacred muſicians; and we have the authority of venerable Bede, for ſocial and domeſtic ſinging to the harp in the Saxon language, upon this iſland, at the beginning of the eighth century: though he himſelf wrote in Latin, the only language of the church and the learned then, and for many ages afterwards.

The "Muſical Relics of the Welſh Bards, by Mr. Edward Jones, Welſh Bard to H. R. H. the Prince of Wales," publiſhed in 1784, is a curious and entertaining work; and, being written by a native of Wales, and an eminent performer on the harp, we ſhall extract from it Mr. Jones's account of the muſical inſtruments of his country. "The muſical inſtruments, anciently uſed in Wales, are as different from thoſe of other nations as their muſic and poetry. Theſe inſtruments are five in number: the *telyn*, or harp; the *crwth*; the *pibgorn*, or pipe; the *tabwrdd*, or tabret; and the *corn buelin*, cornet, or bugle-horn. We find that the *telyn*, or Welſh harp, was always peculiar to our bards; though, probably, there was no difference betwixt the harp, when in its ancient primitive form, and the Grecian lyre; for Diodorus Siculus records, that the Celtic bards played on inſtruments like lyres: οργάνων ταῖς λυραις ὁμοίων. In the time of the Welſh princes, an hereditary harp was preſerved with great care and veneration in the houſehold of every prince and lord, to be beſtowed ſucceſſively on the bards of the family; and theſe were as indiſpenſible among the poſſeſſions of a gentleman as a coat of arms.

"The triple, or modern Welſh harp, has three rows of ſtrings; the two outſide rows are uniſon; the middle row the flats and ſharps. Its compaſs extends to five octaves. Some of its preſent appendages were probably the addition of the latter centuries. This celebrated inſtrument has been recently improved by the invention of pedals, which change it, without freſh tuning, into all the different keys, and have rendered it much leſs complicated and inconvenient by reducing it to a ſingle row of ſtrings." This may, probably, not only improve the inſtruments in the principality, but the ſtyle of muſic and taſte of the country, which ſeem to have been totally confined to national tunes and vulgar variations. Mr. Jones himſelf, who, during many years, was the chief bard, and beſt performer on the *telyn*, an ancient Welſh harp, has quitted that inſtrument for the pedal-harp, on account of the ſuperior facility with which all kinds of muſic for keyed inſtruments can be executed with as little difficulty as on a piano-forte; and it is, we ſuppoſe, in alluſion to the *pedal-harp*, that Mr. Jones ſays, "in expreſſion and variety the harp has no rival, which every one will acknowledge who knows how the heart is ſoothed by its delicate and ſofter ſounds, as well as animated by its powerful and brilliant tones." The *triple harp* ſeems to imply that there have been in Wales three ſeveral kinds of harps: the *ſingle harp*, with only one ſtring to each note; the *double harp*, with two; and the *triple harp*, with three ſtrings.

In the ninth year of queen Elizabeth, an *eiſteddfod*, or ſeſſion of the bards and minſtrels, was appointed at Caerwys, in North Wales. This was reviving an ancient cuſtom in the principality; as the Welſh hiſtorians and annaliſts inform us, that Gruffidd ap Conan, prince of Wales, eſtabliſhed a congreſs or meeting of maſters of muſic, about the year 1100, who underwent a public examination for degrees in their art, and for prizes, the chief of which was a ſilver harp with nine ſtrings, worn by the victor as a badge of honour. One of theſe prize-harps is ſtill preſerved in the curious collection of Cambro-Britiſh antiquities of the Moſtyn family; and another was in the poſſeſſion of the late Dr. Burney.

Miſs Hutton, (Third Tour in North Wales,) writing in the year 1799, ſays, "The profeſſion of bard is not extinct in N. Wales; though I believe ſome other occupation is generally annexed to it, to procure a livelihood. The Welſh ſtill have bards, who compoſe *extempore* verſes, and ſing them to the harp; and, as one of the moſt celebrated of ancient times was denominated ***Rhys Coch yr Eiryri***, Rhys the Red of Snowdon, ſo one of the moſt noted of the modern is called ***Dafydd Dû yr Amlwch***, David the Black of Amlwch; from their reſpective complexions, and places of reſidence. The bards form themſelves into different ſocieties, and each elects a preſident; who, at their meetings, propoſes a ſubject. Every one preſent makes extempore verſes upon it; and a prize is awarded to him whoſe compoſition is judged to be the beſt. The Welſh ſay, that ſome of theſe pieces have great merit; but that they loſe much on being tranſlated into Engliſh." Of the aptitude of the Welſh for vocal muſic, ſee p. 298.

On Plate XVII. fig. 1. repreſents an ancient Welſh ſingle harp; fig. 2. an ancient triple harp; and fig. 3. a modern triple harp. Fig. 4. is a ***bell-harp***, ſo called from its being ſwung about, by thoſe who play upon it, like a bell. It is about 21 inches long; its ſtrings are of braſs or ſteel wire, fixed at one end, and ſtretched acroſs the ſound-board by ſcrews fixed at the other end. It comprehends four octaves; and the ſtrings are ſtruck with the thumbs, the right hand playing the treble, and the left the baſe; and, in order to draw the ſounds the clearer, the thumbs are armed with a little wire pin. This inſtrument is in the poſſeſſion of Mr. Edward Jones, whoſe work we have quoted.

The harp was a favourite inſtrument with our Saxon anceſtors. All our hiſtorians relate the romantic ſtory of Alfred reconnoitring the Daniſh camp in the diſguiſe of a harper. Anlaff, and other Daniſh chiefs, played Athelſtan the ſame trick in the Saxon camp. The harp of David, as well as that of Alfred, muſt have been of a different ſize and conſtruction from the triple Welſh harp to be portable; particularly that of David, when he danced before the ark. Euſebius, indeed, calls it a *lyre*, and informs us that he carried it with him wherever he went, to conſole him in his affliction, and to ſing to it the praiſes of God.

Millico, when in this country in 1774, accompanied himſelf in ſinging his elegant canzonets on a ſmall harp, which he flung over his ſhoulder like a guitar, with which, though of a very different form, and open like a lyre, was equally portable.

The modern Iriſh harp is a ſingle inſtrument, ſtrung with metal ſtrings of braſs wire, nine in number, and calculated for mere melody, or a treble part. Carolan's tunes had no baſs to them originally, as we have been informed by a native of Ireland, and a good judge of muſic, who had often ſeen and heard old Corolan perform. It was only after his deceaſe, in 1738, that his tunes were collected and ſet for the harpſichord, violin, and German flute, with a baſs, Dublin, folio, by his ſon, who publiſhed them in London by ſubſcription, in 1747.

Galilei, the father of the great mathematician Galileo, ſays that the Italians, who were in poſſeſſion of the harp before the time of Dante, had it from Ireland.

According to Mr. Walker, in his "Hiſtorical Account of the Iriſh Bards," the Iriſh have four different ſpecies of harp: 1. The *clar-ſch*, or *clar-ſeach*, commonly denominated the Iriſh harp. 2. The *keirnine*, a ſpecies of dulcimer. 3. The *cionu cruit*, of ten ſtrings, a kind of guitar. 4. The *greamthine cruit*, the *crwth* of the Welſh. Whether the Welſh had their muſic from Ireland, according to Giraldus Cambrenſis, or the Iriſh had theirs from the Cambro-Britons, we ſhall not attempt to determine; but ſhall leave St. David and St. Patrick, and their champions Jones and Walker, patriotically to diſpute the point.

We can obtain no ſatisfactory account of the time when, and on what occaſion, the harp was aſſumed in the arms of Ireland. The learned Mr. O'Halleran ſays, it was by order of Henry II. and Mr. Ledwich by that of Henry VIII. (Walker's Iriſh Bards;) but neither of theſe gentlemen aſſigns a reaſon for it, or gives any authority for his aſſertions. Fig. 5. on the preceding Plate repreſents the ancient harp of Brian Boromh, preſerved in the univerſity of Dublin. Its height is 32 inches.

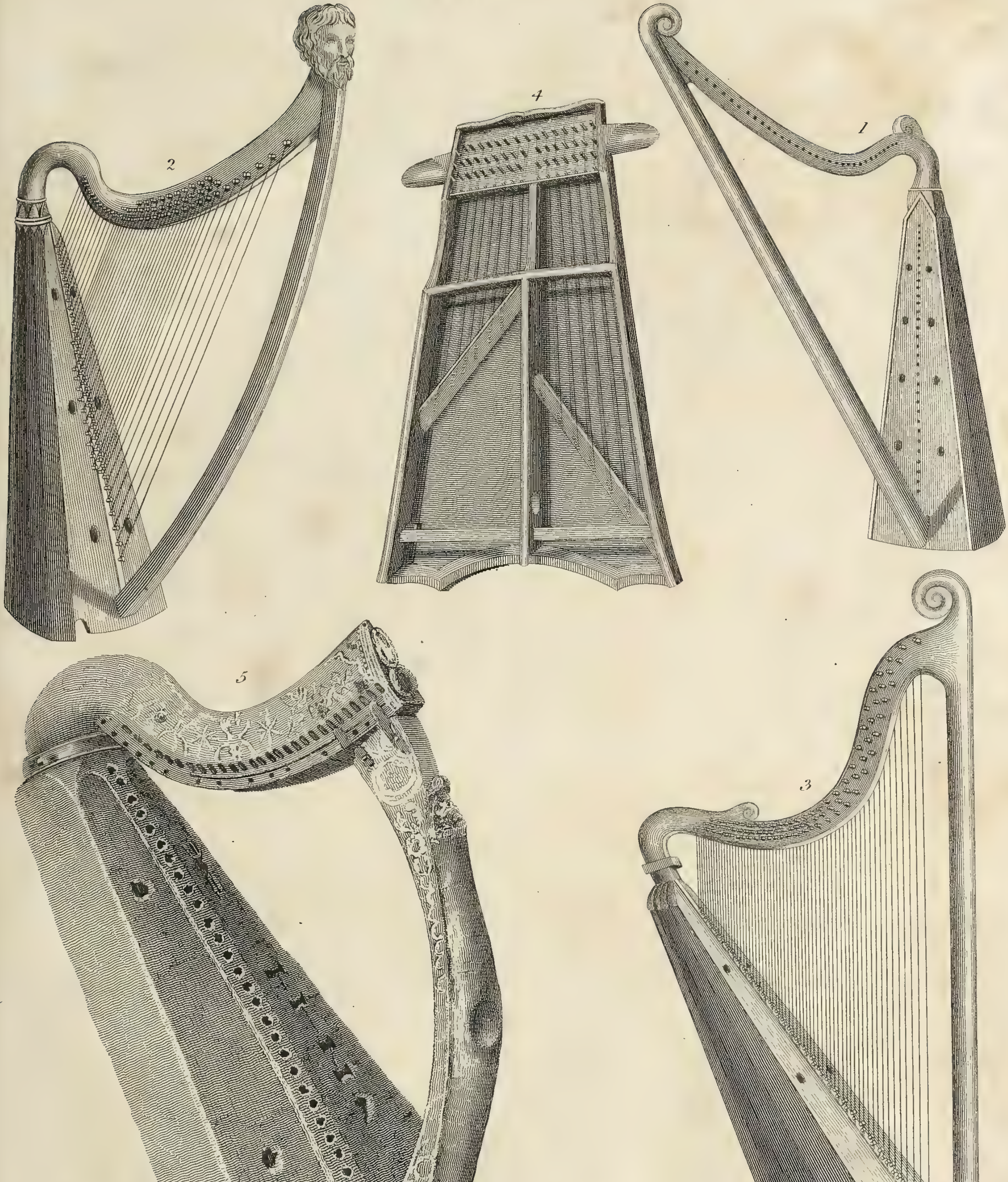
Before the invention of pedals, the whole range of ſounds in the double and treble harps on the continent had been reduced to the diatonic ſcale, with a ſingle ſtring to each note; the ſemitones being produced by braſs rings with the left hand, at the top of the inſtrument, which were both difficult to get at and diſagreeable to hear, from the noiſe which, by a ſudden motion of the hand, they occaſioned.

It was ſome time after this expedient was put in practice, before the ſecret of producing the half-notes by pedals was diſcovered. This method, which has rendered it a female inſtrument, was invented at Bruſſels about the year 1757, by M. Simon, who ſtill reſided in that city in 1772. It is an ingenious and uſeful contrivance, in more reſpects than one; for, by reducing the number of ſtrings, the tone of thoſe that remain is improved: as it is well known that, the leſs an inſtrument is loaded, the more freely it vibrates. It was in the year 1772 that Dr. Burney firſt heard the pedal-harp at Paris and Bruſſels, where the inſtrument was conſtructed of an elegant form, and beautifully ornamented. Its tone was ſweet, diſtinct, and capable of the moſt minute ſhades of piano, and the moſt touching expreſſions. Among all the muſical inſtruments in uſe, there is no one more becoming to a female figure.

We ſhall not attempt to inſtruct our readers how to apply theſe pedals to the harp, or to explain their operation: the mechaniſm is too complicated to be taught by verbal inſtruction. We have only to obſerve, that the harp, like the organ and piano, has by degrees had its compaſs extended, ſo that at preſent its ſcale is the ſame as that of the grand piano with additional keys. The ſemitones are produced by means of the pedals: and it is commonly tuned in E^b with three flats; but Erard's new patent harps are tuned in D^b with ſeven flats, having two motions of the pedal to each note, making it firſt natural and then ſharp.

The *Æolian harp* is rather a toy than a muſical inſtrument; yet it produces an agreeable harmony, merely by the action of the wind; and hence the name. It is thus conſtructed. Let a box be made of deal, as thin as poſſible, of a length anſwering to the width of the window in which it is to be placed; five or ſix inches deep and ſeven

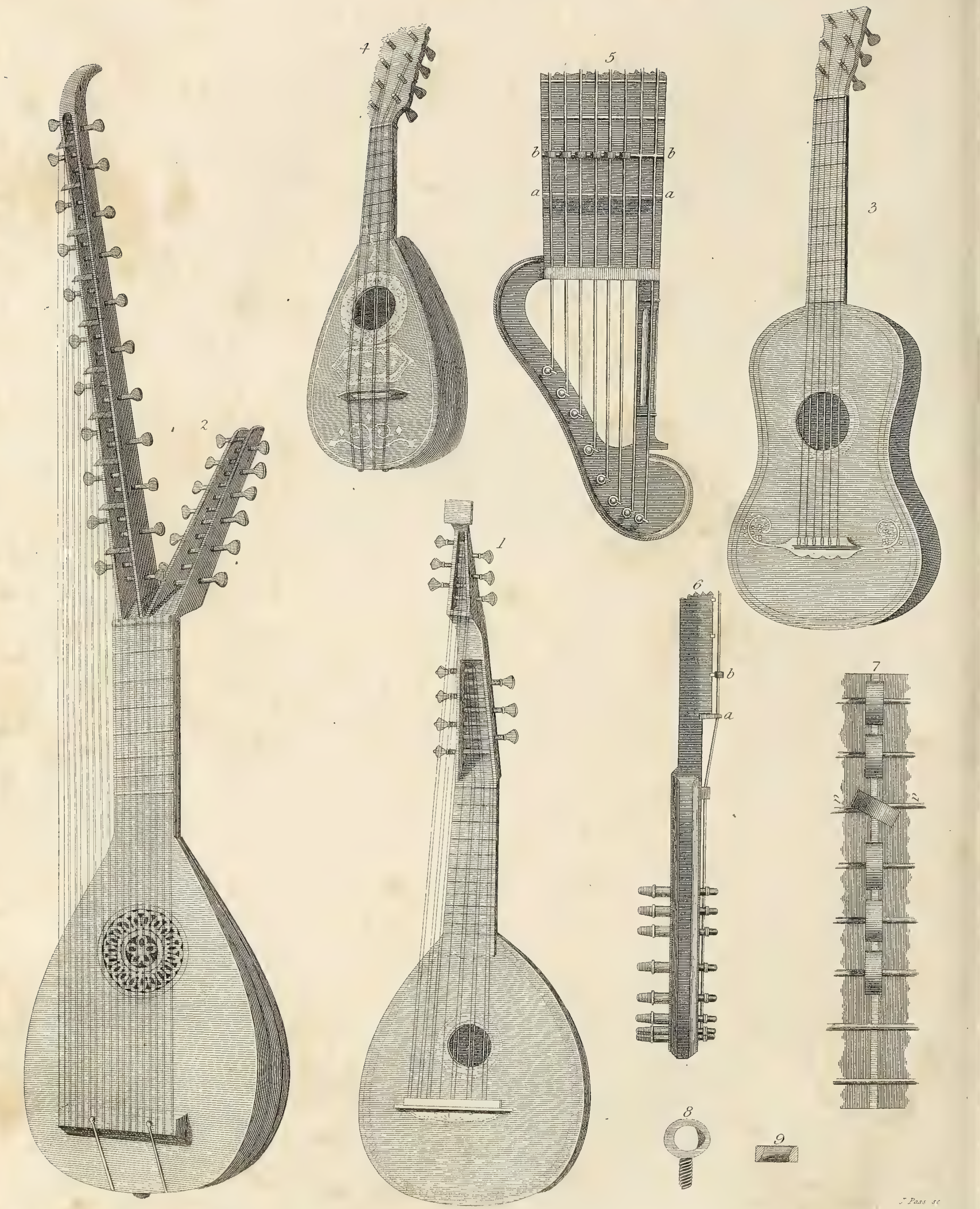
or



J. Liss sculp

Welch and Irish Harps.

Engraved for the Encyclopaedia Londinensis 1818



J. Pass sc.

1. The Lute. 2. The Theorbo, or Arch-Lute. 3. The Spanish Guitar.
4. The Mandoline. 5. The Harp-Guitar.

Engraved for the Encyclopaedia Londinensis 1819

or eight inches wide. Let there be glued upon it two pieces of wainſcot about half an inch high, and a quarter of an inch thick, to ſerve as bridges for the ſtrings; and within-ſide, at each end, glue two pieces of beech, about an inch ſquare, of length equal to the width of the box, which are to ſuſtain the pegs. Into theſe fix as many pins (ſuch as are uſed in a harpſichord) as there are to be ſtrings in the inſtrument, half at one end, and half at the other, at equal diſtances. It now remains to ſtring it with ſmall catgut, or blue firſt fiddle-ſtrings, fixing one end to a ſmall braſs pin, and twiſting the other round the oppoſite pin. When theſe ſtrings are tuned uniſon, let the inſtrument be placed, with the ſtrings outward, in the window to which it is fitted; and it will, provided the air blows on that window, give a ſound like a diſtant choir, increaſing or decreaſing according to the ſtrength of the wind. There muſt be ſound-holes in the middle; and, the thinner the top is, the better will the inſtrument perform. Thompſon, in a note to his celebrated Ode on this inſtrument, aſcribes the invention of it to Mr. Oſwald; whereas it was known to Kircher above a hundred years before; and the method of conſtructing and uſing it is deſcribed by him in a book intitled Magia Phonotactica et Phonurgia.

This inſtrument was conſtructed in an improved form by the late Rev. W. Jones. The ſtrings, inſtead of being on the outſide, are fixed to a ſounding-board or belly within a wooden caſe, and the wind is admitted to them through an horizontal aperture. In this form the inſtrument is portable, and may be uſed any-where in the open air.

The Æolian harp produces all the harmonies of a ſingle ſtring, divided in harmonical proportion. See p. 322. The tenſion of the ſtrings muſt not be great; as the air, if gentle, has not ſufficient power to make them vibrate; and, if it blows freſh, the inſtrument does not ſing, but ſcream. Its creſcendo and diminuendo, or the gradual advancing and retiring of its delicate tones, are very pleaſing.

Kircher has attempted to account for the phenomena of the Æolian harp, by ſuppoſing the current of air to ſtrike on different portions of the ſtring. But this is contrary to experience; for, if we ſuppoſe the Æolian note to be one-fifth above the original note of the ſtring, that is, one-third of the whole; then, according to Kircher, the remaining part would be at reſt, which is not the fact; for an obſtacle applied to any other point beſides the quieſcent points of diviſion, will deſtroy the Æolian tone. The chords alſo, that would ariſe on this theory are not ſuch as really take place in Nature; thus, where the chord conſiſts of the notes F and A, the firſt note F is produced, according to Kircher, by the blaſts ſtriking on one fourth of the ſtring; and in this caſe, the remaining part of the ſtring muſt be at reſt, according to Kircher, which is contrary to experience; or, if it be agitated as one ſtring, it muſt produce the note of three-fourths of the whole ſtring, that is, a fourth above the baſs-note; whereas, the note really produced, is the double octave to the third above the baſs-note.

Mr. Young, in order to aſcertain the order of the notes in this inſtrument, took off all the ſtrings but one; and, placing it in a proper ſituation, he was ſurpriſed to hear a great variety of notes, and frequently ſuch as were not produced by any aliquot part of the ſtring; and he often heard a chord of two or three notes from this ſingle ſtring. Theſe complex and extraordinary phænomena at firſt perplexed him; and he almoſt deſpaired of being able to account for them on the principle of aliquot parts. On farther examination, however, he found that they all flowed naturally and eaſily from this principle. Having directed his attention to the effect of a current of air ruſhing againſt a ſtretched elaſtic ſtring, he obſerved, that a blaſt againſt the middle point of the ſtring moved the whole of it from its rectilineal poſition; and that the ſtring, by its elaſticity, returned to its former poſition; ſo as thus to continue vibrating and exciting pulſes in the air, which produced the tone of the entire ſtring. If the current of air be too ſtrong and rapid, when the ſtring is bent, it will retain its curvature; and, though the whole ſtring cannot perform its vibrations in this caſe, the ſubordinate aliquot parts may; and theſe will be of different lengths, according to the rapidity of the blaſt. Thus, when the velocity of the current increaſes ſo as to prevent the vibration of the whole ſtring, thoſe particles which ſtrike againſt the middle points of the halves of the ſtring, agitate thoſe halves, as in the caſe of ſympathetic and ſecondary tones; and, as theſe halves vibrate in half the time of the whole ſtring, though the blaſt may be too rapid to admit of the vibration of the whole, yet it can have no more effect in preventing the motion of the halves than it would have on the whole ſtring if its tenſion were quadruple; for the times of vibrations in ſtrings of different lengths, and agreeing in other circumſtances, are directly as the lengths; and in ſtrings differing in tenſion, and agreeing in other circumſtances, inverſely as the ſquare roots of the tenſions; and therefore, their vibrations may become ſtrong enough to excite ſuch pulſes as will affect the drum of the ear; and the ſame may be ſaid of other aliquot diviſions of the ſtring. Thoſe particles which ſtrike againſt ſuch points of the ſtring as are not in the middle of aliquot parts, will interrupt and counteract each other's vibrations, as in the caſe of ſympathetic and ſecondary tones, and therefore will not produce a ſenſible effect. Theſe principles are illuſtrated and applied by Mr. Young, in his Enquiry into the Principal Phenomena of Sound and Muſical Strings; Lond. 1784, 8vo.

The **Lute**.—We are now arrived at that claſs of inſtruments which are furniſhed with a neck, on which frets are raiſed, and againſt theſe the ſtrings are preſſed with the left hand, while they are made to ſpeak by means of the fingers and thumb of the right, and in ſome caſes with a plectrum or quill.

All that is known with certainty concerning the **Lute**, has been related under that word, vol. xiii. p. 785, 6. On the annexed Plate XVIII. fig. 1 is a lute, according to the beſt authorities; its length is 3 feet 8 inches. Fig. 2 is the theorbo, or arch-lute; length, 5 feet 8 inches, in the collection of the late Mr. D. Walker. It has two necks, the ſecond and longer of which ſuſtains the four laſt rows of ſtrings, which are to give the deepeſt ſounds. The meaning of the word *tiorbe*, or theorbo, is not known: Mace only ſays, that Θε, in Greek, "begins a very high name;" meaning Θεος, God, perhaps from its high and ſublime tones. Some will have it to be the name of the inventor. The theorbo is an inſtrument which for many years ſucceeded to the lute, in the playing of thorough-baſſes. It is ſaid by ſome to have been invented in France, and thence introduced into Italy, &c. Mace ſays, that the theorbo is really the original, or "old Engliſh lute." The chief difference between the theorbo and the common lute was, that the former had eight baſs or thick ſtrings twice as long as thoſe of the lute; which exceſs of length muſt have made it rather unmanageable. Mace (Muſick's Monument) has noticed the inconveniences of the great length of the neck in this inſtrument: "Thoſe very extreme long heads which are uſually put upon theorboes, are both troubleſome to tune, and inconſiſtent with the punctilioes and criticiſms in art; they rendring the inſtrument diſproportionable within itſelf; for in the uſe of it, theſe extraordinary long baſſes commonly over-ring and drownd the trebles; or, if (to help the matter) you ſtrike them ſo much the ſofter, yet they ſeem not to be of the ſame kinſhip with the ſhorter ſtrings." P. 205.

In the ſame work, there is a print of the theorbo (but with the neck ſhortened) and common lute (called the Engliſh and French lutes) joined together, and chriſtened "the lute dyphone, or double lute of fifty ſtrings." He tells us, that it is as eaſy to play upon as any other lute; but we really cannot underſtand it; and muſt therefore refer the reader to the book itſelf (ch. xli. p. 203.) for an explanation. This ſtrange inſtrument was of his own making; and he ſays, (thus confirming that the theorbo was the original Engliſh lute,) " When I had finiſh'd it, I be-deck it with theſe fine rhimes following, fairly written upon each belly; viz.

(Firſt, round the theorboe-knot, thus:)
" I am of old, and of Great Brittain's fame:
Theorboe was my name."
(Then next about the French-lute knot, thus:)
" I'm not ſo old; yet grave, and much accute,
My name was the *French lute.*"
(Then from thence along the ſides, from one knot to the other, thus:)
" But, ſince we are thus joyned both in one,
Henceforth our name ſhall be *The Lute Dyphone.*"

The GUITAR.—The word *guitar* ſeems naturally deducible from the Latin *cithara.* There is little doubt but the Roman C was hard like modern K; and the Italian word chitarra is manifeſtly derived from the Greek κιθαρα. But, what is more to our purpoſe, the learned Ainſworth obſerves, that " the Roman C is more probably framed from the Greek Γ, its right and perpendicular line, for the more eaſe and quick diſpatch in writing, having degenerated into a ſemicircle, inſtead of an angle. The rank which C holds in the Latin alphabet, anſwering to that of Γ in the Greek, is a farther proof of this extraction; and in many Latin words K and G are written indifferently, as *Caius Cnæus,* or *Gaius Gnæus;*" ſo that, when the Romans had got the letter G into their alphabet, which was not till after the firſt Punic war, they would be as likely to have written *kithara,* for a harp or lute, as *cithara.*

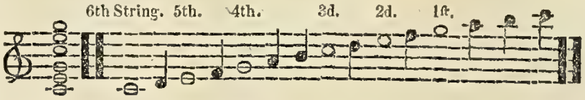
It is difficult to trace the origin of the guitar. The reſt of Europe had it from the Spaniards, to whom it was probably brought by the Moors. It is however the general opinion in Spain, that it is as ancient as the harp. Either through reſpect for this opinion, or from the ſweet reverie which it inſpires, being congenial with the national, tender, gallant, diſcreet, and melancholy, character; whether, in ſhort, the ſilence of the beautiful nights in Spain, when the inhabitants are moſt alert and active, is moſt favourable to its mild and dulcet harmony, we know not; but it is eſtabliſhed there as a national inſtrument. It has had the ſame ſucceſs among the Portugueſe and the Italians; and ſeems to have been at all times the favourite inſtrument of warm climates: it is ſo portable, and graceful of carriage, that ſerenaders, nocturnal revellers, and day-break lovers, prefer it to all other tuneful interpreters of paſſion. The Portugueſe having loſt a battle, 14,000 guitars were found on the field of battle. (Menagiana. tom. i.) The guitar is made to be heard alone, or with a voice. It is unfit for a concert, and has therefore given way to more powerful inſtruments.

In France, ſome lovers of muſic revived, a few years ago, the paſſion for this inſtrument, which was in great vogue there in Louis XIVth's time; and was a very ſociable companion of French vaudevilles, paſtorals, and brunettes, of which, ſays M. Laborde, it augments the charms.

The common guitar uſed in England has frequently had fits of favour in this country. About fifty years ago, its vogue was ſo great among all ranks of people, as nearly to break all the harpſichord and ſpinet makers, and indeed the harpſichord-maſters themſelves. The ladies diſpoſed of their harpſichords at auctions for one-third of their price, or exchanged them for guitars; till old Kirkman, the harpſichord-maker, after almoſt ruining himſelf with buying-in his own inſtruments for better times, hit upon the expedient of purchaſing ſome cheap guitars, and made preſents of ſeveral to girls in milliners' ſhops, and to ballad-ſingers in the ſtreets, whom he taught to accompany themſelves with a few chords. This ſoon made the ladies aſhamed of their frivolous taſte, and return to the harpſichord.

During the guitar paroxyſm, not a ſong or ballad was printed, without its being tranſpoſed and ſet for that inſtrument, at the bottom of the page; as in the beginning of the laſt century was done for the common flute. The old tablature, however, was thrown aſide, and the ſame notation adopted for the guitar as for other inſtruments; but confined to the key of C natural, except by Marella, a good player on the inſtrument, and not a bad compoſer, who tuned and taught the guitar in the key A major.

The Engliſh guitar has ſix wire ſtrings; of which the four firſt are double, the fifth and ſixth ſingle but covered; the three firſt are ſteel, the others braſs. They are tuned as expreſſed by the notes cloſe to the clef in the following example; and the ſcale of the inſtrument follows the double bar in the order of the ſtrings, 6, 5, 4, &c. the open note denoting the open ſtring:

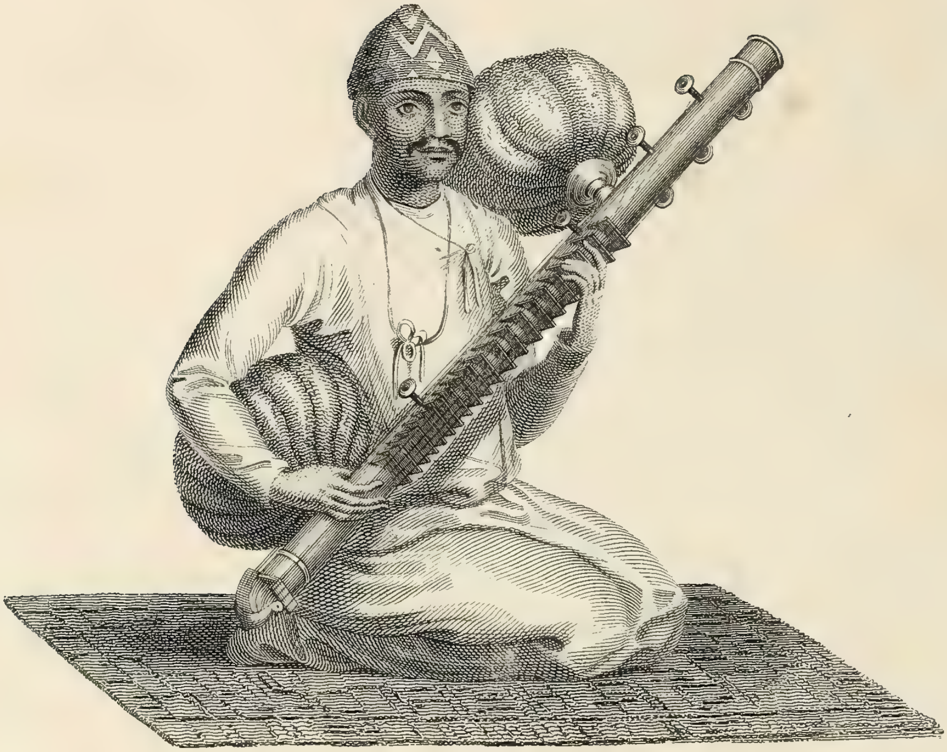


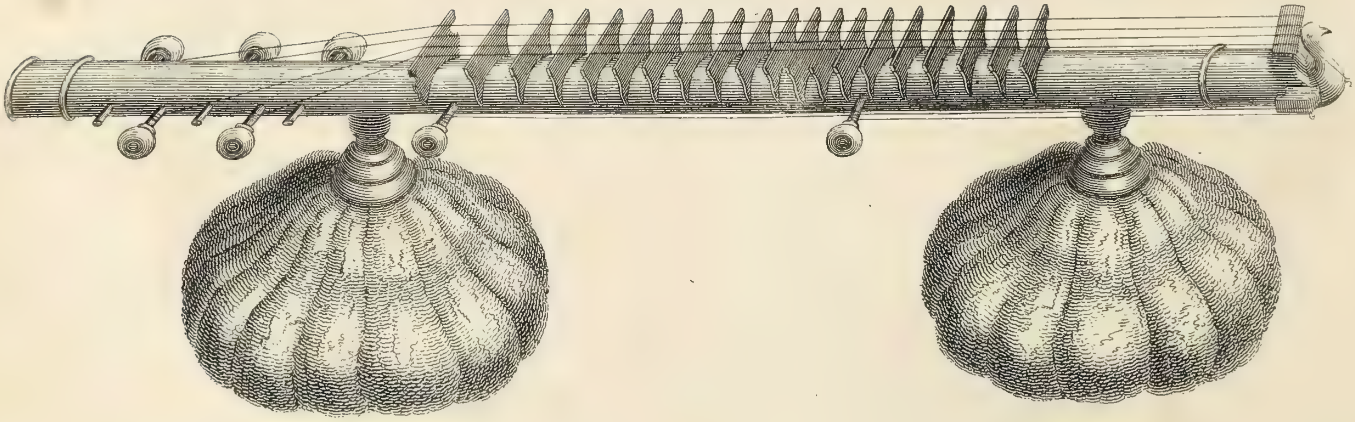
The Spaniſh guitar, fig. 3, has ſix ſtrings alſo, but ſingle, and made of catgut. It is of a much larger ſize than the chitarra of Italy, or the guitar uſed in France or England, being a full yard long; and, in form, it ſeems to have been conſtructed of a ſection of a pumpkin or gourd, to which is adjuſted a belly of deal, and a neck at the upper part of the body of the inſtrument. It has frets, dividing each ſtring into ſemitones: of theſe the tenſion muſt be extremely tight round the neck, for fear of their giving way. The ſtrings are faſtened to a bridge fixed to the lower part of the belly, and ſupported by a nut at the end of the neck. The ſtrings are governed by pegs or metal pins at the back of the neck.

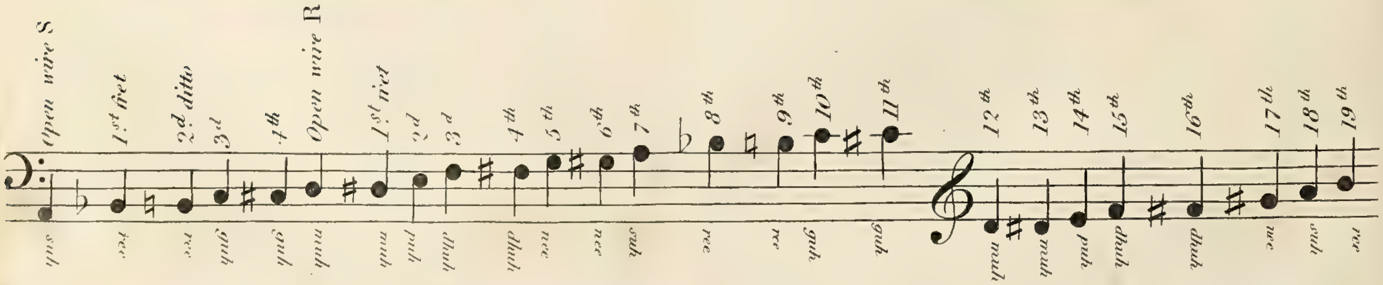
The tablature of the guitar in Spain and Portugal is ſtill the ſame as that of the lute; but in moſt other countries, its notation is the ſame as for the harp or piano-forte. In the ancient tablature, letters of the alphabet, or ciphers, are uſed for the melody and accompaniment. This method, though ancient, is preſerved in France for the convenience and carriage of the hand, the arrangement of the fingers, the clearneſs of the tone, the harmony and facility of execution. If this inſtrument is not ſtudied as much as the harpſichord or piano-forte, it is hardly poſſible to find the poſitions of the hand with ſufficient readineſs.

There are two ways of performing on this inſtrument, either by ſweeping or pinching the ſtrings; many affect one way more than the other: ſome uſe both ways occaſionally, which is preferable. The moſt extenſive, and the moſt ſuſceptible of execution, is the pinching of the ſtrings. The arpeggios are more harmonious, becauſe all the ſtrings are in vibration; but they muſt be touched very lightly and delicately with the right hand, and with firmneſs and correct poſition with the left hand, to produce a good effect; for nothing is ſo eaſy as to metamorphoſe this inſtrument, of which the harmony may be rendered ſo ſweet, into a mere kettle. The ſtrings are pinched or thrummed between the roſe and the bridge; but the arpeggios ought to be made between the roſe and the laſt fret of the neck, that is, about the middle of the ſtrings, to avoid the harſhneſs reſulting from playing too near the bridge, where the ſtrings are more ſtubborn and unmanageable than towards the middle.

This guitar is ſuperior in tone, expreſſion, and power, to the common guitar ſtrung with wire. About forty-five years ago, ſoon after the conſpiracy at Liſbon, of Malagrida and others, a Portugueſe gentleman, or muſician with the appearance of a gentleman, of the name of Meneſis, probably involved in the plot, reſided ſome time in London, ſeemingly as a man of faſhion, who performed in a very ſuperior manner on the large Spaniſh guitar, ſtrung with catgut, or bowel-ſtrings. He was ſo great a





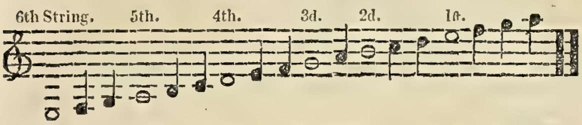


The Indian Guitar, and its Scale.

Engraved for the Encyclopaedia Londinensis 1813.

maſter of the inſtrument, and ſo able a muſician, that he played voluntaries upon it in the ſame full and learned manner of a great performer on the organ; led off ſubjects, purſued them in three and four parts with ſcience and fancy through all the keys of legal modulation; and in ſlow movements, his taſte and expreſſion were equally admirable with the learned and maſterly effuſions of his allegros. Dr. Burney was "ſo fortunate as to hear him perform at lord Eglington's, with lord Kelly, Bach, and Abel, all good judges and ſevere critics."

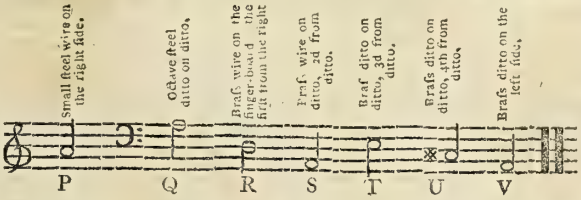
The Spaniſh guitar had originally but four ſtrings; afterwards it had five double wire ſtrings, of which we are told the three firſt were tuned uniſons, and the fourth and fifth octaves to each other: ſometimes the fifth ſtring had no octave, leſt it ſhould overpower the reſt; and the firſt ſtring was often ſo falſe, that it was thought moſt adviſable to play it ſingle. At preſent this guitar has ſix catgut ſtrings, a ſixth or baſs ſtring having been added, a double octave below the firſt, and which is ſtopped by the thumb of the left hand. The tuning is ſtill like that of the lute, entirely by fourths, except one major third: viz. E, A, D, G, B, E; as in the following example, where the open notes expreſs the open ſtrings.



The **Mandoline**, fig. 4. has been ſufficiently deſcribed under that word, vol. xiv. p. 272. The diſtance from the bridge to the nut is the ſame as the violin, 13 inches; and its ſcale and tuning are exactly the ſame, which therefore we ſhall defer till we come to deſcribe that inſtrument.

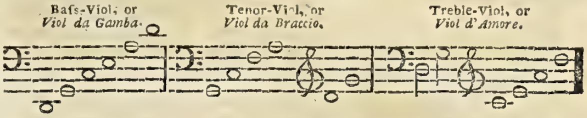
The **Harp-Guitar**, as improved by Mr. Levien of Pentonville, is repreſented at fig. 5. Mr. L. was rewarded with ten guineas, from the Society of Arts, for his invention. The improvement conſiſts in an appendage to the finger-board, by which any of the ſtrings can be raiſed or lowered half a tone, ſo as to introduce ſuch flats or ſharps as are neceſſary, in order to perform the muſic that is ordinarily met with, without the neceſſity of previouſly tranſpoſing it into the keys of C, G, or F, as is the caſe with guitars in general. This is effected, by placing acroſs the firſt fret of the finger-board a ſeries of metal loops, or ſtops, through which the ſtrings paſs, the holes in the loops being widened ſo as to permit the ſtrings to vibrate therein unimpeded. Theſe loops, being ſcrewed into the finger-board, can be turned ſo as to compreſs the ſtring on each ſide in the manner frequently done on pedal-harps, and thereby to raiſe the tone of the ſtring half a note higher; thus introducing thoſe ſharps, &c. which are neceſſary to the performance of the muſic, without the neceſſity of croſs-fingering, the only method of producing them hitherto uſed, and the great difficulty of doing which is ſufficiently known. Fig. 5. repreſents the head of the improved guitar, and part of the finger-board: *a*, *a*, the nut; and *b*, *b*, the metal loops arranged acroſs, or in place of the firſt fret. Fig. 6. is a ſide-view of theſe parts. Fig. 7. is an enlarged view of that part of the finger-board containing the firſt fret, with the loops ſcrewed into it of their full ſize; one of the loops, *a*, *a*, is here repreſented as being turned, and acting upon the ſtring ſo as to raiſe its tone half a note higher; and fig. 8. ſhows one of the loops, with its ſcrewed tail or ſtem, and its hole widened, as deſcribed above, but which more evidently appears in the ſection of the hole, fig. 9, the oppoſite ſides of it being rounded off, ſo as not to gall or injure the gut or ſilk ſtring, by preſſing againſt it, when turned. The loops are turned by means of a ſlit made acroſs the handle of the key, uſed in turning the pins to put the guitar into tune.

Plate XIX. repreſents the **Indian Guitar**, called the *Vina*, or *Been*, with the manner of playing it, and its ſcale. This inſtrument has been already deſcribed at vol. xiii. p. 840. from the Aſiatic Reſearches. Francis Fowke, eſq. cauſed an accurate drawing to be made of the *been*, both ſeparately and in the hand of the player, which he tranſmitted to the preſident of the Aſiatic Society, (the late lamented ſir William Jones;) and the communication enriched the firſt volume of their Tranſactions, from which we have copied it. The wires are ſeven in number, and are tuned in the following manner:


Small ſteel wire on the right ſide.
Octave ſteel ditto on ditto.
Braſs wire on the finger-board the firſt from the right
Braſs wire on ditto, 2d from ditto.
Braſs ditto on ditto, 3d from ditto.
Braſs ditto on ditto, 4th from ditto.
Braſs ditto on the left ſide.
P
Q
R
S
T
U
V

There are nineteen frets; and the notes that they give will appear on the ſcale which is engraved underneath the figure of the inſtrument itſelf. "I have added below," ſays Mr. Fowke, "the names which the performer himſelf gives to the notes in his own language. It is very obſervable, that the ſemitones change their names on the ſame ſemitone as in the European ſcale. On the wires R and S, which are thoſe principally uſed, there is an extent of two octaves, with all the half-notes complete in the firſt octave, but the G♮ and B♭ wanting in the ſecond. The performer's apology for this was, that he could eaſily get thoſe notes by preſſing the ſtring a little hard upon the frets F♯ and A♮, which is very true from the height of the frets; but he aſſerted that this was no defect in his particular inſtrument, but that all *beens* were made ſo. The wires T and U are ſeldom uſed, except open. You may abſolutely depend upon the accuracy of all that I have ſaid reſpecting the conſtruction and ſcale of this inſtrument: it has been done by meaſurement; and, with regard to the intervals, I would not depend upon my ear, but had the been tuned to the harpſichord, and compared the inſtruments carefully, note by note, more than once."

Of **Viols**.—In the ſeventeenth century, moſt muſical families were in poſſeſſion of a *cheſt of viols*, as it was called, which conſiſted of two trebles, two tenors, and two baſſes, with ſix ſtrings upon each, all tuned lute-faſhion, by 4ths and 3ds, and the necks *fretted*. The compaſs, and *accordatura*, of this inſtrumental family, were the following:



Here it will be obſerved, that theſe inſtruments, as we noticed in the Spaniſh guitar, are uniformly tuned by fourths, except one major third, which in theſe viols is between the third and fourth ſtring. The treble viol is an octave above the baſs; and the tenor viol a fourth above the baſs, and a fifth below the treble. The paſſages given to theſe ſeveral inſtruments, at this time, diſcover no kind of knowledge of the expreſſive power of the bow; and even Orl. Gibbons, who compoſed ſo well for voices in the church, ſeems very little ſuperior to his cotemporaries in his productions for inſtruments. Indeed, his madrigals of five parts, as well as thoſe of many others, are ſaid in the title-page to be *apt for viols* and voices: a proof that with us, as well as the ancient Greeks, and other nations, there was at firſt no muſic *expreſsly compoſed for inſtruments*; conſequently, the powers of theſe inſtruments muſt have been circumſcribed; and, when this muſic was merely played without the aſſiſtance of the human voice and of poetry, capable of no great effects.

As to the proportions of the viols, honeſt Mace, whoſe quaint expreſſions we love to quote, tells us, "Your trebles muſt be juſt as ſhort again in the ſtring, viz. from bridge to nut, as are your baſſes, becauſe they ſtand eight notes higher than the baſſes; the tenors juſt ſo long as from the bridge to the F fret, becauſe they ſtand a fourth higher than your baſſes.

“ After all this, you may add to your preſs a pair of violins, to be in readineſs for any extraordinary jolly or jocund conſort-occaſion: but never uſe them, but with this proviſo; viz. be ſure you make an equal proviſion for them, by the addition and ſtrength of baſſes; ſo that they may not out-cry the reſt of the muſick, (the baſſes eſpecially;) to which end it will be requiſite you ſtore your preſs with a pair of luſty full-ſized theorboes, always to ſtrike in with your conſorts, or vocal muſick; to which that inſtrument is moſt naturally proper. And now, to make your ſtore more amply compleat, add to all theſe, three full-ſcized lyro-viols; theſe being the moſt admirable things made, by our very beſt maſters, for that ſort of muſick, both conſort-wiſe, and peculiarly for two and three lyroes. Let them be luſty ſmart-ſpeaking viols; becauſe that, in conſort, they often retort againſt the treble; imitating, and often ſtanding inſtead of, that part; viz. a ſecond treble. They will ſerve likewiſe for diviſion-viols very properly. And, being thus ſtored, you have a ready entertainment for the greateſt prince in the world.”

The viols in preſent uſe are none of them fretted, nor have any of them more than four ſtrings. Of theſe, the firſt place is due to

The VIOLIN.—This is a well-known inſtrument with four ſtrings, which are tuned fifths, and played by a bow. It has a neck, like the old treble viol; but the finger-board has no frets.

The origin of the violin, according to the French account, is unknown. It is only ſuppoſed to have been invented about the ninth or tenth century; to which opinion we ſhould have ſubſcribed, had not ſome ancient monuments remained with an exact repreſentation of its form. In the pictures of Philoſtratus, in an ancient grotto, may be ſeen many violins, which are repreſented much like thoſe of the preſent times, except that the neck is ſhorter. Amphion is there repreſented, playing upon a kind of viol or violin, with five ſtrings, and with a bow like our's, and quite different from the plectrum of the ancients. It is believed, that Athenæus means the bow, when he ſays, “ the ſceptre is one thing, and the plectrum another.” It is imagined that by the *ſceptre* he means the bow. The pit, or grotto, on the walls of which we ſee violins like the preſent, is found on ſilver medals which were ſtruck by order of Scribonius Libo, a very conſiderable perſonage at Rome. An account of theſe may be ſeen in Pierre Valerien, author of the Hieroglyphics, book xlvii.

The violin ſeems to have been more cultivated in Germany, during the 17th century, than in any other part of Europe; as appears by the number of performers who, according to Walther, have excelled, and the numerous compoſers and pieces publiſhed for that inſtrument, which he has recorded in his Dictionary.

Of the compoſers for the violin in the laſt century, Telemann, the concert-maſter Graun, Fr. Benda, Neruda, and Janitſch, were in favour through Pruſſia and Saxony; while only Hofmann, Schwindl, and Wagenſeil, were heard at Vienna; Holtzbaur, J. Stamitz, Filtz, Cannabich, Toeſki, and Fräntzel, at Manheim; and Bach and Abel in London. But in leſs than ten years, all theſe were ſuperſeded by Haydn, Ditters, and Vanhall. At preſent, Roſetti, Mozart, and Pleyel, ſhare with them the public favour; indeed (ſays Dr. Burney, Hiſt. Muſic, vol. iv.) there has lately been a rage for the muſic of Pleyel, which has diminiſhed the attention of amateurs and the public to all other violin muſic. “ But whether this ingenious and engaging compoſer does not draw faſter from the fountain of his invention than it will long bear, and whether his imitations of Haydn, and too conſtant uſe of ſemitones, and coquetry in *ralentandos* and *pauſes*, will not be ſoon conſtrued into affectation, I know not; but it has already been remarked by critical obſervers, that his fancy, though at firſt ſo fertile, is not ſo inexhauſtible, but that he frequently repeats himſelf, and does not ſufficiently diſdain the mixture of common paſſages with his own elegant ideas.”

The violin has been cultivated with good ſucceſs in England during the laſt forty years. It is within our remembrance, that the opera-band conſiſted chiefly of Germans and Italians, and that a play-houſe band could not be made effective without one or more Germans to lead the principal parts. Foreigners being thus encouraged, we need not wonder that, during the laſt century, almoſt all the great violiniſts of Europe, except Somis and Tartini, have viſited this country; but Giardini, at one time perhaps the beſt performer in Europe, reſiding here ſo many years, formed a ſchool, which furniſhed our orcheſtras with a greater number of able performers on that inſtrument than can be found in the capital of any other kingdom in Europe. And we may venture to aſſert, from our own knowledge, that the loweſt ripieno in the opera orcheſtra, at preſent, has more hand, and is a better ſight'ſman, than the leader of that band in Feſting's time.

The violin conſiſts, like moſt other inſtruments of the viol kind, of three parts; the *neck*, the *table*, and the *ſound-board*. At the ſides are two apertures for ſound, and ſometimes a third towards the top, ſhaped like a heart. The bridge, which is between the apertures, bears up the ſtrings, which are faſtened to the two extremes of the inſtrument; at one of them by a ſcrew, which ſtretches or looſens them at pleaſure.

The ſtyle and ſound of the violin are the gayeſt and moſt ſprightly of all other inſtruments; and hence it is, of all inſtruments, the fitteſt for dancing. Yet there are ways of touching it, which render it grave, ſoft, languiſhing, and fit for church or chamber muſic. Indeed, it is well obſerved by Dr. Crotch, that ſtringed inſtruments played with a bow, and the violin in particular, are ſuperior in point of expreſſion to keyed inſtruments, as they combine the ſoſtenuto of the organ, the preciſion of the harpſichord, and the variety of power of the piano-forte; and are alſo capable of producing the ſmalleſt intervals.

The violin generally makes the treble, or higheſt parts, in concerts. Its harmony is from 5th to 5th. Moſt nations, ordinarily, uſe the G clef on the ſecond line, to denote the muſic for the violin; only, in France, they uſe the ſame clef on the firſt line at bottom: the firſt of theſe methods is beſt where the ſong goes very low; the ſecond where it goes very high.

Merſennus ſpeaks of the tenor and contra-tenor violin, which, he ſays, differ only in magnitude from the treble violin. But at preſent we have no ſuch inſtrument in uſe as the contra-tenor violin; the part proper to it, being with eaſe performed on the violin; and, accordingly, in concertos, overtures, and other inſtrumental compoſitions of many parts; the ſecond violin is in reality the counter-tenor part. It is much to be doubted, ſays ſir John Hawkins, (Hiſt. Muſic, vol. iv. p. 115.) whether the counter-tenor violin ever came into England. Anthony Wood, ſpeaking of the band of Charles II. makes no mention of the contra-tenor violin. Before the reſtoration of Charles II. ſays he, and eſpecially after, viols began to be out of faſhion, and only violins uſed, as treble violin, tenor and baſs violin; and the king, according to the French mode, would have twenty-four violins playing before him while he was at meals, as being more airy and briſk than viols.

The old luteniſts and violiſts marked the progreſs and influence of the violin with jealouſy. Though now the baſſes in a concert bear a proportion to the violins of about one to four, the old maſters thought there ought to be as many baſs viols as trebles, or more. Thus ſays old maſter Mace: “ Is it not reaſonable, yea neceſſarily reaſonable, that all the parts ſhould be equally heard? ſure it cannot reaſonably be deny'd. Then what injury muſt it

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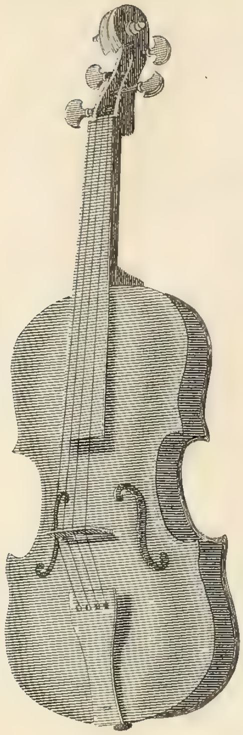

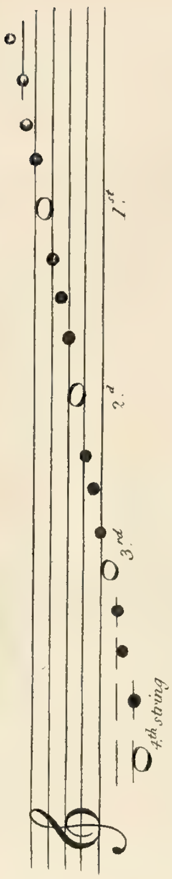

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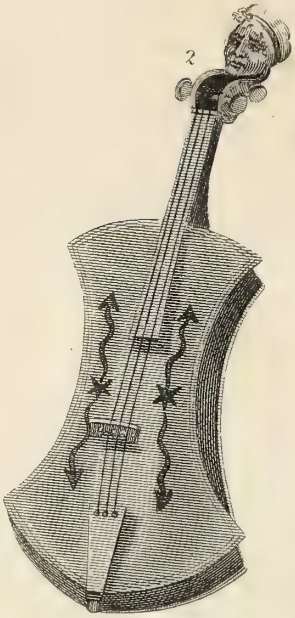

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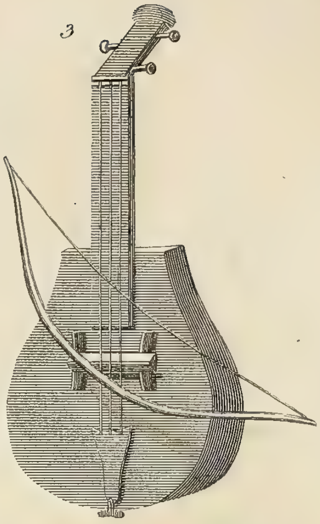

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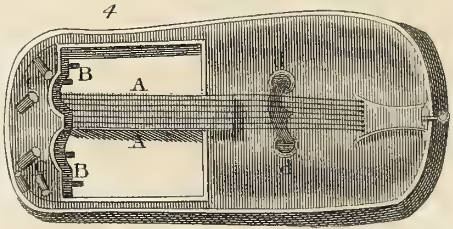

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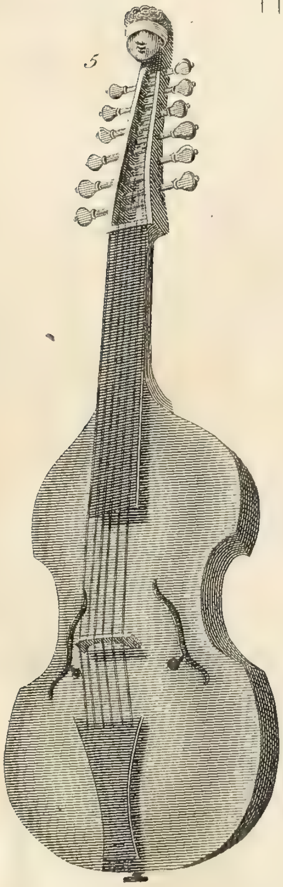

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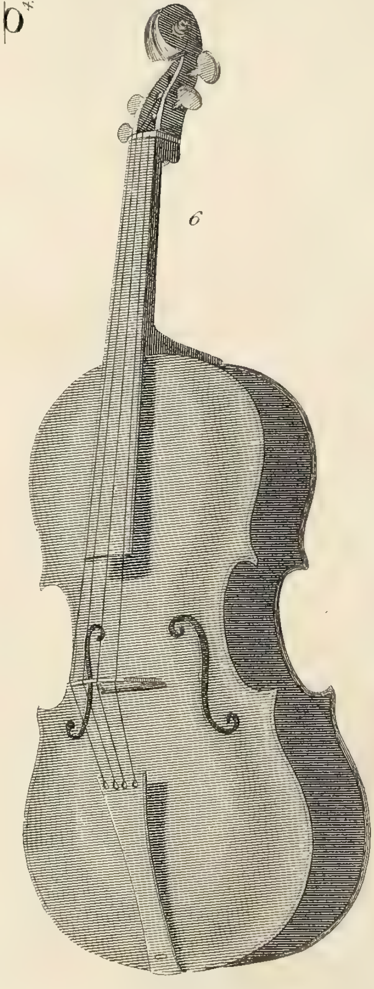

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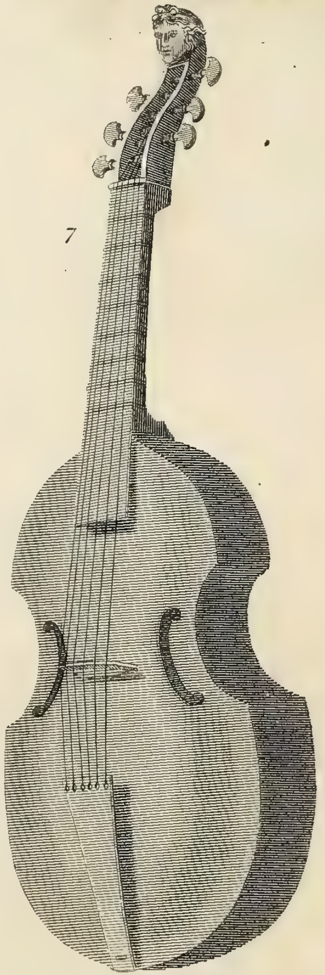
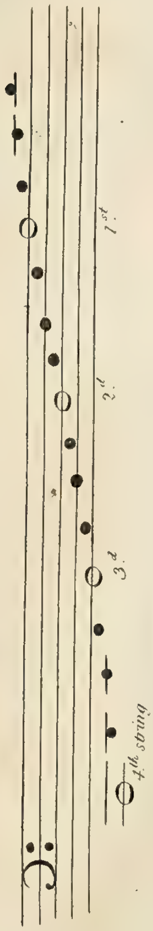




Scale of the Violoncello, Fig. 6.

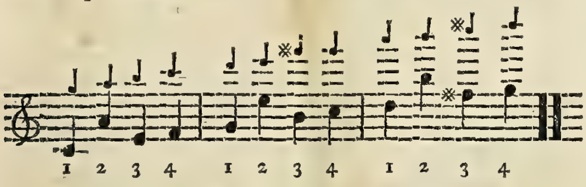
1. The Violin. 2. 3. Rebecs. 4. The Crowth. 5. The Viol d'Amore.
6. The Violoncello. 7. Viol di Gamba.

[illegible]

it needs be to have ſuch things played upon inſtruments unequally ſuited, or unevenly numbered! viz. one ſmall weak-ſounding baſs-viol, and 2 or 3 violins; whereas one (in reaſon) would think, that *one violin* would bear up ſufficiently againſt 2 or 3 common ſounding baſſes, eſpecially ſuch as you ſhall generally meet with in their ordinary conſorts. This is a very common piece of inconſiderate practice at this day. But it has been objected, There has been an harpſicon, or organ, with it, What then? has not the harpſicon or organ baſſes and trebles equally mixt? and muſt not ſtill the unequalneſs be the ſame? Or ſuppoſe a theorboe-lute: the diſproportion is ſtill the ſame: the ſcolding violins will out-top them all. Nay, I have as yet but ſuppos'd a ſmall matter of unequalneſs in reſpect of what I have heard, and is ſtill very magnanimouſly endeavoured to be daily performed; viz. ſix violins, nay ten, nay twenty or more, at a ſumptuous meeting, and ſcarce half ſo many baſſes, which (as I ſaid before) were more reaſonable, ſure, to be the greater number. Now I ſay, if this be not an injury, both to the muſic, the compoſer, and the compoſitions, let any judicious perſon judge." Muſick's Monument, p. 233.

Plate XX. fig. 1. repreſents the violin, with its *natural ſcale* at the ſide of it; the open notes denoting the open ſtrings as before. All the ſemitones are of courſe ſuppoſed to be included. But above this natural ſcale, by ſhifting upon a long finger-board, notes are produced as high as are expreſſed by the additional keys of a piano-forte; for which we refer to Plate I. Ex. 3.

Beſides theſe notes, there is another ſet to be produced from the violin by a peculiar mode of fingering. Theſe are called the *harmonics*. To produce theſe charming ſounds, the finger ſhould touch the ſtring as ſlightly as poſſible; and, when the fourth finger is uſed, the firſt ſhould be placed in the uſual way, as a fulcrum, while the fourth is very ſlightly laid on. In the following Example, the figures underneath denote with what fingers the notes ſhould be taken; and the ſmall notes above are the harmonics produced:



The *viola piccola*, or kit, called in French *violon de poche*, or in ſhort *poche*, has exactly the ſame ſcale as the violin; the length of the finger-board and neck the ſame; only the body is ſmaller.

The *rebec* is the moſt ancient violin in France; it had but three ſtrings, and the romancers and troubadours frequently mention it. A figure of the minſtrel Colin Muſet, is ſtill preſerved at the entrance of the church of St. Julien des Meneſtriers, at Paris, playing on the rebec. The time is not known when the fourth ſtring was added to this inſtrument. It is ſtill uſed in its primitive ſtate, as a trichord, in Turkey and other Eaſtern countries. Its three ſtrings are tuned 5ths, and played with a bow.

Etymologiſts have tortured themſelves to find a derivation for the name of a vulgar inſtrument, no longer in uſe. Some trace it from the Arabic, ſome from the Celtic, the Welſh, the Spaniſh, Italian, and old French. *Rebec, ribibe,* and *ribible*, ſeem to be the ſame inſtrument; and are often indiſcriminately uſed by Gower, Chaucer, and the ſtill more ancient bards of Normandy, and our own country. The following paſſages are from Tyrwhitt's Chaucer:

The Millere's Tale. Speaking of the Pariſh Clerk.

A mery child he was, ſo God me ſave;
Wel coud he leten blod, and clippe and ſhave,
And make a chartre of land, and a quitance,
In twenty manere coud he trip and dance,
(After the ſcole of Oxenforde tho,)
And with his legges caſten to and fro;
And playen ſonges on a ſmall *ribible;*
Therto he ſong ſomtime a loud quinible,
And as wel coud he play on a giterne.
In all the toun n'as brewhous ne taverne,
That he ne viſited with his ſolas,
Ther as that any gaillard tapſtere was.
But ſoth to ſay, he was ſomdel ſquaimous
Of faſting, and of ſpeche dangerous.

The Coke's Tale. Speaking of the Prentis.

For ſothly, a prentis; a revelour,
That hanteth dis, riot and paramour,
His maiſter ſhal it in his ſhoppe abie,
Al have he no part of the minſtralcie.
For theft and riot they ben convertible,
Al can they play on giterne or *ribible.*
Revel and trouth, as in a low degree,
They ben ful worth all day, as men may ſee.

Ribeba, in the Decameron, ix. 5. is rendered by Maçon, the old French tranſlator, *rebec*, and *guiterne*; but in the above paſſages the *giterne* is diſtinguiſhed from the *ribible*.

As the head, or ſcroll-work, of old viols and violins, uſed to be curiouſly carved, ſo ſeems to have been that of the rebec. Chaucer compares the face of an old woman, an old trot, to the head of a rebec. Rabelais does the ſame:

—— A tel mineſtrier tel rebec,
Tenant toujours le verre aubec;
Car elle avoit *viſage de rebec.*

At length the inſtrument came to be put for the old woman herſelf, perhaps from its ſhrillneſs. An old writer, quoted by Du Cange, has the following lines in his deſcription of a concert:

Quidam *rebeccam* arcuabant,
Muliebrem vocem confingentes.

"Some, imitating the voice of a woman, fiddled on a rebecca." Now we are informed, that a ſhrew, a quarrelſome woman, is to this day called in France *une Rebecca;* and from that circumſtance, the head of a peeviſh woman was placed at the handle of this ſmall violin, which, by its ſhrill ſound, ſeemed to imitate the argute diapaſon of a ſcold: hence probably the name.

In the following paſſages from Chaucer, it ſeems to be put, not for an old woman merely, but a woman of ill fame; perhaps from *ribaude*, a bawd:

The Frere's Tale. The Archedeken's Sompnour.

And ſo befell, that ones on a day
This ſompnour, waiting ever on his prey,
Rode forth to ſompne a widewe, *an olde ribibe,*
Feining a cauſe, for he wold han a bribe.
And happed that he ſaw beforn him ride
A gay yeman under a foreſt ſide:
A bow he bare, and arroes bright and kene;
He had upon a courtepy of grene,
An hat upon his hed with frenges blake.

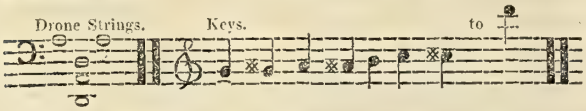
When that they comen ſomewhat out of toun,
This ſompnour to his brother gan to roune;
Brother, quod he, here woneth an old *rebekke*
That had almoſt as leſe to leſe hire nekke
As for to yeve a peny of hire good.
I wol have twelf-pens though that ſhe be wood,
Or I wol ſomone hire to our office;
And yet, God wot, of hire know I no vice.

It will have been obſerved, alſo, that Rabelais, in the paſſage quoted from him, uſes the word in this ſenſe alſo: "A tel mineſtrier tel rebec."

The rebec repreſented at fig. 2. was kindly communicated to us by a profeſſor, whoſe apartment is a cabinet of curious inſtruments and ſcarce books on the ſcience of muſic. This gentleman had fitted it up as a violin, with four ſtrings; but he found that the additional ſtring would not produce a good tone, though the original three had a charming effect. Fig. 3. is the *goudok*, or Ruſſian rebec.

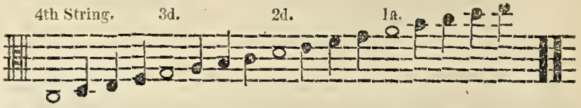
Fig. 4. is the *crowth*, or *crûth*, an inſtrument reſembling a violin, formerly in common uſe in the principality of Wales, as a tenor accompaniment to the harp; but now become extremely rare in that country. The length is 20½ inches, the breadth at bottom 9½, tapering towards the top to 8 inches; its thickneſs is $1\frac{8}{10}$, and the finger-board meaſures 10 inches in length. It has ſix ſtrings, ſupported by a flat bridge, placed obliquely to the ſides, and is played on with a bow. A, A, repreſent the apertures for the hand; B, B, ſtrings, conducted under the end-board; C, C, the pegs, and *d, d*, the ſound-holes. The fifth and ſixth ſtrings are the uniſon and octave of G, the fourth and third the ſame of C, and the ſecond and firſt the ſame of D; ſo that the ſecond pair of ſtrings are a fourth, and the third a fifth, to the firſt. Some have ſuppoſed this inſtrument to have been the parent of the violin; but it is much more extenſive in its compaſs. Two or three of the lower ſtrings are often ſtruck with the thumb, and ſerve as a baſs accompaniment to the notes ſounded with the bow. This inſtrument was not peculiar to Wales; ſince a figure of it has been lately diſcovered among the outſide ornaments of the abbey-church of Melros, in Scotland, built about the time of Edward II. From the name *crowth* is derived *crowther*, a *crowder*, as a common fiddler is now called. The uſe of this inſtrument is almoſt loſt. The Welſh had alſo a three-ſtringed crowth, which was the ancient baſs-viol.

The *vielle*, or hurdy-gurdy, is often confounded with the *viole*, or viol. It is not, indeed, a bowed inſtrument, like the viol; but its tone is produced by the friction of a wheel, which performs the part of a bow. The ſtrings are preſſed on the wheel by the fingers, and ſometimes by keys. It is at preſent a mere ſtreet-inſtrument every-where but at Paris, where it is much in uſe with other inſtruments at the Boulevards and Guinguettes; and even ladies ſometimes condeſcend to learn to play upon it. Kircher gives it no better title than that of *lyra mendicorum*, "the beggars' lyre." It is ſo loud in the open air, that it ſeems impoſſible to bear it in a room. The itinerant performers on this inſtrument are generally Savoyards. The name of the inſtrument ſeems a corruption of *viole*, if it be not the eldeſt of the two. It has a neck or finger-board fretted, and five ſtrings always ſounding as drones, tuned as in the following example; that is to ſay, the two firſt uniſons, and the fourth an octave below it; the third and fifth octaves to each other; ſo that, in fact, the drone conſiſts but of two notes, and the inſtrument is ſometimes deſcribed as having but two ſtrings: ſome of the ſmaller ones may perhaps have but two. As the keys, which lie conveniently for the hand, produce all the ſemitones from G to D in alt, an uncouth jarring is heard when the G♯ and D♯ ſound together with the A♮ and D♮ of the drone. The following, then, is the complete ſcale of this delightful inſtrument:



The *Viola d'Amore*, or "love-viol," ſo called from its ſweetneſs, was the treble viol of the ancient cheſt. It has ſix double wire ſtrings, of which the tuning has been given at p. 381. It is ſtated to be 2ft. 4in. in length, ſix inches longer than our violin; then ſurely the tenor viol, or *viol di braccio*, which muſt have been larger and longer, muſt have been an unwieldly inſtrument to hold under the chin. As the rebec has the head of an old woman upon the neck, ſo it will be ſeen, by our fig. 5. that the preſent is ſurmounted with a blind Cupid, denoting that it is the *love-viol*. Dr. Burney mentions one of theſe in the poſſeſſion of Giardini, which had but four ſtrings, which were tuned fifths like thoſe of the violin; but underneath theſe there were four other ſtrings of ſmall braſs or iron wire, which were called *ſympathetic ſtrings:* theſe were never touched by the bow, but were cauſed to vibrate by the ſound of the ſtrings over them, when played upon by the bow. In the Supplement to the firſt Encyclopédie in folio, a viol d'amour is mentioned with twelve ſtrings, ſix upon the great bridge, and ſix upon a ſmaller bridge below. The ſix inferior ſtrings are of metal, and tuned octaves to the ſuperior.

The VIOLA, *Alto Viola*, or Tenor.—What the *contralto* is in vocal muſic, the *alto viola* is in inſtrumental. The ſame clef is uſed for both; the tenor on the third line. The inſtrumental tenor is an octave above the violoncello, and five notes below the violin, as will appear from the following ſcale:



Theſe, with the ſemitones, are all the notes that were given to the tenor during the firſt fifty years of the laſt century, in the concertos of Corelli, Geminiani, and Handel; and the tenor was the inſtrument to which great violiniſts retreated, when the hand, and perhaps the eyes, failed. But, during the laſt fifty years of the preceding century, when quartets, *à parti equali*, came into favour, the tenor was made an important inſtrument; and, when played by a Hindmarſh, a Shields, a Stamitz, and by Giardini himſelf, was as much and as deſervedly applauded as the violin and violoncello.

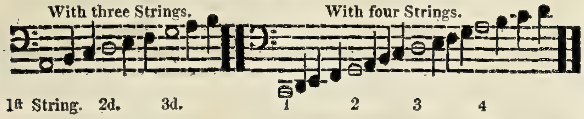
The *Viola di Braccio*, or "arm-viol," (ſo called to diſtinguiſh it from the *viola di gambo*, or "leg-viol,") was the ancient tenor-viol, though, having ſix ſtrings, its ſcale was different. See p. 381.

The *baritone*, we are told in the Life of Haydn, is a complex inſtrument between a tenor and a baſs. Muſic was written for it with the baſs clef on the third line.

The VIOLONCELLO, or Baſs Viol,—Violoncello is the diminutive of *violone*, which is the name for the double-baſs, as *violino* is the diminutive of *viola*, or tenor. The violoncello is the natural baſs to the violin and tenor; and has been very much cultivated throughout Europe, and no-where more ſucceſsfully than in England, during the laſt century, in proportion as the ſix-ſtringed baſs loſt its favour. The firſt performer on the violoncello in our memory, who was always heard with pleaſure, was Caporale, whoſe chief excellence was his fine tone. Gordon and Paxton had conſiderable merit of that kind. The elder Cervetto and Paſqualino, both defective in tone, had what was then thought conſiderable execution and knowledge of the finger-board; but Croſdil and the younger Cervetto became in all reſpects the moſt complete and delightful performers on the violoncello, that not only England but all Europe could boaſt. We have however many performers on the violoncello for general buſineſs, who would have been thought wonderful players formerly; and, to conſole us a little for the loſs of Cervetto and Croſdil, a Linley, who, in every requiſite of a great player, may be pronounced wonderful at preſent. The figure and natural ſcale of the violoncello are given at fig. 6. but ſolo-players extend the ſcale very conſiderably upwards.

The *Viola di Gamba*, or old baſs-viol, is ſomewhat leſs than our violoncello, while the tenor and treble viols appear to have been larger than ours. Like all the ancient viols, it has ſix ſtrings, which give the half-notes by means of ſeven frets on the finger-board, or neck. The laſt Engliſh performer on the viol di gamba, who was favourably noticed, was Miſs Ford, afterwards Mrs. Thickneſs; but ſhe made little more uſe of it than in accompanying her voice, which ſhe did with great expreſſion and effect. But Abel, in ſpite of the natural defects of the inſtrument, the tone of which every one diſliked, by his exquiſite taſte, prodigious execution when he pleaſed, genius, and profound knowledge of compoſition, delighted all hearers, and made them forget, or at leaſt forgive, its querulous and naſal quality of tone. The inſtrument now is as dead as this great muſician, and ſeems to have departed this life at the ſame time; viz. in the year 1787. (See p. 309.) The late Mr. Lidl, indeed, (ſays Dr. Burney,) played with exquiſite taſte and expreſſion upon this ungrateful inſtrument, with the additional embarraſſment of baſs ſtrings at the back of the neck, with which he accompanied himſelf; "an admirable expedient in a deſert, or even in a houſe where there is but one muſician; but to be at the trouble of accompanying yourſelf in a great concert, ſurrounded by idle performers who could take the trouble off your hands, and leave them more at liberty to execute, expreſs, and embelliſh, the principal melody, ſeemed at beſt a work of ſupererogation. The tone of the inſtrument will do nothing for itſelf; and it ſeems with muſic as with agriculture, the more barren and ungrateful the ſoil, the more art is neceſſary in its cultivation; and the tones of the viol da gamba are radically ſo crude and naſal, that nothing but the greateſt ſkill and refinement can make them bareable. A human voice of the ſame quality would be intolerable." (Burney, vol. iv.) That all idea of this once-favourite inſtrument may not be entirely loſt, we have given a repreſentation of it at fig. 7.

The VIOLONE, or Double Baſs, is almoſt twice as big as the violoncello, and the ſtrings are bigger and longer in proportion. Its ſound is an octave lower than that of our baſs-violin, which has a noble effect in great concertos; but this depends on the number of ſtrings, and the manner of tuning them; ſome performers uſing four ſtrings, and others three; and in the tuning of theſe there is a conſiderable difference. The true uſe of the violone is to ſuſtain the harmony, and in this reſpect it has a noble effect: divided baſſes are improper for it, the ſtrings not anſwering immediately to the percuſſion of the bow: theſe can only be executed with a good effect on the violoncello, the ſounds of which are more articulate and diſtinct. The double-baſs now moſt commonly in uſe has but three ſtrings, which are tuned fourths; but the Italian violone has four, and they are tuned fifths. Their notation is as follows; but it is to be obſerved that the real ſounds are an octave lower than here marked:



In general, however, a ſeparate part is not compoſed for the double baſs, but the performer looks at the violoncello-book, playing the ſame notes an octave lower, or omitting ſuch notes as he thinks will not have a good effect. The words *Solo Violoncello,* and *Tutti Baſſi,* are uſed to ſhow when theſe inſtruments are to play ſeparately, and when together. But Dr. Crotch very juſtly obſerves, that the parts ought to be written ſeparately, with an occaſional variation in the paſſages.

Of WIND-INSTRUMENTS.—The moſt ancient and ſimple wind-inſtrument was the imperforated flute formed of a ſingle reed; and the next to that was the ſyrinx, or Pan's pipes, compoſed of ſeveral reeds joined together; and now ſo common as a ſtreet-inſtrument under the vulgar name of the *mouth-organ.*

The flute at preſent uſed in Otaheite, conſiſts of one joint of cane; but differs from the flutes of the ancients, as it is ſounded by one of the noſtrils, whilſt the performer ſtops the other with his thumb. This noſe-flute gives only four ſounds with the firſt degree of breath, which are, in an aſcending ſeries, by a ſemitone, a tone, and a ſemitone. If urged with a ſtronger breath, it will give octaves above theſe; but it then becomes ill in tune; and it ſeems the natives of Otaheite uſe no more than thoſe firſt four ſounds. Notwithſtanding the ſmall extent of this ſeries, yet, by the aid of varying the meaſure, it is capable of ſeveral different melodies, though the general caſt of them will be melancholy.

An inſtrument ſomething ſimilar to the above, but of greater compaſs, was obſerved by Mr. Ledyard in the interior of Africa. Speaking of the preſent Egyptian muſic, he ſays, "Their muſic is inſtrumental, conſiſting of a drum and pipe, both which reſemble theſe two inſtruments in the South Seas. The drum is exactly like the Otaheite drum; the pipe is made of cane, and conſiſts of a long and ſhort tube joined;" but he does not ſay in what manner, whether longitudinally, or laterally like the ſyrinx; probably the former. But the South-Sea iſlanders have a ſyrinx conſiſting of nine muſical pipes of various lengths, and connected together in a parallel poſition. This inſtrument was brought by Capt. Fourneaux from the Iſle of Amſterdam in the South Seas, to London, in 1774; given to the Royal Society, and deſcribed in the lxvth volume of the Phil. Tranſ. by Joſhua Steele, eſq. The manner of blowing the pipes, in making the experiments, was the ſame as people uſe to whiſtle in the pipe-hole of a key. The upper ſeries of tones, which are exact fifths to the lower, are eaſieſt produced by an unexperienced perſon; and the loweſt ſeries, which we ſhall call fundamentals, with ſomewhat more addreſs and a weaker blaſt. Beſides the above-mentioned tones, if the velocity of the breath be increaſed a little, the firſt five pipes will give octaves to the fundamentals, and, if further increaſed, ſharp thirds above theſe octaves. In the pipes 6, 7, 8, 9, Mr. S. could neither make the octaves to the fundamentals nor the ſharp thirds; but, in their ſtead, the minor or flat third above the octave came, when the breath was urged beyond the degree requiſite to produce the fifth. This minor third is an accident out of the natural order of tones produced from ſimple tubes, which Mr. S. does not pretend to account for. He then adds the notes of the ſeveral tones which he produced from each pipe; and he afterwards more particularly deſcribes a ſyrinx of ten pipes from the ſame place. See Phil. Tranſ. abr. vol. xiii. p. 591, 2.

The moſt ſimple wind-inſtrument we have at preſent, is the *tabor-pipe.* This little flute has but three holes, and is played with the thumb, and firſt and ſecond fingers of one hand; the third finger is not uſed at all; but the little finger is uſed by ſome dextrous players to ſtop the hole at the bottom; and, by ſtopping that hole and the others occaſionally only half-way, a ſucceſſion of notes has been produced from the middle C* to A in alt, thirteen notes in all, including the half-notes.

The ENGLISH FLUTE.—The common flute, called *flute à bec,* from the upper end, or mouth-piece, reſembling the beak of a bird, was, at the beginning of the laſt century, till the works of Corelli came over, in far more general uſe as a concert-inſtrument than the violin. Sonatas for two flutes, and a thorough-baſs, violone, or theorbo, were innumerable; with ſolos, duets, and concertos, for the ſame inſtrument; nor was there a ballad then printed which was not tranſpoſed for the flute at the bottom of the page; as, in the middle of the ſame century, almoſt every ſong and tune was ſet to the guitar. The concert-flutes for which this muſic was compoſed were generally F and C. Its ſcale is from the loweſt D in the treble to D in alt; two octaves.

The *flageolet,* or octave-flute, has the ſame ſcale, but generally plays in the key of F. Its extent is from F on the firſt ſpace to A in alt. We have not thought it neceſſary to give figures of theſe ſimple and well-known inſtruments.

The GERMAN FLUTE.—This inſtrument conſiſts of four pieces, or joints, inſerted one in the other. Its name ſuppoſes it to be of German origin; but in France it is called *flute traverſière,* from its being held in a horizontal poſition, or *acroſs* the lips, to diſtinguiſh it from the common Engliſh flute, or *flute à bec,* which is kept in a more vertical or upright poſition.

To become a good performer on this inſtrument, the ſtudent muſt begin by acquiring a proper embouchure, ſo as to procure a clear, full, and ſweet, tone; a taſk far more difficult than is generally imagined. Every one can produce a tone on a common flute, but few are able, without teaching, to make the German flute ſpeak. The inſtrument, being blown at the ſide, muſt be held parallel to the ſhape of the mouth, that the ſtream of air iſſuing from the breath of the performer may enter in part at the ſingle orifice in the upper piece. Whether ſitting or ſtanding, the performer muſt be erect in his carriage, the head rather above than below its uſual poſition, and a little inclining to the left ſhoulder; the hands high, without raiſing the elbows or the ſhoulders; the left hand bent out, and the ſame arm near the body. If the player is ſtanding, the attitude ſhould be firm, the left foot advanced, the body reſting on the right hip, and the whole perſon free from conſtraint. The greateſt care ſhould be taken not to move the head or body, as many do, in order to mark the time. The attitude ſhould have no ſingularities, nothing aukward or affected to attract the attention, or prejudice the audience againſt the performer. With regard to the poſition of the hands, the left is to be at the top of the flute, which is held between the thumb of that hand, and the fore-finger, which ought to ſtop the upper hole; the ſecond hole with the middle finger, and the third by the ring finger. The right hand is to hold the lower part of the inſtrument; the thumb of this hand, which muſt be a little bent inwards, ſupports the flute below, and the three fingers of this hand, the fore finger, the middle finger, and ring finger, ſtop the holes: the little finger ſerves to preſs down the key at the tail-piece, or loweſt joint, which key opens a hole out of the reach of the fingers. The flute muſt be held horizontally. No inſtructions for the lips in blowing the flute can ſuit the form of all mouths; but, when the ſtudent can make the inſtrument ſpeak eaſily and freely, he muſt turn it in and out, by ſmall degrees, till he gets the beſt tone poſſible; and then, beginning with the cheſt well filled with wind, as ſoft as poſſible to ſwell by minute degrees any note to its utmoſt power, and then to diminiſh it by the ſame degrees to a thread.

The principal and moſt uſual key of the common German flute is D major with two ſharps; and other keys are proportionably unfit for it, as they are farther removed from this key. The additional keys and joints of which we are preſently to ſpeak, are intended to facilitate the playing in different keys, as well as to extend the ſcale. The moſt proper paſſages for the flute, are ſweet and ſoft melodies. In full parts, high and lengthened notes are given to it in modern muſic; and indeed the general uſe of wind-inſtruments in the full parts of modern muſic is to ſuſtain the principal or eſſential notes of the harmony, and to ſupply the want of voices or of the organ.

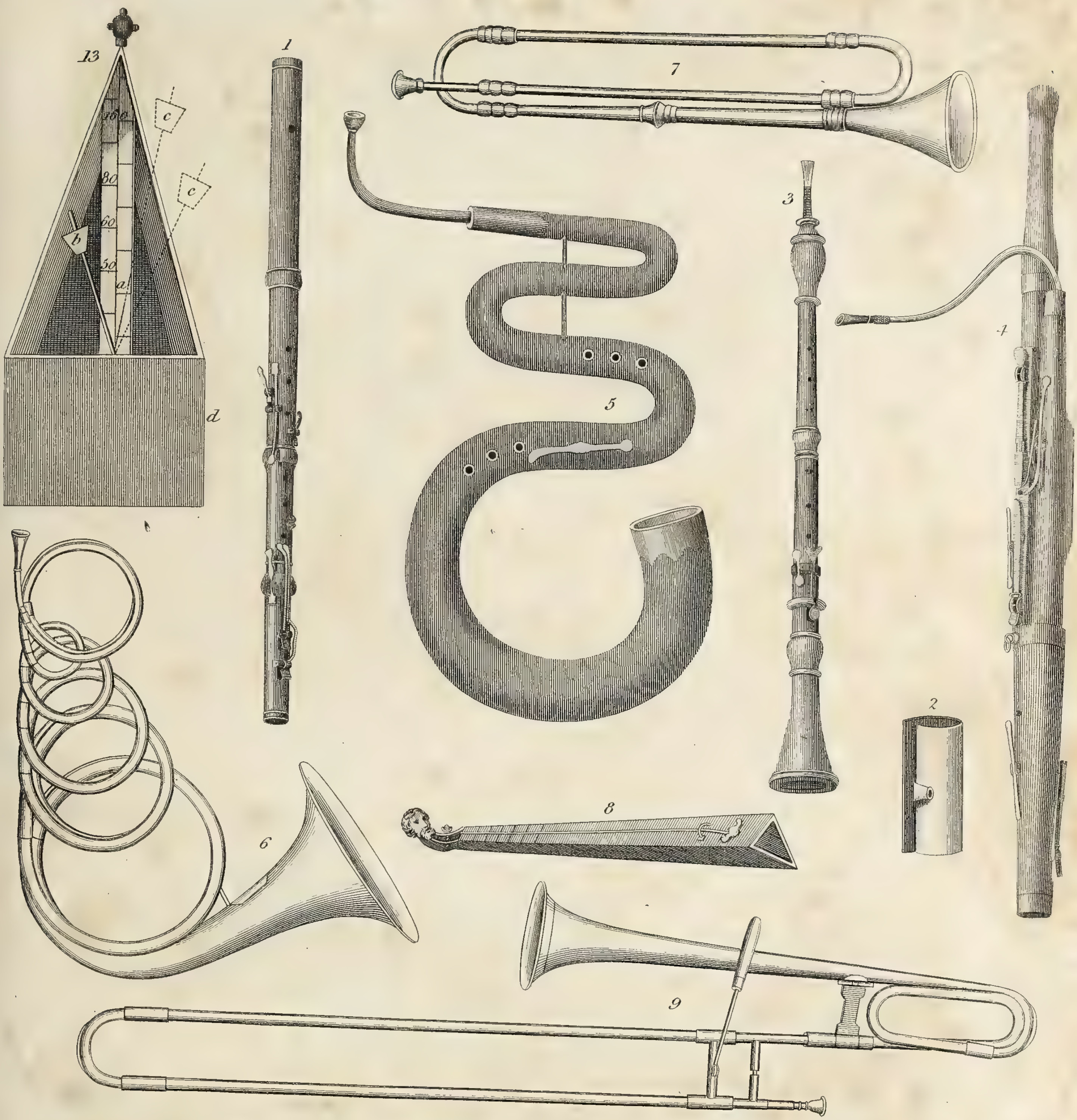
The original compaſs of this inſtrument was from the loweſt D in the treble to A in alt. This at leaſt was the extent of the ſcale in 1752, when Quantz publiſhed his *Méthode de la Flute*, who was the great king of Pruſſia's maſter on that inſtrument, and the firſt who added keys to correct and clear the bad notes. In the folio Encyclopédie, tome vi. there is a ſcale of all the tones, ſemitones, and ſhakes, poſſible on the inſtrument, with an additional half-note, C♯ or D♭, below the uſual loweſt note of its compaſs, and three notes above A in alt, the higheſt note of Quantz's ſcale. Quantz tells us, that in the year 1620 the German-flute had no key to make D♯ or E♭; and that it was then called the *Swiſs flute*. It was the French who added the firſt key; but it was not known by whom or when. Quantz himſelf added a ſecond key in the year 1726, and, about 1732, a third. Tacet was the firſt to adopt theſe additional keys, and he added two others, but more for parade than uſe, for he ſeldom uſed them all; and indeed, the management of five keys in rapid performance, (ſays Dr. Burney,) "would be as difficult as running diviſions on an organ, with all the five ſhort keys ſplit into quarter-tones." Potter's patent-flute, however, has *ſeven keys*; and ſome have ſince been made with *nine*. Flute-players are alſo indebted to Quantz for the invention (in 1752) of the new joint for the upper piece of the flute, by which, without drawing out the middle piece, and without hurting the tone, the inſtrument may be raiſed or lowered half a note.

On Plate XXI. fig. 1. repreſents a German flute with all the additional keys; and at fig. 2. is Whetſtone's patent mouth-piece, for obviating the difficulty of obtaining a good method of blowing. This little machine ſlides over the mouth-hole, and reduces the embouchure to the ſame certainty and eaſe as that of the *flute à bec*. But this is nothing to what we have read (for indeed we have not ſeen or heard it) of the invention of the late Mr. Hogben, the ſurgeon, who, "being of a delicate form, and ſubject to cough, found that playing the flute affected his breathing, and gave him ſome alarm by an affection on the cheſt; ſo that he found it neceſſary, in order to continue the gratification which he derived from this inſtrument, to contrive an *artificial breath* for it. This he accompliſhed ſo perfectly and ſo conveniently, that *he could ſing and play at the ſame time.* This notable piece of mechaniſm, is now in the poſſeſſion of his ſurviving brother." Gent. Mag. Sept. 1815.

Many other improvements, or, at leaſt, innovations, have been applied to this inſtrument ſince the time of Quantz; and, for ſome of them, patents have been obtained.

Potter's patent-flute is furniſhed with metallic ſtoppers, for the holes under the keys, inſtead of leather.

Mr. Malcolm M'Gregor, of Bell-yard, Temple-bar, received the ſilver-medal and twenty guineas from the Society of Arts in the year 1813, for an improved German flute, which he preſented to the ſociety, accompanied with certificates from various eminent performers. The object of Mr. M'Gregor's improvement is, to give the means of tuning the inſtrument perfectly, when required to alter its pitch, which can be done to the extent of a note above, or half a note below, the *concert-pitch*, making an extent of a note and a half in the whole; by which means a piece of muſic may be performed in a different or eaſier key from that in which it is compoſed; while the ſame alteration of the pitch, being attempted upon other German flutes, would put them conſiderably out of tune, ſo as not to be endured. This is accompliſhed by making the inſtrument draw out proportionately at all the ſeveral joints which unite its parts; by this means, when the cork or ſtopple is drawn out to lengthen the tube, and thus to lower the pitch of the inſtrument, the ſeveral joints alſo admit of the tube being lengthened in its different parts, ſo that the ſeveral ſpaces between the holes will bear the ſame relative proportion to the whole tube, in its lengthened ſtate, as they did before the alteration; by this means the ſound, produced by all the different parts of the tube, will accord, or be in tune with each other. Mr. M'Gregor deſcribes his contrivance as follows: "The flute is made, as uſual, in four lengths, which are united by joints, made to draw out, in order to lengthen it at pleaſure, each joint being fitted with cylindrical metal tubes, ſliding like thoſe of teleſcopes, for that purpoſe; the upper length has the mouth-hole in it, and the extreme end is ſhut up by a cork; as this is required to ſlide, to alter the length of the tube, it is rendered adjuſtible by means of a ſcrew, made of ivory, and is part of a piece which goes completely through the cork, and is glued faſt to it; the ſcrew is received into an ivory cap, looſely fitted into the end of the tube, and reſting with a flat ſhoulder upon the end of it; therefore, by turning this nut or cap round, the cork is drawn out, or may be puſhed farther into the tube. A ſmall pin, or tail, projects from the end of the ſcrew, and goes through a hole in the end of the cap; it has lines or marks made upon it, which direct how far the cork is to be moved, for the purpoſe of tuning the inſtrument to any required pitch.



1, to 9. Wind Instruments. 10. to 13. Time Measurers.

Engraved for the Encyclopaedia Londinensis 1818.

pitch. This conſtruction is common to many other German flutes; but, in this, the three joints, uniting the lengths, have alſo correſponding marks upon them, to ſhow how much they are to be drawn out, to correſpond with the alteration of the cork; and they alſo completely ſupply the place of the ordinary *thread-joints*, ſo very inconvenient in uſe." For a more minute deſcription, with figures of the ſeveral parts, we muſt refer to the volume of the Society's Tranſactions for the year 1813.

Wood's patent-flute appears to us to be formed exactly upon the ſame principle, though perhaps improved in ſome particulars. But it is underſtood, that thoſe who claim a reward from the Society of Arts are bound to give up their invention for the uſe of the public, and not to take out a patent. Mr. Wood, however, deſcribes his flute as being "conſtructed on an entirely new principle; and ſo contrived, by means of tubes fixed to the ſeveral joints, that it is capable of being tuned to any pitch, whether ſharp or flat, without the uſe of any extra joints, and the inſtrument ſtill remains perfectly in tune, however the pitch may be altered, a perfection hitherto found unattainable. Another advantage is, that it is perfectly air-tight at the joints, ſo that the trouble of uſing thread, or any other preparation, is entirely done away with. The inſtrument is alſo preſerved from the decay uſually occaſioned by the water reſting on the joints, and is always ready for uſe." Theſe improvements, (whether appertaining to M'Gregor or to Wood,) with the rich, full, and fine, body-tone they produce, and the great freedom with which every note may be produced, from the loweſt note to the higheſt in altiſſimo, added to their portability, and the neatneſs and elegance with which they are finiſhed, have gained this kind of flute a great degree of reputation.

The compaſs of the German flute at preſent extends to three octaves, from the loweſt D in the treble to the octave above what uſed to be the higheſt D. But C♯ or D♭ below the D♮, has lately been acquired by blowing very ſoftly, and turning the inſtrument inward; and the more recent improvements have carried it down to C♮. It is to be obſerved that, the higher the notes on this inſtrument are, the wind muſt be increaſed, and the orifice of the lips ſomewhat more cloſed. Moſt of the notes are broken into octaves by a little additional force in blowing. The B, C, D, of the third octave, cannot be produced upon all flutes: with middle-pieces, which lower the tone of the whole inſtrument, they are eaſier to be produced. There are ſometimes ſeven middle-pieces in uſe for flattening the pitch. Theſe amount to about a tone; ſo that by their aſſiſtance a flute may accommodate itſelf to any pitch.

The *flauto piccolo* is a ſhrill flute, uſed by Handel to imitate the ſinging of birds, and by Gluck for the howling and whiſtling of the wind.

The *Fife* is alſo a ſmall ſhrill flute, blown at the ſide, like a German flute. It is in almoſt every muſical band; and, as the tabor and pipe enliven the dance, the fife and drum animate the ſoldier, particularly in the quick ſtep. The fife has ſix holes, and furniſhes two octaves, from the loweſt D in the treble to D in alt. The Swiſs firſt brought this inſtrument into France, after the battle of Marignan, under Francis I. ſince which time it has been admitted into regimental muſic, in preference to the common octave flute, being made leſs falſe (ſays Laborde) from its having a key, which the *fife à bec* has not.

The fife is an inſtrument particularly intended for the uſe of regiments; and forms, in conjunction with the drum, the only muſic with which many corps are provided. This little ſhrill tube is uſually about fourteen inches in length, and of one piece, though ſome are made to take to pieces; but ſuch are not ſuited to military uſe. It may be conſidered as a ſmall kind of flute, eſpecially if provided, as ſome are, with a key; but ſuch are rare, the generality being confined to only ſix finger-holes, and an embouchure, or mouth-hole. The want of a key neceſſarily occaſions a difference in the fingering of many notes; but the compaſs, or extent, is about the ſame as that of the old German flute; namely, from D below the treble ſtaff to D in alt; but all beyond B in alt are more or leſs harſh, and cruelly piercing to a ſenſible ear. Fifes are made of three ſeveral ſizes, denominated A, B, and C, reſpectively; A being the largeſt and deepeſt toned, and one minor third below concert-pitch. The next ſize is made to correſpond with the B♭ of the muſical ſcale, and is generally uſed when playing with ſuch military bands as uſe what are called B♭ clarionets. The C fifes are thoſe at concert-pitch, and are chiefly uſed for the ordinary ſervice of theſe inſtruments.

The Oboe, or Hautboy.—This inſtrument is blown with a reed. It is the natural treble to the baſſoon, as their ſeveral names imply: *haut-bois*, high wood; *bas ſon*, low ſound. The hautbois conſiſts of four pieces, or joints; of which the upper piece, to which the reed is fixed, is the narroweſt. The tube increaſes in diameter to the end, which terminates with a wide mouth like the trumpet. See the Plate, fig. 3.

The hautbois goes as low as the improved German flute; that is, down to middle C; and ſeldom, in full pieces, mounts higher than D in alt. Its principal key is that of C major: keys which have many ſharps or flats ſhould therefore be avoided in ſolos; but, in full muſic, this inſtrument is uſed in almoſt all keys.

This ſeems to have been an inſtrument in common uſe in the time of Shakeſpeare, and to have had a companion or baſſoon for its baſs. Falſtaff, in deſcribing the lank and meagre figure of Juſtice Shallow in his juvenile days, ſays: "The caſe of a *treble hautbois* was a manſion for him, a court." Henry IV. Part 2.

Yriarte, in the notes to his Spaniſh poem, "La Muſic," regards its tone as nearer that of a human voice than any other wind-inſtrument; and there a kind of hautbois, which is called the grand oboe, or vox humana; and it takes in all the half-notes up to G in altiſſimo.

There is a ſpirit and hilarity in the tone of the hautbois, which is gay and enlivening in allegros, and yet is not without expreſſion and complaint in pathetic ſtrains. The moſt celebrated performers upon this inſtrument in this country during the laſt century, who are now no more, were San Martini, who arrived in England in 1723; his ſcholar Tommy Vincent, Fiſcher, and Simpſon. Martini and Fiſcher were not only exquiſite performers on their inſtrument, but admirable compoſers. The concertos which Vincent uſed to play fifty years ago, which were known to be Martini's, were admirable, full of fire, taſte, and genius. They were never printed, nor do we know what became of them. The concertos which Simpſon played were generally paſticcios, one movement from one compoſer, and one from another; but Fiſcher's, without being capricious, were ſo much his own, that neither the compoſition nor performance reſembled any other.

The Clarionet.—As the baſſoon is called the baſs to the hautbois, the clarionet might very well be called the tenor to it, being a kind of intermediate inſtrument played with a reed, but of a different and larger kind; and having the general aſpect of a hautbois on a larger ſcale. The clarionet is, however, by profeſſors, called a treble inſtrument, and the muſic for it is written in the treble clef; but (ſtrangely enough) the notation is always a note higher than the muſic is to be played: thus the key of B♭ (the moſt common for this inſtrument) is written C♮. The natural ſcale of this inſtrument is from B♭ (or the middle C) to C (or D) in alt; notes, indeed, are produced as low as E; but Dr. Crotch ſays, that below B♭ they are not in tune: an imputation againſt the inſtrument, which is indignantly repelled by a forty-years' player, now at our elbow. But the truth is, that wind-inſtruments are more out of tune than the profeſſors of them are willing to allow, or than they can be ſenſible of themſelves. A leader or conductor of a band is, however, fully ſenſible of their imperfections. Their grand and impoſing effects are when they are formed into entire (military) bands, without the mixture of more perfect inſtruments. The moſt agreeable keys for the clarionet, are thoſe which have flats. It is naturally a very powerful inſtrument, and was originally appropriated to military bands; wherein two kinds are uſed; that juſt deſcribed, which is called the B♭ or C clarionet; and a ſmaller one, called the F clarionet, which goes up to F in altiſſimo. Thus, then, this is an inſtrument of full three octaves in extent.

The BASSOON.—This, like the two preceding inſtruments, is played with a reed, and is a continuation of the ſcale downwards. It is compoſed of four different pieces or tubes, which are bound together like a faggot; hence by the Italians called *fagotto*. It has three keys of communication to open and ſhut the ventages, which, from the length of the inſtrument, are out of the reach of the fingers. It has a crook, or mouth-piece, to which the reed is fixed. (See fig. 4.) The whole length of the inſtrument is eight feet; but reduced to four, by being doubled up like a trumpet for convenience in performance and carriage. Its compaſs is three octaves, from double AA in the baſs to A in the ſecond ſpace of the treble; of which the tones and ſemitones are as complete as on an organ, or any other keyed inſtrument. Every performer is not able to produce a lower ſound than BB♭ in the baſs, or a higher than G in the treble; and indeed this is now generally conſidered as the ſcale. As this inſtrument can play equally well in all the uſual keys, it may be uſed not only as a baſs to the hautbois and other wind-inſtruments, but in the *tuttis* it may play in uniſon with the baſs ſtringed inſtruments.

In the laſt age, Miller was the moſt eſteemed performer on the baſſoon at all public places in England. At preſent, Holmes is the favourite.

Alexander and Jerome Bezozzi, in the ſervice of the king of Sardinia, at Turin, were the moſt celebrated performers of their time; the one on the hautbois, and the other on the baſſoon. Theſe kindred inſtruments were rendered famous all over Italy during the middle of the laſt century, not only by the exquiſite performance, but by the amiably-ſingular character, of theſe two brothers. Their long and uninterrupted affection and reſidence together, were as remarkable as their performance. They were brothers: the eldeſt, when Dr. Burney firſt heard them in 1770, was ſeventy, and the youngeſt ſixty. The *idem velle et idem nolle* were as perfectly in tune as their inſtruments; ſo that they had always lived together in the utmoſt harmony, carrying their ſimilarity of taſte to their very dreſs, which was the ſame in every particular, even to buckles and buttons. They had lived ſo long and in ſuch a cordial manner together, that it was thought, whenever one of them died, the other would not long ſurvive him; which was exactly the caſe, both dying in 1780, within a few months of each other.

The compoſitions of theſe exquiſite performers generally conſiſted of ſelect and detached paſſages, yet ſo highly poliſhed, that, like apophthegms or maxims in literature, each was not a fragment, but a whole; their pieces being in a peculiar manner contrived to diſplay the genius of their ſeveral inſtruments and powers of performance. The eldeſt played the hautbois, and the youngeſt the baſſoon; but it is difficult to deſcribe their peculiarities of expreſſion. Their compoſitions, when printed, gave but an imperfect idea of its ſweetneſs and delicacy: ſuch a perfect acquieſcence and agreement together, that many of the paſſages ſeemed heart-felt ſighs breathed through the ſame reed. No brilliancy of execution was aimed at; all were notes of meaning. The imitations were exact; the melody equally divided between the two inſtruments; each *forte, piano, creſcendo, diminuendo,* and *appogiatura,* was obſerved with a minute exactneſs that could be attained only by a long reſidence and ſtudy together. The eldeſt brother had loſt his under front-teeth, and complained of age; and it was natural to ſuppoſe that the performance of each had been better; however, to me, (ſays Dr. B.) who heard them now for the firſt time, it was delightful! If there was any thing to lament in ſo exquiſite performance, it aroſe from the *equal perfection of the two parts;* which diſtracted the attention, except when in dialogue, ſo much as to render it impoſſible to liſten to both, when both had diſſimilar melodies equally pleaſing. They were born at Parma, and had been upwards of forty years in the ſervice of his Sardinian majeſty, without ever quitting Italy, (except one ſhort excurſion to Paris, in 1755,) or even Turin, but for that journey, and another to viſit the place of their nativity. They were men of a ſober, regular, and moral, character; in eaſy circumſtances; had a town and country houſe, and in the former many good pictures by the firſt maſters.

The Bezozzi family has furniſhed many admirable muſicians to Italy, and other parts of Europe. Gaetano Bezozzi, a celebrated performer on the hautbois in the king of France's ſervice, was born at Parma in 1727, entered into the ſervice of the king of Naples in 1736, and into that of the king of France in 1765. Dr. Burney heard him perform a concerto at Paris in 1770, and thought him ſuperior to all he had then heard on the hautbois, except Fiſcher. His father, Joſeph Bezozzi, had taught the celebrated brothers at Turin to play on the hautbois and baſſoon. "M. Bezozzi of Paris," ſays Laborde, "in 1780, had during twenty-five years merited and enjoyed the higheſt reputation, as well as the eſteem of all who knew him. His ſon was then lately received into the king's band; and his brother, Anthony Bezozzi, attached to the court of the king of Poland, had alſo a ſon in the ſervice of that of Dreſden, where we heard him perform in 1772, and found him a truly great performer. His ſwell was prodigious; indeed he continued to augmemt the force of a tone ſo much, and ſo long, that it was hardly poſſible not to fear for his lungs. His taſte and ear were exceedingly delicate and refined; and he ſeemed to poſſeſs a happy and peculiar faculty of tempering a continued tone to different baſſes, according to their ſeveral relations: upon the whole, his performance was ſo capital, that a hearer muſt be extremely faſtidious not to receive from it a great degree of pleaſure."

The SERPENT.—The ſerpent is an inſtrument of the baſſoon-kind, blown by a mouth-piece. It has its name from its ſerpentine figure; and is compoſed of two pieces of walnut-tree wood, and covered with thin leather or ſhagreen. This inſtrument has ſix holes, which give it a compaſs of two octaves, of which the middle C of the piano is the higheſt note. The mouth-piece is fixed in a ſocket of copper or ſilver. Its neck is curved, and its mouth-piece is of wood or ivory.

The abbé de Bœuf, in his Hiſtory of Auxerre, tom. i. p. 643, ſays that, about the year 1590, Edmond Guillaume, a canon of Auxerre, found the means of boring and turning a cornet in the form of a ſerpent, which was uſed in concerts at his houſe; and the inſtrument, having been perfected, became common in the great churches. In France, the ſerpent was formerly confined to the military bands; at preſent, ſays M. Laborde, it is confined to the church and proceſſions. In cathedrals there is one on each ſide the choir.

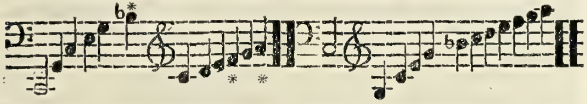
Merſennus, who had ſtudied this inſtrument, ſays, that if unfolded and ſtraight, it would be more than ſix feet long. Laborde ſays eight feet. Merſennus alſo mentions ſome peculiar properties of it; *e. g.* that the ſound of it is ſtrong enough to drown twenty robuſt voices, being animated merely by the breath of a boy, and yet that the ſound may be attempered to the ſoftneſs of the ſweeteſt voice. Another peculiarity of this inſtrument is, that, great as the diſtance between the third and fourth holes appears, yet, whether the third hole be open or ſhut, the difference is but a tone.

Of HORNS.—The *French horn,* which the French themſelves ſtyle *cor de chaſſe,* and the Italians *corno de* *caccia*, or "hunting-horn," is at the head of the horn-family.

The horn and trumpet have ſimilar ſcales. The *generator*, or key-note, is the ſound of the whole tube, which however is never uſed; the ſounds conſiſting entirely of the *harmonics*, or notes produced by the aliquot parts of the tube, which are the ſame as thoſe produced by the ſimilar parts of a ſtring, as given in p. 323. Thus, ſuppoſing the generator to be C,

$\frac{1}{2}$ the length of the tube will give the octave, or - C.
$\frac{1}{3}$ will give the 12th, or 5th above the preceding - G.
$\frac{1}{4}$ ——— the 15th, or 4th above the laſt - - C.
$\frac{1}{5}$ ——— the 17th, or major 3d above - - E.
$\frac{1}{6}$ ——— the 19th, or minor third above - - G.
$\frac{1}{7}$ ——— the 21ſt, or minor third above - B♭.
$\frac{1}{8}$ ——— the 22d, or 2d above - - - C.
$\frac{1}{9}$ ——— the 23d, or 2d above - - - D.
$\frac{1}{10}$ ——— the 24th, or 2d above - - - E.
$\frac{1}{11}$ ——— the 25th, or minor 2d above - - F.
$\frac{1}{12}$ ——— the 26th, or major 2d above - - G.
$\frac{1}{13}$ ——— the 27th, or 2d above - - - A.

Theſe intervals are expreſſed in notes as below; but, as the horn-part is generally written an octave higher than it is intended to be performed, (namely in the real notes of the trumpet,) the following Example will be ſufficient to ſhow the ſcale of both:

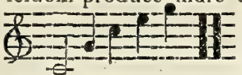

Harmonics of the French Horn. Written thus, as for the Trumpet.

Other notes have been inſerted by reſpectable compoſers; but even the above are not all perfect, as thoſe marked * are out of tune on the common horn and trumpet.

We have given the ſcale only for the key of C; but, by the uſe of *crooks*, the horn is enabled to play alſo in the key of G, A, B♭, D, E♭, E, and F. But all the muſic for the horn is uſually written as above, in the key of C, ſpecifying at the beginning of the movement what the key is, as C, D, G, E♭, &c. and the performer puts on the proper crooks accordingly. At fig. 6 is a French horn with all its crooks.

The French horn is an admirable inſtrument in the field or theatre; and, when the compoſer is careful not to dwell on the fourth or ſixth of the key, which are naturally falſe, and the performer has a nice ear, never overblowing or forcing the tone, its effect, in full pieces, is magnificent and grateful. By means of the hand inſerted in the tube, the chromatic ſcale is obtained in *one octave;* the only regular ſeries of ſounds with which either the horn or trumpet is furniſhed. There have been, and there are now, players on the inſtrument, who can produce all the half-notes, and perform in all keys, major and minor; but the artificial notes, like thoſe of the voice in falſet, are inferior to the natural, leſs ſonorous, and ſeem to be produced with difficulty.

The *bugle-horn*, and indeed every ſimple tube, muſt have a ſcale ſimilar to the horn and trumpet. Its generator is generally an octave higher than that of the trumpet; but it can ſeldom produce more than the five firſt harmonics; viz. But the bugle-horn is now made with holes and keys; and we are told that the 15th regiment has a band formed of bugles only.



The modern *cornet*, not very different probably from the ancient, (ſee p. 349.) is a coarſe inſtrument called in France *bouquin*, or goat's horn, uſed by the cow-keepers to call the cattle together at milking and foddering time. But an inſtrument called a *cornet* was formerly uſed in the orcheſtras in Italy, under the name of *cornetto* and *cornettino;* and the performers on it are frequently mentioned with praiſe during the ſixteenth and ſeventeenth centuries. Artuſi, an intelligent writer on muſic, in his treatiſe *Delle Imperfettione della Moderna Muſica*, gives a curious account of the ſtate of inſtrumental muſic in his time. In deſcribing a grand concert that was made by the nuns of a convent at Ferrara in 1598, on occaſion of a double wedding, between Philip III. king of Spain with Margaret of Auſtria, and the archduke Albert with the infanta Iſabella, the king's ſiſter, he enumerates the ſeveral inſtruments that were employed, and points out their excellencies and defects: among theſe, though the violin is juſt mentioned, yet nothing is ſaid of its properties; while the *cornet*, trumpet, viol, double-harp, lute, flute, and harpſichord, are honoured with particular remarks, both on their conſtruction and uſe; but among theſe, the *cornet*, which has long been ſupplanted in the favour of the public by the hautbois, ſeems to have ſtood the higheſt in the author's eſtimation. The elder Doni, in his dialogue written about fifty years before, mentions the cornet more frequently than any other inſtrument: "Il divino Antonio da *cornetto*, perfettiſſimo —et M. Battiſta dal Fondaro con il ſuo *cornetto* ancora; che lo ſuona miracoloſamente."

In the Tranſactions of the Royal Iriſh Academy for 1788, we have an account of three metal trumpets (from their ſhape we ſhould call them horns) which had been dug up a ſhort time before. Theſe inſtruments were found by a peaſant cutting turf in the bog of Carrick-O'Gunnell, county of Limeric, in the month of May, 1787, and by him ſold to a brazier in the city of Limeric, who reſerved them for the preſent poſſeſſor, (Ralph Ouſeley, eſq. M.R.I.A. who ſent the deſcription to the Society.) "They are of a rich mixed metal, neither copper nor braſs, but inclining rather to a copper colour. They reſemble ſtrongly thoſe deſcribed in Walker's Hiſtorical Memoirs of the Iriſh Bards, (p. 109. Appendix,) except in the *middle piece*, which differs from any I ever heard of, and is, I believe, an unique. This tube is 23$\frac{6}{10}$ inches long, of one entire piece, and has a loop in the centre to run a cord through: at each end it has four holes, correſponding to four in each trumpet, through which two pins, or pegs, faſtened the inſtrument. Both trumpets were fixed on the middle piece like the joints of a German flute, when firſt found, and very firm with ruſt and dirt, but the pins were loſt. I ſhould imagine this tube was only to hang them up by. Dr. Fiſher (a celebrated performer on the violin, and doctor of muſic in the univerſity of Oxford), who ſaw them with me in Limeric, conjectures that the two inſtruments thus connected by the tube, are *firſt* and *ſecond*. The mouth or large end of the biggeſt is 4$\frac{1}{2}$ inches diameter, being one inch wider than the others. The third inſtrument, which was found ſeparate, is ſaid to be the *ſtoc* or *ſtuic*, a ſort of ſpeaking-trumpet deſcribed by Col. Vallancey in the Collectanea, No. XIII. and in Hiſtorical Memoirs of Iriſh Bards, p. 83. The mouth-hole is oval, 1$\frac{3}{4}$ inches long by 1$\frac{1}{4}$ wide; and the third, of which we are ſpeaking, has a mouth-piece, like that of a French horn, fixed to it, but the others have not. They are all ornamented with little conical teats, or projections, at each end; viz. four at the ſmall and ſix at the large ends, and four near each extremity of the middle piece. They have alſo four holes at the wide ends, as if ſome other tube was to be faſtened occaſionally within them, perhaps in the manner of lord Drogheda's, deſcribed by colonel Vallancey." They are of different curvatures: the largeſt, which we ſhould call the baſs-horn, is moſt bent, a line drawn from the large to the ſmall extremity meaſuring 9$\frac{3}{4}$ inches; that of the other, connected with it by the tube, makes a chord of 12 inches; and the third, or ſeparate one, a chord of 15$\frac{6}{10}$ inches. The weight of the three inſtruments and the connecting tube is 9lb. 11$\frac{1}{2}$ oz.

The TRUMPET.—The word trumpet is formed from the Greek ϛρομϐος, in Latin *turbo*, a ſhell anciently uſed for a trumpet. It is uſually made of braſs, ſometimes of ſilver, iron, tin, and even wood. As to the invention of the trumpet, ſome Greek hiſtorians aſcribe it to the Tyrrhenians; but others, with greater probability, to the

Egyptians, from whom it might have been tranſmitted to the Iſraelites. The trumpet of the jubilee is ſuppoſed to have been like our trumpets, widening gradually in a direct line to the orifice. See p. 348, 9.

The modern trumpet conſiſts of a mouth-piece, near an inch broad, though the bottom be only one-third ſo much. The pieces which convey the wind, are called the *branches;* the two places where it is bent, *potences;* and the canal between the ſecond bend and the extremity, the *pavilion;* the places where the branches take aſunder, or are ſoldered, the *knots;* which are five in number, and cover the joints. See fig. 7.

When the ſound of the trumpet is well managed, it is of a great compaſs. Indeed its extent is not ſtrictly determinable; ſince it reaches as high as the ſtrength of the breath can force it. A good breath, we are told, will carry it beyond four octaves, which is the limit of ſome old organs and ſpinets; but its uſual ſcale, noticing its imperfections, has been given in the preceding page. It does not play in ſo many different keys as the French horn; little pieces of metal are applied at the upper part of the tube to effect a change of key, or to enable it to ſound certain notes; but theſe pieces perform very imperfectly the office of the crooks upon the French horn.

There are ſome performers who blow the trumpet ſo ſoftly, and draw ſo delicate a ſound from it, that it is uſed not only in church-muſic, but even in chamber-muſic; and it is on this account that, in the Italian and German muſic, we frequently find parts entitled *tromba prima,* firſt trumpet; *tromba, ſegonda, terza,* ſecond, third, trumpet, &c. as being intended to be played with trumpets. The moſt celebrated trumpet-player of the laſt thirty years, beyond all competition for a dexterous management of the inſtrument, is Mr. Hyde: he is now declining in the vale of years; but is bringing forward his two ſons, who bid fair to ſuſtain the credit of his name.

The *trumpet-marine* is an inſtrument conſiſting of three ſides, which form its triangular body. It has a very long neck, and one ſingle ſtring, very thick, mounted on a bridge, which is firm on one ſide, but tremulous on the other. It is ſtruck by a bow with one hand, and with the other the ſtring is preſſed or ſtopped on the neck by the thumb. See fig. 8.

It is the trembling of the bridge, when ſtruck, that makes it imitate the ſound of a trumpet, which it does to that perfection, that it is ſcarcely poſſible to diſtinguiſh the one from the other. And this is what has given it the denomination of *trumpet-marine,* though, in propriety, it be a kind of monochord. Of the ſix diviſions marked in the neck of the inſtrument; the firſt makes a fifth with the open chord, the ſecond an octave, and ſo on for the reſt, correſponding with the intervals of the military trumpet.

The trumpet-marine has the ſame defects with the real trumpet, viz. that it performs none but trumpet-notes, and ſome of thoſe either too flat or too ſharp. This Mr. Fr. Roberts accounts for, (Phil. Tranſ. 1692.) by premiſing the common obſervation of two uniſon-ſtrings; that, if one be ſtruck, the other will move: the impulſes made on the air by one ſtring ſetting another in motion, which lies in a diſpoſition to have its vibrations ſynchronous to them; to which it may be added, that a ſtring will move, not only at the ſtriking of an uniſon, but alſo of that of an eighth or twelfth; there being no contrariety in the motions to hinder each other. Now in the trumpet-marine you do not ſtop cloſe as in other inſtruments; but touch the ſtring gently with your thumb, by which there is a mutual concurrence of the upper and lower part of the ſtring to produce the ſound. Hence it is concluded, that the trumpet-marine yields no muſical ſound but when the ſtop makes the upper part of the ſtring an aliquot part of the remainder, and conſequently of the whole; otherwiſe the vibrations of the parts will ſtop one another, and make a ſound ſuitable to their motion, altogether confuſed. Now the aliquot parts, he ſhows, are the very ſtops which produce the trumpet-notes.

The *clarion* is a kind of trumpet, whoſe tube is narrower, and its tone ſhriller, than that of the common trumpet. It is ſaid that the clarion, now uſed among the Moors, and by the Portugueſe who borrowed it from them, ſerved anciently as a treble to the common trumpet. The uſe of this is now ſupplied by the trombone, of which we are preſently to ſpeak.

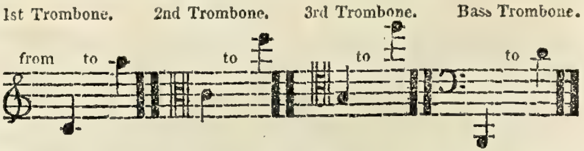
The Sackbut.—The ſackbut is an ancient inſtrument mentioned in Scripture. It is a kind of trumpet, though different from the common trumpet both in form and ſize. It takes aſunder into four pieces, or branches; and has frequently a wreath in the middle; which is the ſame tube, only twiſted twice, or making two circles in the middle of the inſtrument; by which means, it is brought down one-fourth lower than its natural tone. It has alſo two pieces or branches on the inſide, which do not appear except when drawn out by means of an iron bar, and which lengthen it to the degree requiſite to hit the tone required. The ſackbut is uſually eight feet long, without being drawn out, or without reckoning the circles. When extended to its full length, it is uſually fifteen feet. The wreath is two feet nine inches in circumference.

The ancient inſtrument called the *ſackbut* was diſcovered among the ruins of Herculaneum or Pompeii. The lower part is made of bronze, the upper part and the mouth-piece of ſolid gold. The king of Naples made a preſent of it to his preſent majeſty, and from this antique the inſtruments now called *trombones* have been faſhioned. In quality of tone, it has not been equalled by any of modern make.

Trombone, in Italian, ſignifies a "great trumpet," as *trombetta* denotes a little trumpet; both being derived from the generic *tromba.* The trombone, becauſe its tube can be lengthened and ſhortened at pleaſure, is called in Latin *tuba ductilis.*

Zarlini has deſcribed this inſtrument under the title of *trombone amovibile,* and the quantity and quality of the ſounds it is capable of producing, very exactly. "The trombone (ſays he) is an inſtrument truly worthy of conſideration, which I have ſeen and often heard by good performers, beginning at the loweſt ſound which it is capable of producing; when, being cloſed in all the joints, it can produce no ſound leſs than the octave; then from the octave to the 5th; nor from that can it produce a leſs interval than the 4th; and from the 4th to the 3d major, then the 3d minor, after which another 4th, the key-note, from which it can form a complete ſeries of eight notes. No other ſounds than theſe can be produced without altering, moving, and lengthening, the inſtrument." Supplimenti Muſicali, lib. iii. cap. 5.

The trombones are much uſed in the large churches of Germany. They are uſually made of braſs; and are now of four different kinds, anſwering to treble, counter-tenor, tenor, and baſs; but called firſt, ſecond, third, and fourth. They produce all the tones and ſemitones; and the notation is the ſame as for the different voices, as will appear by the following ſcale.



The laſt, or baſs trombone, is repreſented at fig. 9. It is often uſed alone, as a baſs or double baſs to other wind-inſtruments; and has the fineſt effect in funeral proceſſions, and in general in melancholy ſtrains. We never hear it with more pleaſure in England than in Handel's Dead March in Saul. The tromboni and double drums, which were introduced in the abbey at the commemoration of Handel, to make a grand craſh now-and-then, produced an admirable effect. Their uſe ſhould be rare, and their effects would be more ſtriking: but tromboni and double-drums are now ſo frequently uſed at the opera, oratorios, &c. that they are become a nuiſance to lovers of pure harmony and refined tones: for, in fact, the vibrations of theſe inſtruments produce noiſe, not muſical ſounds; though, in certain peculiar ſituations, they have a noble and grand effect.

INSTRUMENTS of PERCUSSION conſiſt of drums, cymbals, triangles, carillons or bells, &c. but the only inſtruments of this kind now uſed in concerts are the kettle-drum and long double-drum.

Of the KETTLE-DRUM we have given a particular account under that article, vol. x. The drum is often uſed to mark, by a ſingle note, the beginning of a bar, or to give force to a loud paſſage by a continual beating; but the fineſt effect produced by it is a roll during a pedale note in the baſs, or a creſcendo.

Every regiment of horſe had formerly a pair of kettle-drums. The kettle-drummer rides always at the head of the ſquadron, and his poſt is on the right when the ſquadron is drawn up. The kettle-drum belonging to the royal regiment of artillery is mounted on a ſuperb waggon, richly gilt and ornamented, and drawn by four white horſes, elegantly capariſoned, with a ſeat for the drum-major general.

It is ſometimes neceſſary to introduce the common drum and fife into orcheſtras, and particularly on the ſtage. The ordinary military *ſide-drum* is made either of braſs or of very thin board, turned round into a cylinder; in which form it is well ſecured by glue and rivets; and, further to ſtrengthen it, is lined throughout with a ſtrong kind of hempen cloth, or coarſe Holland, cemented to its interior, ſo as to prevent the wood from ſplitting. The drum thus made will not, however, ſtand great heats or intenſe cold; nor will it in damp weather yield ſo full a tone as one with a braſs barrel. Within each end of the barrel there is a flat wooden hoop firmly fixed, and projecting about the third of an inch beyond the braſs or wood: theſe, which are called the batten-hoops, ſerve to prevent the head from being cut by the edges. The head is made of parchment cut to a circular form, about two inches each way larger than the ends of the drum-barrel: it is faſtened, while moiſt, to a ſmall ring of copper, or of very firm tough wood, called the *fleſh-hoop*, ſo as juſt to exceed the ſize of the band. The *head* properly means the parchment covering of that end which is beat upon: the other end, which is covered with a coarſer parchment, is called the *reverſe*. The head and the reverſe, being applied to their reſpective ends of the barrel; over each a hoop, of about an inch and a half broad, and about the third of an inch in thickneſs, is drawn, to preſs the parchments cloſe over the ends of the barrel, but not to paſs over the fleſh-hoops. The bracing-hoops, having holes made for paſſing a cord alternately from one to the other, backwards and forwards, are pulled down as near as poſſible towards each other, thereby to ſtrain the head and reverſe parchments very tight; but, as the cord is ſubject to relax, it is neceſſary to have ſliders of very ſtrong buff leather, called *braces*, which, being preſſed downwards from the head hoop towards the reverſe hoop, cauſe them to approach ſtill nearer, and to tighten the two parchments to an extreme. When in this ſtate, the drum is ſaid to be "braced;" when otherwiſe, "unbraced." To give greater effect, and to cauſe that vibration which occaſions a rough intonation, three pieces of thick catgut are ſtretched acroſs the reverſe, flat upon it, and parallel. When theſe, which are called "ſnares," are ſlackened, ſo as not to vibrate when the head is beat upon, the drum is ſaid to be "damped," or "unſnared;" ſome, inſtead of ſlackening the ſnares, put a cloth between them and the reverſe; whereby the ſound is conſiderably deadened: this properly is termed "muffling;" though moſt perſons conſider that term to be appropriate only when the head is covered with crape, &c. as at funerals. After all the foregoing preparation, the drum would have little or no ſound, were it not that a round hole, about the ſize of a large pea, is left in the centre of that ſide which is neareſt the body when the inſtrument is ſuſpended by means of a ſling paſſing over the right ſhoulder and under the left arm.

However ſimple the beats of the drum may appear, it is nevertheleſs by long practice only that perfection can be attained; and then requiring both a correct ear, and a very nimble wriſt. Every beat is perfectly regular in the number and diviſion of the ſtrokes from the two ſticks; of which that held by the right hand is ſlightly graſped, while that in the left hand is retained in an oblique poſition; paſſing between the middle and third fingers, and being held by the two firſt fingers and the thumb; the two lower fingers croſſing under it, and the palm being turned upwards. Such is the eſtabliſhed preciſion in which the drum-majors take great pride, that, if all the drummers of the Britiſh ſervice were aſſembled together, they would be found to beat perfectly alike throughout what is called "the duty;" that is to ſay, all the beats in uſe; of which the following may be conſidered the principal.

The *roll*, which is a continued rolling ſound, without the leaſt inequality or intermiſſion. This is produced by giving two taps with the ſame ſtick, uſing the different ſticks alternately, each beating twice. The ordinary mode of teaching the roll is by the beat of "daddy-mammy;" ſo called from the double taps, in which each hand, after its two taps, is raiſed as high as the ſhoulder; thus forcing the pupil to ſtrike diſtinctly and leiſurely. By degrees he is able to beat quicker, and, ultimately, "to roll," in the manner above deſcribed, with ſuch incredible celerity and evenneſs, as to produce a cloſe and ſmooth ſound.

The *ſwell* is nothing more than the roll occaſionally beat ſo ſoftly as ſcarce to be heard; then increaſing to the utmoſt of the performer's ſtrength; and again lowering ſo as almoſt to die away upon the ear: the great difficulty is to raiſe and to lower the ſound very gradually. This beat is merely ornamental; it is uſually performed in the reveillez, &c. while the fifes are ſilent: it is quite arbitrary, being an *ad-libitum* performance.

The *flam* is a beat made by the two ſticks ſtriking almoſt at the ſame inſtant on the head, but ſo as to be heard ſeparately: it is uſed as a ſignal for various motions and manœuvres.

The *ruffle* is a ſhort roll; perhaps of five or ſix ſeconds' duration, beat very cloſe and firm, decreaſing a little in force juſt before it concludes, which it does in an abrupt and ſmart manner, and with a ſtrong flam.

The *general* is an air, which, when performed at full length, is the ſignal for marching to ſome new ground, or to ſome other ſtation: the firſt bar of its meaſure is beat as a ſignal for the firings to ceaſe.

The *aſſembly*, or *aſſemblez*, is a ſignal for the line to fall in; and, when beat after the *general*, is followed by the *march*, which is beat by each corps as it moves from its ground.

The *march* is almoſt indefinite, but is ordinarily beat in compliment to a reviewing or a paſſing field-marſhal, general, prince of the blood, &c. as alſo during ſalutes, when the battalion preſent their arms. We have the ſlow march and the quick march; but what are commonly called *marches*, and which have no particular diſtinguiſhing character, are uſually performed in ordinary time.

The *reveillez* is beat early in the morning, uſually at day-break, to waken the garriſon: it is a medley of various airs and beats. The *tattoo* is always beat at night, at ſuch hour as the garriſon ſhould retire to reſt; it is the ſignal for extinguiſhing fires and light, except in public guard-rooms. All ſoldiers found abroad after the tatto is beat, are conſidered as treſpaſſers againſt martial law. This alſo is a medley of airs and beats; the drums accompanying only at certain intervals.

The *retreat* is beat every evening at ſun-ſet, or after a corps has been diſmiſſed to their quarters: it is often beat in rather a quick time along the front of a corps, when paraded,

paraded for inſpection or roll-call. This beat likewiſe warns corps engaged in action, or performing evolutions, to retreat.

The *troop* is beat before the new guards, &c. about to march off from their place of aſſembly, to relieve others then on duty. This, as well as the retreat, is ordinalily in triple time of three crotchets or quavers; not unlike the waltz when performed rather ſlowly.

To arms is a beat reſorted to on all emergencies, whether owing to diſturbances, fire, invaſion, &c.

There is a kind of *accompaniment* performed on the drum, when beating to marches, and to other airs played by a fife. This is called the *drag*, and is either double or ſingle, according as the muſic may admit. The *ſingle drag* is little more than a tap of the drum for each note in the air; the taps being given in exact time with the diviſions of the muſic. This is what we commonly hear as an accompaniment to quick ſteps, "Rule Britannia," &c. The *double drag* is a much fuller accompaniment, in which, for the moſt part, two or three taps are given for every note in each bar; or, eventually, the whole is performed in a kind of articulate roll, not to be eaſily deſcribed, in which the accented parts are reinforced with much ſtrength. But to ſay the moſt of the ſide-drum, its monotony ſoon tires the ear; its rattling ſound becomes oppreſſive, and the little variety of its beats, in general not over-well executed, adds to the fatigue of liſtening, and produces ſomething worſe than indifference towards its ſounds. This, however, is a doctrine by no means tolerated among drum-majors, who affect to produce infinite variations from what the vulgar call the *parchment fiddle*. They have a long train of "ſingle reveillez," &c. which are intended to be performed without the fife, and are conſidered as concertantes among the ſages in this branch of muſic: many pride themſelves on the number of thoſe ſolos, which, poſſibly, may have charms for their ears, though failing to faſcinate ours.

The *Baſs Drum*, or *Turkiſh Drum*, is an inſtrument of the ſame conſtruction as the ſide-drum above deſcribed; only it is on a very large ſcale, has no ſnare, is ſlung by the middle acroſs the performer's body, and is beat upon at both ends; the right hand being furniſhed with a large ſtick, having a knob at its end; the left being provided either with a whiſk or ſtick, whoſe knob is covered with buff leather, to ſoften the tone. The right hand beats the accented parts of the meaſure, the left filling up the time according to the performer's judgment. This inſtrument is of great ſervice in military bands, giving a marked emphaſis and a fine effect to the muſic, and proving an admirable guide to the corps while marching, ſo as to make them preſerve a correct and regular pace.

The Cymbal, as we have noticed at p. 350. was in uſe at a very early period; but whether the ancient cymbals were ſimilar to ours is at leaſt very doubtful. The derivation appears to be from the Greek *κυμϐος*, cavity.

The ancient cymbal was of braſs, like our kettle-drums; and, as ſome think, reſembling them in their form, but ſmaller, and applied to a different uſe. Caſſiodorus and Iſidore call it *acetabulum*, the name of a cup or cavity of a bone wherein another is articulated; and Xenophon compares it to a horſe's-hoof; whence it muſt have been hollow; which appears, too, from the figure of ſeveral other things denominated from it: as a baſin, cauldron, goblet, caſque; and even a ſhoe, ſuch as thoſe of Empedocles, which were of braſs. In reality, the ancient cymbals appear to have been very different from our kettle-drums, and their uſe of another kind: to their exterior cavity was faſtened a handle; whence Pliny compares them to the upper part of the thigh, *coxendicibus*; and Rabanus to phials.

The Jews had their cymbals, which they called צלצלים; or, at leaſt, inſtruments which the Greek, Latin, and Engliſh, tranſlators render *cymbals*; for as to their matter, form, &c. the critics are wholly in the dark. Le Clerc has taken ſome pains to prove, that the *tzilzelim*, which our verſion, after the Septuagint, renders cymbals, were only a couple of hollow demiglobes of braſs, or ſome other tinkling metal, about ſix inches in diameter, which they uſed to ſhake one againſt another, like a pair of caſtanets, becauſe we find ſome ſuch inſtruments to have been in uſe among the ancients, and becauſe the root *tzalzal* often ſignifies *to tinkle*.

The cymbals of Bacchus were two ſmall braſs veſſels, ſomewhat in the form of a ſhield, which being ſtruck together by the hands, gave a ſound. The well-known ſtatue of the dancing fawn has one of theſe in each hand. An inſtrument of this kind is frequently to be ſeen in the Bacchanalian ſacrifices or proceſſions repreſented in ancient ſculpture. It is ſtill in general uſe in eaſtern countries; and has lately been introduced among the troops of almoſt all the princes of Europe, on account of its utility in marking the ſteps of the ſoldiers with force and preciſion during their march.

The *Triangle* is a little inſtrument of iron or ſteel, with ſides, but open at one corner; and which ſerves as an accompaniment to other inſtruments in a military band, and in the ſtreets: the performer ſupports it by a ring at the top with his left hand, and beats it with a ſmall iron rod in his right hand. At the loweſt angle iron rings are placed, which by their vibration augment the ſound.

Carillons, or hand-bells, are ſometimes found neceſſary in the accompaniment of certain airs; as "Let the merry bells ring round," in Milton's Allegro; and in the chorus of "Welcome, welcome, mighty king," in the oratorio of Saul. But an excellent and convenient imitation of hand-bells for this purpoſe is now produced by a ſmall keyed inſtrument, played like a piano: the tones are produced by wooden hammers, which ſtrike iron bars of different lengths. The *harmonica*, or muſical glaſſes, are likewiſe now incloſed in a box, and played with keys in the ſame manner.

It may not be amiſs juſt to notice a ſpecies of carillons, or chimes, frequent in the Low Countries, particularly at Ghent and Antwerp, and played on a number of bells in a belfry, forming a complete ſeries, or ſcale, of tones and ſemitones, like thoſe on the harpſichord and organ. There are pedals communicating with the great bells, upon which the *carilloneur* with his feet plays the baſs to ſprightly airs performed with the two hands upon the upper ſpecies of keys. Theſe keys are projecting ſticks, wide enough aſunder to be ſtruck with violence and velocity by either of the hands edgeways, without the danger of hitting the neighbouring key. The player is provided with a thick leather covering for the little finger of each hand, to guard againſt the violence of the ſtroke. Theſe carillons are heard through a large town. Of bell-ringing in general, we have ſpoken ſufficiently under the word Bell, vol. ii. and of muſical chimes, as applied to clocks, with the method of pricking the chime-barrel, ſee the article Horology, vol. x. p. 330–332. and Plate X.

Of MEASURING TIME.

The following are the words in common uſe, as prefixed to pieces of muſic, to denote the *time* they are to be performed in:

Adagio	The ſloweſt time.
Grave	Very ſlow.
Largo	Slow.
Larghetto	Rather leſs ſlow than Largo.
Andante	In a marked and diſtinct manner.
Andantino	In a flowing ſtyle.
Maeſtoſo	Majeſtically.
Allegro	Quick.
Allegretto	Not ſo quick as Allegro.
Vivace	Lively.
Preſto	Very quick.
Preſtiſſimo	As quick as poſſible.

There are ſeveral other terms which often occur at the beginning of different movements; ſuch as *Cantabile*, *Paſtorale*, *Gracioſo*, &c. &c. but theſe rather apply to the ſtyle and manner of playing than to the time. Even the terms we have here retained are very indefinite; ſince, though the *proportions* may be correct, yet the *actual degree of velocity* is yet a matter of doubt, and can only be decided by the compoſer himſelf.

But even the *proportions* are not to be abſolutely depended upon; for the order in which the above terms ſhould be placed is much diſputed. Some put *Adagio* in the ſecond degree, (after *Grave;*) others in the fourth, (after *Larghetto.*) In Rouſſeau's Dictionary of Muſic, time is divided into five principal terms, in the following order: *Largo, Adagio, Andante, Allegro,* and *Preſto.* There are alſo other collateral terms; and there are alſo various modifications of theſe, by the addition of the words *molto, poco, non troppo,* &c. and by combinations, as *andante allegro, andante larghetto,* &c. Theſe terms are, perhaps, only intelligible when conſidered in ſucceſſion. Slow and quick, like great and ſmall, exiſt only by compariſon.

It is not ſurpriſing that compoſers ſhould be miſunderſtood, ſince we find they are themſelves inconſiſtent. Handel has marked the baſs air in the Meſſiah, "But who may abide," with the word *Larghetto;* but he has marked the ſame ſong *Andante larghetto* in the appendix. The recitative "For behold, darkneſs ſhall cover the earth," is marked *Andante larghetto,* and the ſucceeding air, *Larghetto.* Now *larghetto* is certainly ſlower than *andante larghetto,* yet the quavers in the air are always performed full as quick as the ſemiquavers in the recitative. The air, "Thou art gone up on high," for a ſoprano voice, is marked *Andante;* the ſame ſong, with the ſlighteſt variation, for a baſs voice, is marked *Allegro.* In old, and eſpecially church, muſic, where the notes of the ſhorteſt value were quavers, and thoſe but ſeldom uſed, the minims were no longer than our crotchets. Pleyel, and ſome others of the later compoſers, ſeem to have revived this long-neglected ſpecies of notation, in the *preſtos* and other quick movements of their ſinfonias. Indeed time frequently ſeems to depend on the number of notes contained in a bar.

Dr. Nares, in the preface to his Anthems, remarks, that "muſic performed in juſt time is like a painting ſet in a good light;" and he is therefore anxious that the terms of time ſhould be particularly regarded. We partake in the good doctor's anxiety; but before the "terms of time" can be properly "regarded," they muſt firſt have a definite meaning, a correct character, expreſſive of the abſolute duration of each note. This is the object of our preſent enquiry.

It has been remarked, in an excellent "Eſſay on Muſic," printed in the Britiſh Magazine, (Oct. 1800.) that it would be eaſy to prefix to each movement a number, ſignifying how many bars are to be performed in a minute, which might at firſt be aſcertained by the help of a ſtop-watch, and would ſoon become perfectly familiar both to compoſers and performers, even without this aſſiſtance. According to Quantz, the number which ſhould be ſubſtituted for *Allegro aſſai,* in common time, is about 40; for *Allegretto,* 20; for *Larghetto,* 10; and for *Adagio aſſai,* 5. But it is uſual to perform modern muſic much more rapidly than this; or at leaſt the ſtyle of compoſition is ſo changed, that the terms are very differently applied. An allegro, or even an allegretto, in common time, without ſemiquavers, is often performed as faſt as 60; ſeldom ſlower than 30."

The idea, however, of a muſical chronometer, is not new, though it has not been brought into ſucceſsful practice till very recently. But it is neceſſary that we ſhould ſpeak of ſucceſſive as well as ſucceſsful inventions. M. Loulie, a French muſician, invented a machine for the purpoſe of meaſuring time by means of a pendulum. The form of the inſtrument is that of an Ionic pilaſter, and is thus deſcribed by Malcolm in his Treatiſe of Muſic, publiſhed in 1721. "The chronometer conſiſts of a large ruler or board, ſix feet or 72 inches long, to be ſet on end; it is divided into its inches, and the numbers ſet ſo as to count upwards; and at every diviſion there is a ſmall round hole through whoſe centre the line of diviſion runs. At the top of this ruler, about an inch above the diviſion 72, and perpendicular to the ruler, is inſerted a ſmall piece of wood, in the upper ſide of which there is a groove, hollowed along from the end that ſtands out to that which is fixed in the ruler, and near each end of it a hole is made: through theſe holes a pendulum-cord is drawn, which runs in the groove: at that end of the cord which comes through the hole furtheſt from the ruler, the ball is hung; and at the other end there is a ſmall wooden pin, which can be put in any of the holes of the ruler. When the pin is in the uppermoſt hole at 72, then the pendulum from the top to the centre of the ball muſt be exactly 72 inches; and therefore, whatever hole of the ruler it is put in, the pendulum will be juſt ſo many inches as that figure at the hole denotes. The manner of uſing the machine is this: The compoſer lengthens or ſhortens his pendulum, till one vibration be equal to the deſigned length of his bar, and then the pin ſtands at a certain diviſion, which marks the length of the pendulum; and this number being ſet with the clef at the beginning of the ſong, is a direction for others how to uſe the chronometer in meaſuring the time according to the compoſer's deſign: for with the number is ſet the note, crotchet or minim, whoſe value he would have the vibration to be; which in briſk duple (common) time is beſt a minim, or half-bar; or even a whole bar, when that is but a minim; and in ſlow time a crotchet. In triple time, it would do well to be the third part, or half, or fourth part, of a bar; and, in the ſimple triples that are allegro, let it be a whole bar. And if, in every time that is allegro, the vibration is applied to a whole or half bar, practice will teach us to ſubdivide it juſtly and equally. Obſerve, that to make this machine of univerſal uſe, ſome canonical meaſure of the diviſions muſt be agreed upon, that the figure may give a certain direction for the length of the pendulum." This, we think, muſt have been an unwieldy, complex, and expenſive, inſtrument.

Another chronometer, invented by M. Sauveur, is deſcribed in his "Principles of Acouſtics." It was a pendulum of a particular kind, which he excluſively applied to aſcertain the time in the performance of muſical compoſitions. L'Affilard, in his "Principles dedicated to Religious Ladies," placed at the head of all his airs figures which expreſſed the number of vibrations of the pendulum during the performance of each bar.

Rouſſeau ſaid, in his Dictionary, forty years ago, that it was then thirty years ſince a ſimilar inſtrument appeared under the title of chronometer, which beat the time itſelf; but none of them had ſucceeded. "Many, however, (continues Rouſſeau,) have aſſerted, that it is very much to be wiſhed that ſuch an inſtrument was completed in order to fix with preciſion the time of each bar in a piece of muſic; as, by that means, the true original meaſure of each compoſition would be recorded, without which expedient, it loſes its character; and, after the death of the author, it is only by a kind of tradition, very likely to vary and be loſt, that the time is known. Old people already complain that the time of many airs is loſt; and it is believed that they are performed too ſlow. This may have come on by degrees, from the characters in preſent uſe, which look much quicker than thoſe of a hundred, or indeed of fifty, years ago, when demi-ſemiquavers were ſeldom uſed; and, where there are now only minims, there uſed to be ſemibreves, as in alla breve time." We are certain, from our own memory, that the time of Handel's muſic is often miſtaken, and performed ſometimes quicker and ſometimes ſlower than when under his own direction; but moſtly quicker.

The objections of Monſ. Diderot to the uſe of a chronometer are by no means inſurmountable; and ſome of them are ingeniouſly anſwered by Rouſſeau. But one of them is very curious: he remarks, that "in a movement there are, perhaps, not two bars of the ſame duration!" Happily, however, we have no ſuch muſic; it never exiſted out of France; and is at length baniſhed its only aſylum. But we will detain the reader no longer from an acquaintance with thoſe inſtruments by the invention and ſucceſſive improvement of which, that which has been ſo long a *deſideratum* is at length diſcovered; namely, a true time-meaſurer, by the uſe of which the compoſer's intentions as to the velocity of his muſic may at once be known, and can never be loſt.

A very few years ago, two or three compoſers of acknowledged abilities, particularly Mr. G. Lanza and Dr. Crotch, began to adopt (or rather to revive) the uſe of a pendulum to regulate the time of their compoſitions, and to mark the length of the pendulum at the head of their pieces as a direction to the player. From the hints furniſhed by theſe diſtinguiſhed profeſſors, Mr. Ackermann has contrived two very ſimple but uſeful inſtruments, which we ſhall now proceed to deſcribe.

To ſuch muſical ſtudents as are acquainted with the rudiments of natural philoſophy, it will be needleſs to obſerve, that the velocity of the vibrations of a pendulum depends ſolely upon its length; and that no force, however ſtrong, nor the greater or leſs weight of the ball, is capable of accelerating or retarding thoſe vibrations. An increaſed impulſe will make the ball ſwing through a more extended range, but it will return to its original place exactly in the ſame time as it would have done if moved by the ſlighteſt touch of the finger. It is owing to this iſochronous property of the pendulum, that it has been applied to the regulation of clocks, &c. Having premiſed thus much, the inſtrument itſelf will eaſily be underſtood. Fig. 10. repreſents a braſs ball affixed to a ſilken ſtring, correctly divided into inches and half-inches (beginning from the centre of the ball). The length preſcribed, at the outſet of each movement, for any note of a certain value, ſuch as a crotchet, quaver, or ſemiquaver, is taken on the ſtring, and thus much of it held out by the hand, or faſtened to ſome place within view of the performer; it is then ſet in motion, and *each diſtinct vibration* will indicate the quickneſs of the time required. This little inſtrument is by Ackermann called a ***Regulator;*** and is ſold, fitted up in a box, for the trifling ſum of one ſhilling. Its ſimplicity is its higheſt recommendation. The only inconvenience it preſented on trial was, that it required either a perſon to hold it ſuſpended while the other was playing to it, or that a convenient place within view of the performer, to faſten it to, could not at all times be deviſed.

Theſe objections are effectually removed by the ***Balance-Regulator***, fig. 11. brought to its preſent ſtate of perfection after ſeveral alterations and improvements. The pendular ball is nicely balanced by another ball of equal weight, faſtened to the other end of the ſtring, and ſliding up and down a ſquare braſs rod, upon the ſides of which inches (from 1 to 11), as well as half and quarter inches, are marked in the metal. When required to be uſed, the lower extremity of the rod is ſtuck into the cover of the little box in which the whole apparatus is contained, and the box placed near the performer, on the pianoforte itſelf; or, if thought proper, a neat hole may be contrived on one of the ſides of the pianoforte, to inſert the rod in. When fixed, the *upper end* of the ball is ſhifted to ſuch a number of inches as ſtands marked at the beginning of each movement; and, when ſet in motion, it will vibrate the note required, (crotchet, quaver, or ſemiquaver;) care being taken not to relax the ſtring in lifting or puſhing the ball, leſt the balancing-ball ſlip from its mark. To render the balance-regulator as portable as poſſible, and capable of being carried in the pocket, the length of the rod and ſtring has been limited to eleven inches, it having, by repeated trials, been aſcertained, that even the ſloweſt movements may be marked by that length, if not in quavers, at all events in ſemiquavers. As, however, ſome muſic has already iſſued, and may hereafter iſſue, in which the length of the pendulum exceeds eleven inches, it remains to be ſhown how this inſtrument may be uſed for any poſſible pendular ſignatures. The ſimple rule, founded on the theory of pendulums, is this: Whenever the ſignature exceeds eleven inches, ſet the balance-regulator to the fourth part of ſuch ſignature, and it will ſwing a note as quick again as the one for which that ſignature was intended. For inſtance, ſuppoſe the ſignature preſcribed a length of 20 inches for crotchets, in that caſe 5 inches taken on the regulator will ſwing quavers; or again, were the ſignature 13 inches for quavers, 3¼ inches on the regulator would ſwing ſemiquavers, &c.

As hitherto very few muſical works have been publiſhed with a pendular notation of the time, it was conceived that no ſmall ſervice would be rendered to the muſical ſtudent by preſenting him with a general ſcale of the time in which every ſpecies of movement, from the ***Largo*** to the ***Preſtiſſimo***, may, with propriety and effect, be executed by means of the pendulum. This ſcale will therefore be found in a brief catalogue in the box. As it has been laid down by a profeſſor of the firſt-rate eminence, it will be found as correct as the nature of a general rule would admit of; particularly when it is conſidered, that the opinions of the greateſt compoſers have not unfrequently been found at variance as to the time to be aſſigned to particular movements; and that, conſequently, a degree of latitude is left in this reſpect to the taſte and judgment of the performer. In framing this ſcale, Clementi's "Introduction to the Art of Playing on the Pianoforte" has been taken as the baſis; and thoſe ſignatures only have been noticed which appeared directly to influence *the time* of the movement, omitting ſuch as ſeemed rather intended to illuſtrate *the character* of the piece, which muſt likewiſe be left to the taſte and conception of the player.

It is probably alſo needleſs to add, that the regulator of either kind is by no means intended to vibrate from the beginning to the end of a movement; but merely to indicate its time for a number of bars, ſufficient to impreſs the performer with a correct idea of the time required; and as ſuch it will be found to keep its motion much longer than neceſſary.

Mr. Ackermann concludes his deſcription and recommendation of theſe machines with an aſſertion which ſtartled us, and made us almoſt repent of having undertaken to advocate the uſe of time-meaſurers at all. His words are theſe: "To play a whole piece *ſtrictly in time*, has, however paradoxical the aſſertion may appear, upon a late trial purpoſely inſtituted for the ſake of experiment, been found to be attended with no good effect. The muſic, by the punctual obſervance of time, became diveſted of its ſpirit, and highly inſipid. Something, therefore, it ſeems, muſt even here be left to the taſte and diſcrimination of the performer; and a regulator mechanically contrived, ſo as to remain in motion throughout the piece, would anſwer no deſirable purpoſe."

Smart's Muſical Chronometer is repreſented at fig. 12. It is the invention of Mr. Henry Smart, leader of the orcheſtra at Drury-lane theatre. It is about ſixteen inches wide and fourteen high; it forms a moſt commodious double or ſingle muſic-deſk, either for the pianoforte or the table. Immediately under the book-reſt or ledge, is a row of eight little hammers beating upon a tablet, on which is engraven a ſtaff of muſic, divided into eight bars or compartments, containing the gradation of notes from the ſemibreve to the demiſemiquaver, including the triplets. On each ſide is a dial with a hand or index: that on the left contains the ſigns of the ſix times, or meaſures, moſt commonly in uſe; i. e. 𝄴 $\frac{2}{4}$ $\frac{6}{8}$ $\frac{3}{4}$ $\frac{3}{8}$ 𝄵. The right-hand dial is divided into 60 degrees, by which the time may be accelerated or retarded to the greateſt nicety. The whole is put in motion by internal machinery,

chinery, and, when wound up, will continue in action for an hour; by turning the index of the left dial, the chronometer is adjuſted to any meaſure required, whilſt in the ſame action the tablet ſhifts itſelf, and ſhows the gradation of notes in the required meaſure; and each hammer beats the exact time of the notes over which it acts. To prevent the confuſion that might ariſe from the action of all the hammers at the ſame time, there is a little ſtud under each to reſtrain their motion, ſo that any hammer may be ſtopped at pleaſure by merely ſlipping back the correſponding ſtud. The management of this inſtrument is very ſimple; but ample inſtructions for the uſe of it will be found in a little work publiſhed in 1815, by the inventor, entitled "An Introduction to the Muſical Chronometer, forming a Selection of Airs, &c. from the moſt claſſical Authors;" in the courſe of which, the application and management of the machine are progreſſively explained. The inventor ſays, "The clearneſs with which this machine demonſtrates the principles of time renders it a moſt important acquiſition in the ſtudy of muſic, particularly in the maſter's abſence, as pupils have conſtant inſtruction before them in the hours of private practice, when, if neceſſary, they may aſcertain the true time of every note they have to play."

Maelzel's ***Metronome***, or Muſical Time-keeper, is the machine moſt recently invented, and which has already obtained the greateſt reputation. We ſhall therefore deſcribe it at length from the ſpecification to the patent.

The object of this invention is two-fold: 1ſt. It affords to the compoſers of every country the means of indicating, in a ſimple and deciſive manner, the degree of quickneſs with which their works are to be executed. 2dly. It accuſtoms the young practitioner to a correct obſervance of time, which it beats with unerring preciſion, and according to any velocity required, during the whole performance.

The metronome conſiſts of a portable little obeliſk, or pyramid, ſcarcely a foot high, the decorated exterior of which renders it an ornamental piece of furniture. Its interior contains a ſimple mechanical apparatus, with a ſcale reſembling that of a thermometer. According to what number on this ſcale the index is ſet to, the audible beats produced will be found to embrace the whole gradation of muſical time, from the loweſt *Adagio* to the quickeſt *Preſto*. The metronomic ſcale is not borrowed from the meaſures of length peculiar to any one country, but is founded on the diviſion of time into minutes. The minute being thus, as it were, the element of the metronomic ſcale, its diviſions are thereby rendered intelligible and applicable in every country. An univerſal ſtandard-meaſure for muſical time is thus obtained, and its correctneſs may be proved at all times by compariſon with a ſtop-watch.

At the top of the obeliſk is a ſmall lid, with a hinge to its back. On lifting this lid, the upper part of the front of the obeliſk is puſhed forward by a ſpring, ſo as to enable its being taken out and put aſide; at the ſame time the ſteel pendulum, together with the ſcale behind it, will likewiſe fly forward into a perpendicular direction, and a ſmall key be found under the upper lid. This key fits a hole contrived about the middle of one of the ſides of the obeliſk, and with it the clock-work is wound up and the pendulum made to move. Its motion may be ſtopped at pleaſure by a ſmall braſs bolt fixed to the top. Theſe preparations made, the directions to be given for uſing the inſtrument may be claſſed under two heads.

A ſliding weight is attached to the rod, or ſteel pendulum: the higher up this weight is ſhifted, the ſlower will be the vibrations, and *vice verſa*: ſo that, when the weight correſponds with the number 50, the vibrations will be the ſloweſt poſſible; at 160 they will be the quickeſt. Theſe numbers have all reference to a *minute of time*: viz. when the weight is placed at 50, fifty beats, or ticks, will be obtained in each minute; when at 60, ſixty beats in a minute (i. e. ſeconds preciſely); when at 100, one hundred beats in a minute: any ſtop-watch, therefore, will ſhow how far the correctneſs of the metronome may be depended on. The doubles of the numbers on the ſcale anſwer to a preciſely double degree of velocity: thus, if 50 be the proper number for a minim, 100 is the number for the crotchets in the ſame movement; if 60 ſerves for crotchets, 120 expreſſes the quavers in the ſame movement, &c.

The compoſer is beſt able to judge, from the nature of his movement, whether to mark its time by minims, crotchets, quavers, &c. Generally ſpeaking, it will be found, that in *Adagios* it is moſt convenient to mark the time on the metronome by quavers, in *Andantes* by crotchets, in *Allegros* by minims, and in *Preſtos* by whole bars. As often, however, as the caſe may admit of ſo doing, it is deſirable that the pendulum ſhould be made to ſtrike integral parts of a bar, juſt as a maſter would beat or count the time; i. e. in $\frac{4}{4}$, $\frac{4}{3}$, and $\frac{4}{2}$, time, the rod ſhould, whenever poſſible, beat $\frac{1}{4}$, or one crotchet. In $\frac{6}{8}$ and $\frac{3}{8}$ time, the rod ſhould, whenever poſſible, beat $\frac{1}{8}$, or one quaver. This being premiſed, ſuppoſe a compoſer deſires to time a movement in $\frac{4}{4}$ time, which, according to the preſent ſyſtem, would be called an *Allegro*; let the weight, by way of trial, be placed againſt N° 80, and two or three bars of the movement be played, to aſcertain whether, at that number, each beat falls in with the degree of quickneſs deſired for one minim or two crotchets. If it beat too ſlowly, ſhift the weight downwards, until, by two or three trials, a place (ſuppoſe at 84) has been found for the weight, at which the pendulum beats the minim in the preciſe degree of quickneſs contemplated for the due performance of the movement: it being well underſtood, that in this, as in every other, caſe, "each ſingle beat, or tick, forms a part of the intended time, and is to be counted as ſuch; but not the two beats produced by the motion from one ſide to the other." At fig. 13, this machine is repreſented open and in action: ***a*** is the ſcale of numbers deſignating the time; ***b***, the inverted pendulum, with its weight, or regulator; ***c, c***, other lengths of the pendulum, or heights of the weight; ***d***, the mahogany box containing the wheel-work.

The following numerous catalogue forms only a part of the works that have been conſulted in the compilation of this article.

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MU'SIC-MASTER, *ſ.* One who teaches muſic.—We have dancing-maſters and *muſic-maſters.* *Arbuthnot and Pope.*

Now look into the *muſic-maſter's* gains,
Where noble youth at vaſt expenſe is taught,
But eloquence not valu'd at a groat. *Dryden's Juv.*

MU'SICAL, *adj.* Harmonious; melodious, ſweet ſounding.—Neither is it enough to give his author's ſenſe in poetical expreſſions and in *muſical* numbers. *Dryden.*

Sweet bird that ſhunn'ſt the noiſe of folly,
Moſt *muſical,* moſt melancholy;
Thee, chauntreſs, oft the woods among
I woo to hear thy even-ſong. *Milton's Il Penſ.*

Belonging to muſic.—Several *muſical* inſtruments are to be ſeen in the hands of Apollo's muſes, which might give great light to the diſpute between the ancient and modern muſic. *Addiſon.*

MU'SICALLY, *adv.* Harmoniouſly; with ſweet ſound. —Valentine, *muſically* coy, ſhunn'd Phædra's arms. *Addiſon.*—In conformity to the rules of muſic.—Though he be not apt to break out into ſinging, yet he will drink often *muſically* a health to every one of theſe ſix notes, ut, re, mi, fa, ſol, la. *Howel.*

MU'SICALNESS, *ſ.* Harmony.—The peculiar *muſicalneſs* of the firſt of theſe lines, in particular, ariſes principally from its conſiſting entirely of iambic feet. *Warton's Eſſay on Pope.*

MUSI'CIAN, *ſ.* One ſkilled in harmony; one who performs on inſtruments of muſic:

The nightingale, if ſhe ſhould ſing by day,
When every gooſe is cackling, would be thought
No better a *muſician* than the wren. *Shakeſpeare.*

A compoſer of muſic.—A painter may make a better face than ever was; but he muſt do it by a kind of felicity, as a *muſician* that maketh an excellent air in muſic, and not by rule. *Bacon's Eſſays.*

Muſician is a title given equally to him who compoſes and to him who performs muſic. The firſt is, however, more frequently and more civilly ſtyled *compoſer.* Muſicians, among the ancients, were poets, philoſophers, and orators of the firſt claſs. Such were Orpheus, Terpander, Steſichorus, &c. Nor would Boëthius honour with the name of muſician him who only in a ſervile manner practiſed muſic mechanically with his fingers or voice, but him who poſſeſſed the ſcience of muſic by reaſon and ſpeculation. "And it ſeems," ſays Rouſſeau, "that to mount to elevated expreſſion in oratorical and imitative muſic, the human paſſions and the language of nature muſt have been made a particular ſtudy. But the muſicians of our times, bounded for the moſt part by the practice of notes, and a few paſſages, will not, it is hoped, be offended, if we ſhould not hold them to be great philoſophers."

MUSIL'LIM, or MU'SLIM A'LI, a numerous tribe of Arabians, on the borders of the Perſian gulf, between Oman and Lachſa.

MUSIMPOU'R, a town of Hindooſtan, in Bahar, near the right bank of the Ganges: fourteen miles ſouth-eaſt of Patna.

MU'SING, *ſ.* [from *muſe.*] Meditation; contemplation. —Wiſdom and knowledge are ſweet as the wakened *muſings* of delightful thoughts, which not only dew the mind with perfumes that ever refreſh us, but raiſe us to the mountain that gives us view of Canaan; and ſhew us rays and glimpſes of the glory that ſhall after crown us. *Feltham on Eccleſ.*

If we did think
His contemplation were above the earth,
And fix'd on ſpiritual object, he ſhould ſtill
Dwell in his *muſings.* *Shakeſpeare's Hen. VIII.*

Abſence of mind.—Thick-ey'd *muſing,* and curs'd melancholy. *Shakeſpeare.*

MUSITAU' (Charles), a phyſician, was born at Caſtrovalle, in Calabria, in January 1635. He received his medical education, and took the degree of doctor, at Naples, where he likewiſe fixed his reſidence, and obtained conſiderable reputation as a practitioner. He was honoured by being elected into the different learned ſocieties of Italy, and by the appointment to a profeſſorſhip in the univerſity of Naples. He combined the two profeſſions of theology and phyſic in his own perſon; and, as his ſucceſs excited the jealouſy and rancour of his leſs-fortunate brethren, the aſſerted indecency of this combination was made a pretext for attempting to interdict him altogether from the practice of medicine. His merits, however, obtained for him the patronage and protection of pope Clement IX. and of cardinal Pignatelli, archbiſhop of Naples, (and afterwards the ſovereign pontiff, under the name of Innocent XII.) who permitted him to hear confeſſions. He lived in the general eſteem of his fellow-citizens; and died regretted in 1714, at the age of ninety-ſeven. In his pathological creed, he was a ſtaunch adherent of the chemical ſect, and an avowed enemy to Galeniſm. His deſcriptions of diſeaſe are prolix and obſcure; and his hypotheſes and practice abound with the errors of the ſchool to which he was attached. The following is a catalogue of his writings: 1. Pyretologia, ſeu de Febribus; Naples, 1683. 2. Del Mal Franceſe, four books; 1697. 3. Chirurgia Theoretico-practica; ſeu Trutina Chirurgico-phyſica; Genev. 1698. 4. Apologia celeberrimorum Virorum; 1700. 5. Trutina Medico-phyſica; 1701. 6. Mantiſſa ad Hadriani à Mynſicht Theſaurum et Armamentarium Medico-chymicum; 1701. 7. De Morbis Mulierum; 1709. Theſe works were publiſhed collectively at Geneva, in two vols. 4to. 1701. and in two vols. folio, 1716. The latter edition contained alſo ſome other tracts by the author. *Eloy Dict. de la Med.*

MUSI'TIAN, a town of South America, in the province of Tucuman: forty-two miles ſouth-eaſt of Rioja.

MUSK, *ſ.* [*muſchio,* Ital. *muſc,* Fr. from the Arab. *moſcha.*] A dry, light, and friable, ſubſtance, of a dark blackiſh colour, with ſome tinge of a purpliſh or blood-colour in it, feeling ſomewhat ſmooth or unctuous: its ſmell is highly perfumed, and too ſtrong to be agreeable in any large quantity: its taſte is bitteriſh: it is brought from the Eaſt Indies, moſtly from the kingdom of Bantam, ſome from Tonquin and Cochin China. The animal which produces it is of a very ſingular kind; it is of the ſize of a common goat, but taller. See MOSCHUS, p. 55. —Some putrefactions and excrements yield excellent odours; as civet and *muſk.* *Bacon's Nat. Hiſt.*

From the reſult of chemical experiments, muſk appears to contain albumen, gelatine, muriat of ammonia, phoſphat of ſoda, and an uncombined acid; but the greater part of it conſiſts of a reſin combined with a volatile oil, and a mucilaginous extractive matter.

Muſk is in conſiderable uſe among the perfumers and confectioners, though much leſs now than it was formerly. It is ſuppoſed to fortify the heart and brain, and is good againſt deafneſs, and is now received in general practice in different convulſive diſorders; and its doſe has been increaſed with advantage to a ſcruple and half a drachm, every four or ſix hours. Muſk and other perfumes of the ſame tribe have been long celebrated as antiſpaſmodics, but were formerly ordered in ſuch ſmall quantities as to have little effect. Practitioners thought four or five grains a large doſe. But the Chineſe have taught us to be more bold; the tenth part of an ounce is a uſual doſe among them. The remedy in the Eaſt for the bite of a mad dog contains ſixteen grains of muſk; and this they repeat frequently.

The operation of muſk, in ſome reſpects, reſembles that of opium; but is in this much preferable, that it does not leave behind it any ſtupor or languidneſs, which the latter often does. Muſk, therefore, ſeems likely to anſwer in thoſe low caſes where ſleep is much wanted, and opiates are improper. It is ſaid to be beſt given in a bolus, and that thoſe, who are moſt averſe to perfumes, may take it in that form without inconvenience. For, as Etmuller and others have long ago obſerved, the ſmell of the perfume is often found to be of diſſervice, where the ſubſtance inwardly taken produces good effects. It is pity that a medicine of this conſequence ſhould be ſo liable to adulterations, and that the criteria of its genuineneſs are ill ſettled.

To MUSK, *v. a.* To perfume with muſk. *Cotgrave.*

MUSK, *ſ.* [*muſca,* Lat.] Grape-hyacinth or grape-flower. *Johnſon.*

MUS'K-APPLE, *ſ.* A kind of apple. *Ainſworth.*

MUSK-BULL'. See Bos moſchatus, vol. iii. p. 224.

MUSK-CHER'RY, *ſ.* A ſort of cherry. *Ainſworth.*

MUSK CRA'NE'S-BILL, *ſ.* in botany. See Erodium moſchatum, vol. vi. p. 908.

MUSK-MEL'ON, *ſ.* A fragrant melon.—The way of maturation of tobacco muſt be from the heat of the earth or ſun; we ſee ſome leading of this in *muſk-melons,* which are ſown upon a hotbed dunged below, upon a bank turned upon the ſouth ſun. *Bacon.*

MUSK-O'CHRA. See Hibiscus, vol. ix.

MUSK-PE'AR, *ſ.* A fragrant pear.

MUSK-RAT'. See p. 234.

MUSK-RO'SE, *ſ.* A roſe ſo called from its fragrance.—The *muſk-roſe* will, if a luſty plant, bear flowers in autumn, without cutting. *Boyle.*

Thyrſis, whoſe artful ſtrains have oft delay'd
The huddling brook to hear his madrigal,
And ſweeten'd every *muſk-roſe* of the dale. *Milton.*

MUS'K-SEED. See Hibiscus.

MUS'KED, *adj.* Perfumed with muſk. *Aſh.*

MUSKER'RY, a barony in the county of Cork, Ireland, the chief town of which is Macromp. It is ſituated on the river Sullane, and is in the new road from Cork to Killarney. Its caſtle is very ancient, having been built in the reign of king John; but, having been much injured by fire in 1641, it was altered into a more modern ſtructure by the earls of Clancarty. This place is 141 miles ſouth-weſt from Dublin, and weſt from Cork.

MUS'KET, or Musquet, *ſ.* [*mouſquet,* Fr. *moſquetto,* Ital. a ſmall hawk. Many of the fire-arms are named from animals. *Johnſon.*—From *moſchetta,* low Lat. "baliſta quædam antiquis." *Du Cange.*] A ſoldier's hand-gun. A fire-arm borne on the ſhoulder, and uſed in war; it was fired by the application of a lighted match.—The length of the *muſket* is fixed to three feet eight inches from the muzzle to the touch-pan, and its bore is to be ſuch as may receive a bullet of fourteen in a pound, and its diameter differs not above $\frac{1}{50}$th part from that of the bullet. *Muſkets* were uſed in England ſo lately as the beginning of the civil wars. They are ſaid to have been firſt invented in the year 1520 or 1521. *Chambers.*

They charge their *muſkets,* and, with hot deſire
Of full revenge, renew the fight with fire. *Waller.*

The Spaniards in the time of Philip II. cauſed muſkets to be made of a very great calibre, and ſuch that a ſtrong and vigorous foot-ſoldier might carry them: but they were ſo heavy, that they could not be preſented without the aſſiſtance of ſtaves ſhod and pointed at the bottom, and which they fixed into the earth, making uſe of a fork that was at the top, as a prop to ſuſtain the end of the muſket: theſe large muſkets carried to a great diſtance, and by the ſize of their balls inflicted dreadful wounds: but, on account of their weight, they left off uſing them in the field, and reſtricted them to ſieges. The inconſiderable execution done by pieces of ſmall calibre probably cauſed the introduction of the muſket, which was a long heavy piece, carrying large balls, and on account of its ſize and weight fired on a kind of fork, called a reſt. (See Artillery, vol. ii. p. 235.) The reſt continued in uſe for a conſiderable time; but on certain occaſions, being found unwieldly and inconvenient, a lighter kind of piece was introduced, generally known by the name of the *caliver,* which was fired without any ſuch aſſiſtance. This caliver was a lighter kind of matchlock-piece, between a harquebuſe and a muſket, and fired without a reſt. But, before the entire diſmiſſion of the reſt, divers attempts were made to convert it to a defence againſt cavalry, whilſt the muſketeer was loading, by arming it with a projecting ſpike from one of the prongs of the fork, ſerving for the head, or part on which the muſket was laid; or by encloſing a tuck in the ſhaft of the reſt, which, on opening a ſmall valve, ſprung out: reſts thus armed were called the *Swines* or *Swediſh feathers,* and were contrivances preceding the uſe of the bayonet.

At preſent muſkets are little uſed, fuſees and firelocks having taken their place and name. From an ingenious military treatiſe, entitled "Engliſh Military Diſcipline," and printed in 1680, we learn that the fuſil or firelock was then in uſe in our army, eſpecially among the fuſileers and grenadiers; and probably the appellation of *fuſileers* was given to thoſe troops that were armed with fuſils. Perhaps the fuſileer-regiments were originally a ſort of grenadiers, as like them they wear caps, and have no enſigns. Fuſileers are foot-ſoldiers armed with fuſees with ſlings to ſling them. There are four regiments in our army, which have always been called fuſileers, and paſs under the name of Engliſh, Scotch, Iriſh, and Welſh, fuſileers. The firſt deſign of fuſileers was to guard the artillery, to which end the regiment of fuſileers, commanded by ſir Charles O'Hara, was firſt raiſed. To ſupply the want of pikes, and to ſecure themſelves againſt horſe, the fuſileers uſed to carry turnpikes along with them, which in a camp were placed along the front of a battalion, and on a march were carried by the ſoldiers, each carrying one of the ſhort pikes, and two, by turns, the ſpar through which they are thruſt; ſo that they were quickly put together. According to Millan's ſucceſſion of colonels, the 7th regiment, or royal Engliſh fuſileers, was raiſed, June 11th, 1685; the 21ſt regiment, or royal North Britiſh fuſileers, 23d September, 1679; the 23d, or royal Welſh fuſileers, 17th March, 1688; but there is no Iriſh regiment bearing the appellation of fuſileers. For every thing relating to the manufacture of firelocks, fuſils, &c. ſee the article Gun, vol. ix. p. 97–108.

MUS'KET, *ſ.* [*mouchet,* Fr. perhaps from the Lat. *muſca,* a fly.] A male hawk of a ſmall kind, the female of which is the ſparrow-hawk; ſo that eyas *muſket* is a young unfledged male hawk of that kind. *Hanmer.*—How now, my eyas *muſket,* what news with you. *Shakeſpeare.*

The *muſket* and the coyſtrel were too weak;
Too fierce the falcon. *Dryden.*

MUS'KET BALL, *ſ.* The bullet with which a muſket is charged.—One was brought to us, ſhot with a *muſket-ball* on the right ſide of his head. *Wiſeman.*

MUS'KET-BASKET, *ſ.* in fortification, an earth-baſket, ſo called becauſe, being a foot wide at top and only 8 or 10 inches at bottom, there is room to place a muſket between each at the bottom as they ſtand in a row. They are about a foot or a foot and a half high; and, being filled with earth, they are ſet on low breaſt-works, or parapets, or upon ſuch as are beaten down. *James's Mil. Dict.*

MUS'KET-SHOT, *ſ.* The range of a muſket.—He perceived a body of horſe within *muſket ſhot* of him. *Clarendon.*

MUSKETEE'R, *ſ.* A ſoldier whoſe weapon is his muſket.—The duke of Alva went himſelf with a company of *muſcateers,* and conquered them. *Howell.*—Notwithſtanding they had lined ſome hedges with *muſketeers,* they purſued them till they were diſperſed. *Clarendon.*

The muſketeers in the reign of James and Charles I. carried their powder in little wooden, tin, or leather, cylindric boxes, each containing one charge. Twelve of theſe were fixed to a belt worn over the left ſhoulder, called a bandeleer; a contrivance which ſeems to have been borrowed from the Dutch or Walloons. The uſe of cartridges, which ſeems to have taken place about the ſame time as the firelock, introduced the cartridge-box inſtead of the bandeleer, which is a great improvement, both with reſpect to the more commodious carriage of the ammunition, and alſo the quickneſs of firing, as the ſoldier may fire at leaſt three times the number of ſhot which he could diſcharge when loading from his bandeleer.

The muſketeers, *mouſquetaires*, formerly employed in France, were troopers who fought ſometimes on foot, ſometimes on horſeback: they were gentlemen of good families, and were divided into two troops, the one called the grey muſqueteers, the other the black muſqueteers, from the colour of their horſes. Whether they have been recently reſtored, we are not informed.

MUSKETOO'N, *ſ.* A muſket, ſhorter, though thicker, than the ordinary muſket. It is fired by the colliſion of a ſteel and flint in the lock; whereas the muſket is fired by a match. Its bore is a thirty-eighth part of its length; and it carries five ounces of iron, or ſeven and a half of lead, with an equal quantity of powder. This is the ſhorteſt ſort of blunderbuſs.

The word is alſo uſed for the man who bears or uſes that weapon.—The ambaſſadour moved ſlowly towards the ſultan's palace, all the way paſſing between a double guard of archers and *muſquetoons*. *Sir T. Herbert's Travels.*

MUS'KINESS, *ſ.* The ſcent of muſk.

MUSKINGUM', [an Indian name denoting the "Elk's Eye."] A county of the ſtate of Ohio, bounded north on the Indian boundary and Columbiana; ſouth on Waſhington; eaſt on Columbiana, Jefferſon, and Belmont; and weſt on Fairfield.

MUSKINGUM', a large navigable river in the ſtate of Ohio. It is two hundred and fifty yards wide at its confluence with the Ohio, 172 miles below Pittſburg, including the windings of the Ohio, though in a direct line it is but 90 miles. At its mouth ſtands Fort Harmer and Marietta. Its banks are ſo high as to prevent its overflowing; and it is navigable by large batteaux and barges to the Three Legs, 110 miles from its mouth, and by ſmall boats to the lake at its head, 45 miles farther. From thence, by a portage of about one mile, a communication is opened to Lake Erie, through Cayahoga, a ſtream of great utility, navigable the whole length, without any obſtruction from falls. From Lake Erie, the avenue is well known to Hudſon's River in the ſtate of New York. The land on this river and its branches is of a ſuperior quality, and the country abounds in ſprings and conveniences fitted to ſettlements remote from ſea navigation, viz. ſalt-ſprings, coal, free-ſtone, and clay. A valuable ſalt-ſpring has been lately diſcovered, eight miles from this river, and fifty from Marietta, called the *Big Spring*. Such a quantity of water flows, as to keep 1000 gallons conſtantly boiling. Ten gallons of this water will, as experiment has proved, afford a quart of ſalt of ſuperior quality to any made on the ſea-coaſt. *Morſe's American Gaz.*

MUSKI'TO, or MUSQUI'TO, *ſ.* [*muſca*, Lat. a fly.] A ſtinging-fly or gnat of the Indies. See CULEX, vol. v. p. 462.—They paint themſelves to keep off the *muſkitas*. *Purchas's Pilgrim.*—If in writing voyages you have occaſion to ſend meſſengers through an uninhabited country, infeſt them with *muſquittos*. *Cambridge.*

MUSKOGUL'GES, MUSKOGEE'S, or CREEK INDIANS, as they are more commonly called from the creeks and rivulets with which their country abounds, a powerful confederacy of aboriginal North Americans, inhabiting the middle parts of Georgia. The country they claim is bounded north by the 34th degree of latitude, and extends from the Tombigbee-river to the Atlantic ocean, though they have by different treaties ceded a part of the tract on the ſea-coaſt to the ſtate of Georgia. The weſtern line of their ſettlements and villages is formed by the Cooſa-river, and its main branches; but their hunting-grounds extend two hundred miles further to the Tombigbee, which ſeparates their country from the Chactaws. Their territory is naturally divided into three diſtricts, viz. the Upper Creeks, Lower and Middle Creeks, and Seminoles. The upper diſtrict includes all the waters of the Tallapooſee, Cooſahatchee, and Alabama, rivers; and is called the Abbacoes. The lower or middle diſtrict includes all the waters of the Chattahooſee and Flint rivers, down to their junction; and, although occupied by a great number of different tribes, they are altogether called *Cowetaulgas*, or Coweta people, from the Cowetan town and tribe, the moſt ancient and warlike of any in the whole nation. The lower or ſouthern diſtrict takes in the river Appalachicola, extends to the point of Eaſt Florida, and is called the Country of the Seminoles. The Creeks, or Muſkogulges, reckon fifty-five towns beſides villages; and they have eſtabliſhed a powerful empire upon the ruins of that of the Natchez. After their emigration from the weſt, beyond the Miſſiſſippi, their original native country, they firſt ſettled on the Oakmulge fields; and, gradually ſubduing their ſurrounding enemies, they ſtrengthened themſelves by admitting into their confederacy the vanquiſhed tribes; thus they rendered themſelves victorious over the Chactaws, and formidable to all the nations around them. The ſmalleſt of their towns contain from twenty to thirty houſes, and ſome from one hundred and fifty to two hundred. Theſe houſes ſtand in cluſters of four, five, ſix, ſeven, and eight, together, irregularly diſtributed along the banks of the rivers or ſmall ſtreams. Each cluſter of houſes contains a clan, or family, of relatives, who eat and live in common. Each town has a public ſquare, hot-houſe and yard near the centre of it, appropriated to various public uſes. The principal towns of the Upper and Lower Creeks that have theſe public ſquares, beginning at the head of the Cooſa, or Cooſa Hatcha river, are Upper Utalas, Abbacoochees, Natches, Cooſas, Oteetoo-heenas, Pine Catchas, Pocuntullahaſes, Weeokes, Little Talaſſie, Tuſkeegees, Cooſadas, Alabamas, Tawaſas, Pawactas, Antobas, Auhoba, Weelumpkees Big, Weelumpkees Little, Wacacoys, Wackſoy, and Ochees. The following towns are in the central, inland, and high, country, between the Cooſa and Tallapooſee rivers, in the diſtrict called the Hillabees; viz. Hillabees, Killeegko, Oakchoys, Slakagulgas, and Wacacoys. On the waters of the Tallapooſee, from the head of the river downward, are the following: Tackabotchee, Tehaſſa, Totacaga, New York, Chalaacpaulley, Loguſpogus, Oakfuſkee, Ufala Little, Ufala Big, Sogahatches, Tuckabatchees, Big Tallaſſee, or half-way-houſe, Clewaleys, Cooſahatches, Coolamus, Shawaneſe or Savannas, Kenhalka, and Muckeleſes. The towns of the Lower Creeks, beginning on the two waters of the Chattahooſee, and ſo downwards, are Chelu Ninny, Chattahooſee, Hohtatoga, Cowetas, Cuſſitahs, Chalagatſcoor, Broken Arrow, Euchees Several, Hitchatees Several, Palachuolo, and Chewackala: beſides twenty towns and villages of the Little and Big Chehaus, low down on Flint and Chattahooſee rivers.

Their country is hilly, but not mountainous; and the ſoil is very fertile and well watered. Their agriculture is as far advanced as it well can be without the proper implements of huſbandry. They cultivate tobacco, rice, Indian corn, potatoes, beans, peaſe, cabbage, melons, and have plenty of peaches, plums, grapes, ſtrawberries, and other fruits. A very large majority of the natives being devoted to hunting in the winter, and to war or idleneſs in the ſummer, they cultivate but ſmall parcels of ground, barely ſufficient for ſubſiſtence. But many individuals, particularly on Flint-river, among the Chehaws, who poſſeſs a number of negroes, have fenced fields, tolerably well cultivated: but, as they have no ploughs, they break the ground with hoes, and ſcatter the ſeed promiſcuouſly over the ground, in hills, but not in rows: they rear horſes, cattle, fowls, and hogs: the only articles they manufacture are earthen pots and pans, baſkets, horſe-ropes or halters, ſmoked leather, black marble pipes, wooden ſpoons, and oil from acorns, hickery-nuts, and cheſnuts. Their land is a common ſtock; and any individual may remove from one part of it to another, and occupy vacant ground wherever he can find it.

From their unſettled and roving diſpoſition, their number cannot be eaſily or exactly aſcertained. The fighting men are eſtimated at between five and ſix thouſand, excluſive of the Seminoles, who are of little account in war, except as ſmall parties of marauders. The whole number of perſons that compoſe the Creek nations may be reckoned at about 25 or 26,000. Every town and village has one eſtabliſhed white trader in it, and generally a family of whites, who have fled from ſome part of the frontier. The Creeks are a well-made, expert, hardy, ſagacious, politic, people, jealous of their rights, and averſe from parting with their lands. They are badly armed, having few rifles, and being moſtly armed with muſkets. For about forty years paſt, they have had little intercourſe with any foreigners except the Engliſh, to whom they are much attached, and whom they highly reſpect. Their language is ſoft and muſical, and is ſpoken through the whole confederacy, though compoſed of many nations who have a ſpeech peculiar to themſelves, and alſo by their friends and allies, the Natchez; the Chichaſaw and Chactaw language is, ſay the Muſkogulges, a dialect of theirs. Theſe people are ſingularly laudable for prohibiting the uſe of ſpirituous liquors: one of the principal articles in their treaties with the white people is, "that no kind of ſpirituous liquors ſhall be ſold or brought into their towns." Moſt of their favourite ſongs and dances they derive from their enemies, the Chactaws, who are famous for poetry and muſic. Their muſic is both vocal and inſtrumental; but of the latter they have ſcarcely any thing that deſerves the name; ſuch are the tambour, rattle-gourd, and a kind of flute, made of a joint of reed, or the tibia of the deer's leg, which yields a hideous melancholy diſcord, rather than harmony; but the tambour and rattle, accompanied with their ſweet low voices, produce a pathetic harmony, in which they keep time together; the countenance of the muſician expreſſing, at proper intervals, the ſolemn elevated ſtate of his mind; and the harmony touches the feelings of the attentive audience, and produces an univerſal ſenſation of delight and tranquility throughout the aſſembly. Their muſic, both vocal and inſtrumental, united, keeps exact time with the performers or dancers. In dancing, their moſt admired and generally practiſed ſtep is ſlow, ſhuffling, and alternate; both feet moving forward one after the other, firſt the right foot foremoſt, and next the left, moving one after the other, in oppoſite circles, i. e. firſt a circle of young men, and within a circle of young women, moving together oppoſite ways, the men with the courſe of the ſun, and the females in a contrary direction; the men ſtrike their arms with the open hand, and the girls clap hands, and raiſe their ſhrill ſweet voices, anſwering an elevated ſhout of the men at ſtated times of termination of the ſtanzas; and the girls perform an interlude or chorus ſeparately. In accompaniment with their dances, they have ſongs, martial, bacchanalian, and amorous; and they have alſo moral ſongs, which ſeem to be the moſt eſteemed and practiſed, and anſwering the purpoſe of religious lectures. They have alſo a variety of games for exerciſe and paſtime, ſome peculiar to the men, others to the female ſex, and others in which both ſexes are employed. The ball-play is eſteemed the moſt noble and manly exerciſe. This game is exhibited in an extenſive level plain uſually contiguous to the town; and in this the inhabitants of one town play againſt thoſe of another, in conſequence of a challenge, where the youth of both ſexes are often engaged; and here they perform amazing feats of ſtrength and agility. The game principally conſiſts in taking and carrying off the ball from the oppoſite party, after being hurled in the air between two high pillars, which are the goals, and the party which bears off the ball to their pillar wins the game. Each perſon has a racket or hurl, which is an implement of curious conſtruction, reſembling a ladle, or ſmall hoop-net, with a handle about three feet in length, the hoop and handle of wood, and the netting of thongs of raw hide, or tendons of an animal. The foot-ball is likewiſe a favourite diverſion. All their games are terminated with feaſting and dancing in the public ſquare. They have, beſides, feſtivals almoſt for every month in the year, which are chiefly dedicated to hunting and agriculture. The principal of theſe is the *buſk*, or feaſt of firſt-fruits, which ſeems to end the old and begin the new year. There are three in Auguſt, when their new crops of corn are arrived at maturity; and every town celebrates it ſeparately, when their harveſt is ready. If they have any religious rite or ceremony, this feſtival is its moſt ſolemn celebration. They begin with cleanſing their houſes, ſquares, and the whole town, of filth, and conſuming all their old veſtments and proviſions with fire. Then follows a faſt of three days, during which the fire in the whole town is extinguiſhed, and they abſtain from the gratification of every appetite and paſſion. A general amneſty is proclaimed; all malefactors may return to their town, and they are abſolved from their crimes, which are now forgotten, and they are reſtored to favour. On the fourth morning, the high prieſt, by rubbing dry wood together, produces new fire in the public ſquare, whence every habitation in the town is ſupplied with the new and pure flame. The women then go forth into the harveſt-field, and bring from thence new corn and fruits, which, being duly prepared, are ſolemnly brought, together with drink, into the ſquare, where the people are aſſembled in their new clothes and decorations. The women and children place themſelves in their ſeparate families, and in the evening repair to the public ſquare, where they dance, ſing, and rejoice, through the whole night. This continues three days; and during the four following days they receive viſits, and rejoice with their friends from neighbouring towns, who have purified and prepared themſelves. The Muſkogulges allow of polygamy in the utmoſt latitude: for every man takes as many wives as he pleaſes; but the firſt is the conſort, and the others her handmaids and aſſociates.

The youth of both ſexes are fond of decorating themſelves with external ornaments. The men ſhave the head, leaving a creſt or comb, beginning at the crown, where it is frizzed and ſtands upright, covering the hinder part of the head and neck, and terminating behind in lank hair, ornamented with pendant ſilver quills and jointed ſilver plates. Their ears are lacerated, and a piece of lead is faſtened to the cartilage, which extends it to a great length, and which is then bound round with braſs or ſilver wire in the form of a bow or creſcent, decorated with ſoft white plumes of heron-feathers. They encircle the forehead with a curious diadem or band, ingeniouſly wrought, and decorated with ſtones, beads, porcupine-quills, &c. the front peak being embelliſhed with a high waving plume of crane or heron feathers. Their clothing is ſimple and frugal. The head, neck, and breaſt, are painted with vermillion; and ſome of the warriors have the ſkin of the breaſt, or muſcular parts of the body, inſcribed with hieroglyphic ſcrolls, flowers, figures of animals, ſtars, creſcents, and the ſun in the middle of the breaſt; which ſtains are given in youth, by pricking the ſkin with a needle, and rubbing in a bluiſh tint. The decorations of dreſs are reſtricted to particular occaſions; for the male youth are perfectly naked till they attain the age of twelve or fifteen years; but the females always wear a jacket which reaches to the middle of the leg. The junior prieſts, or ſtudents, conſtantly wear the mantle or robe, which is white; that of others being of a ſcarlet or blue colour; and they have a great owl-ſkin caſed and ſtuffed, and ſo well executed as almoſt to repreſent the living bird, having large ſparkling glaſs beads or buttons fixed in the head for eyes: this enſign of wiſdom and divination they ſometimes wear as a creſt on the top of the head: at other times it is borne on the arm, or on the hand. Theſe *bachelors* are always diſtinguiſhable from other people by their taciturnity, grave and ſolemn countenance, dignified ſtep, and by their ſinging to themſelves ſongs or hymns, in a low ſweet voice, as they ſtroll about the towns. *Morſe's Gaz.* under Creeks and Muſkogulge.

MUSKON'GUS, a ſmall river of America, which ſprings from ponds in the town of Maine, in the county of Lincoln and ſtate of Maine, and enters the ſea, after a courſe of about twenty miles, through the adjoining town of Weldeborough.

MUSKON'GUS BA'Y, a bay formed by Briſtol or Pemaquid point on the weſt, and Meduncook plantation on the eaſt. In this bay is an iſland of the ſame name, containing about a thouſand acres. This Indian name is alſo applied to a grant or claim of land called *Muſkongus Patent.*

MUS'KY, *adj.* Fragrant; ſweet of ſcent:

There eternal ſummer dwells,
And weſt winds, with *muſky* wing,
About the cedar'n alley fling
Nard and caſſia's balmy ſmells. *Milton's Comus.*

MUS'LIN, *ſ.* [*mouſſeline*, Fr. from *mouſſe*, on account of its having a downy nap, like moſs, on its ſurface; or from *Moſſul*, the port whence it was firſt ſent into Europe. *Baumgarten's Supplem. Univ. Hiſt.*] A fine ſtuff made of cotton, imported from the Eaſt Indies.—By the uſe of certain attire made of cambric or *muſlin* upon her head, ſhe attained to an evil art in the motion of her eyes. *Tatler.*

In half-whipt *muſlin* needles uſeleſs lie,
And ſhuttlecocks acroſs the counter fly. *Gay.*

There are various kinds of muſlins brought from the Eaſt Indies, chiefly from Bengal; as mulmuls, tanjeebs, terrindams, coſſacs, jacconotts, &c. Jacconott, or jacconett, is a ſpecies of muſlin of a fabric between the coſſac and the mulmul, being lighter and thinner than the former, and ſtouter than the latter. The name is ſaid to be a corruption of Jaggernaut, the diſtrict in India where muſlins of this deſcription are chiefly made. The jacconott is perhaps the moſt univerſal fabric of the lighter deſcriptions of muſlin, being more ſhowy and open than the coſſacs, long-cloths, or cotton cambrics, and more durable than the mulmuls. It is alſo from this quality the beſt fitted for the ornamental figures of tambour and needle-work; the lighter fabrics, although very beautiful when well executed, being too flimſy to bear waſhing, dreſſing, or clear-ſtarching, often, when loaded with needle-work of any kind; and the opacity of the ſtouter fabrics diminiſhing very ſenſibly both the ſhow and beauty of the work.

Jacconott muſlins are now made in great abundance both in England and Scotland. In England, beſides thoſe which are worn plain, a very great number is uſed for the finer kinds of printed goods, both as garments and ſhawls. In Scotland, beſides plain wearing and printing, they are employed for the needle-work of various kinds. The Scotch jacconotts are in general made conſiderably lighter in the fabric than thoſe of England; and this is very proper when the different uſes to which they are generally applied are taken into conſideration. A very great proportion of the jacconotts made in England are either worn plain or uſed for printing; in both theſe caſes a cloſe ſtout fabric is moſt economical, and in the latter the colours will appear with more brilliancy and effect when there is a cloſe body to receive and abſorb the colour in conſiderable quantity. In every ſpecies of needle-work, on the contrary, the lightneſs and tranſparency of the fabric, forming a contraſt with the cloſe appearance of the work, give it a degree of what painters call *relief*, which greatly heightens its appearance.

MUSMUR'REAH, a town of Hindooſtan, in the circar of Gohud: ten miles weſt of Caſpy.

MUSNI'KI, a town of Lithuania, in the palatinate of Wilna: fourteen miles ſouth of Wilkomierz.

MUSNOU', a town of Spain, in Catalonia, on the coaſt: ſeven miles ſouth-weſt of Mataro.

MUS'NUD, *ſ.* [Indian.] A ſeat; but it particularly expreſſes the throne of a prince.

MU'SO, a town of South America, in the viceroyalty of New Grenada: ſeventy miles north of Santa Fé de Bogota, and one hundred ſouth-ſouth-eaſt of Santa Fé de Antioquia.

MUSOLEN'TE, a town of Italy, in the Treviſan: nine miles ſouth-eaſt of Ciſmone.

MUSO'NE, a river of Italy, which runs into the Adriatic a little to the north-eaſt of Loretto.

MUSO'NIUS, one of the moſt virtuous and excellent of the modern Cynics, was a Babylonian by birth, and flouriſhed in the ſecond century of the Chriſtian æra. Philoſtratus ſpeaks of him as next to Apollonius in wiſdom, and an excellent philoſopher. He was at Rome during the reign of the emperor Nero, where, by animadverting on the vices of that tyrant, he provoked his reſentment, and was committed to priſon. While he was in confinement, he contracted a friendſhip with Apollonius, and entered into a correſpondence with him, of which ſome ſpecimens may be ſeen in Philoſtratus. At laſt he was baniſhed into the iſthmus of Greece, and condemned to daily labour with the ſpade in a ſtate of ſlavery. Being ſeen in this condition by his friend Demetrius of Corinth, the latter expreſſed great concern at his unworthy treatment: upon which Muſonius, ſtriking his ſpade firmly in the ground, ſaid, "Why, Demetrius, do you lament to ſee me digging in the Iſthmus? You might, indeed, have juſt cauſe for lamentation, if you ſaw me, like Nero, playing on the harp." His magnanimity is ſpoken of with admiration by Julian, in his Epiſtle to Themiſtius. The time of his death is uncertain; and none of his writings have deſcended to modern times. *Philoſtrati de Vit. Apollonii Tyan.* lib. iv.

MUSO'NIUS (Caius), ſurnamed *Rufus*, a ſtoic philoſopher, and a contemporary of the preceding, was a Tuſcan by birth, of the equeſtrian order, and enjoyed military honours. He endeavoured to diſſeminate the principles and precepts of the philoſophy to which he was attached among the Roman youth, particularly among the officers of the army; and by ſo doing excited the ridicule of ſome, while he gave offence to others. He likewiſe incurred the diſpleaſure of Nero, moſt probably by the freedom with which he expoſed the turpitude of the actions that diſgraced his reign, and was baniſhed by him to Gyara. Afterwards, however, he was recalled by Veſpaſian; and that emperor was ſo well pleaſed by the manner in which he conducted himſelf, that, when he baniſhed the philoſophers in general from Rome and Italy, Muſonius was alone permitted to remain in the city. He is thought to have been the philoſopher of this name, whom Origen commended in his third book againſt Celſus, for his great integrity and exemplary behaviour. His philoſophy, like that of Socrates, was adapted to the purpoſes of life and manners; as may be inferred from the fragment of one of his diſſertations "On the Contempt of Labour, and the Exerciſe of the Mind," which is preſerved in Stobæus. *Enfield's Hiſt. Phil.* vol. ii.

MUSQUABAS'TON LA'KE, a lake of Canada, in lat. 51. 40. N. lon. 87. 30. W.

MUSQUA'KIES, Indians of America, inhabiting the ſouthern ſhore of Lake Michigan.

MUSQUATON'S, Indians inhabiting near Lake Michigan.

MUSQUI'TO. See MOSQUITO.

MUSQUI'TO RIV'ER AND BA'Y, lie at a ſmall diſtance north of Cape Canaverel, on the coaſt of Eaſt

Florida. The banks of the river towards the continent, abound in trees and plants common to Florida, with orange-groves; but, towards the ſea, the narrow ſtrips of land are moſtly ſand-hills.

MUSQUITON'S, Indians who inhabit near the Outtagamies.

MUS'ROL, *ſ.* [*muſerole*, Fr.] The noſeband of a horſe's bridle.

MUSS, *ſ.* [Cotgrave mentions *mouſche*, Fr. "the play called *muſs*;" which ſport Brand notices in his Popular Antiquities, and cites Dr. Grey as deducing it "à *Muſcho* inventore."] A ſcramble:

When I cry'd ho!
Like boys unto a *muſs*, kings would ſtart forth,
And cry, Your will? *Shakeſpeare's Ant. and Cleop.*

The monies rattle not, nor are they thrown
To make a *muſs* yet 'mong the gameſome ſuitors.
B. Jonſon's Magn. Lady.

MUSSÆNDA, *ſ.* [The vernacular name of the original ſpecies in the iſland of Ceylon.] In botany, a genus of the claſs pentandria, order monogynia, natural order of contortæ, (rubiaceæ, *Juſſ.*) Generic Characters—Calyx: perianthium ſuperior, five-parted, unequal; leaflets linear acuminate, permanent. Corolla: one-petalled, funnel-form; tube long, filiform, hirſute; border five-cleft, equal; ſegments ovate. Stamina: filaments five, the length of the corolla, growing to the tube on the inſide; antheræ linear-briſtle-ſhaped, long, within the tube. Piſtillum: germ inferior, ovate; ſtyle filiform; ſtigmas two, ſimple, thickiſh. Pericarpium: berry oblong, crowned. Seeds: numerous, in four parcels.—*Eſſential Character.* Corolla funnel-form; ſtigmas two, thickiſh; berry oblong, inferior; ſeeds diſpoſed in four rows. There are eleven ſpecies.

1. Muſſænda frondoſa, or hairy muſſænda: panicle with coloured leaves. This is a large woody climbing ſhrub, without tendrils or thorns, having many long ſcattered branches. Leaves ovate-lanceolate, quite entire, wrinkled, ſubſeſſile, oppoſite. Flowers gold-coloured, in large ſpreading terminating cymes, with large, ovate, nerved, very white, petioled, bractes: calyx tubular; ſegments awl-ſhaped, hairy, erect; border of the corolla ſhort; ſegments acute, tailed; antheræ erect; ſtyle equal to the corolla; ſtigmas lanceolate, erect; ſeeds roundiſh. According to Gærtner, the berry is inferior, ovate-globular, or ſubturbinate, with a prominent whitiſh ring from the remains of the calyx, and within that, marked at the top with five minute tubercles, and on each ſide with an obſcure longitudinal groove, ſmooth, black, two-celled; ſkin thin, becoming leathery when ripe; pulp watery, finally vaniſhing. Receptacle an ovate fungous lamina, bent like an ox-yoke, and by means of another tranſverſe lamina fixed on both ſides to the middle of the partition, both together forming the Burgundian croſs, as Rumphius calls it, in the middle of the fruit.

Linnæus gives Belilla of Rheede, and Folium principiſſæ of Rumphius, as ſynonyms to his Muſſænda frondoſa. The firſt of theſe has oblong berries and black ſeeds: the ſecond has almoſt cylindrical berries, excavated on the outſide. Gærtner can ſcarcely believe them all three to be one and the ſame ſpecies. He is certain, however, that his plant is the genuine Muſſænda of the Ceyloneſe and of Hermann. Vahl ſuſpects that Folium principiſſæ of Rumphius, rather, is the ſame with his Muſſænda glabra. Loureiro remarks, that the figures and deſcriptions of Burmann and Rumphius agree in many things, but not in all, with his plant, and that they do not entirely agree with each other; but that the differences are rather thoſe of varieties than ſpecies. In the Cochinchineſe plant he did not obſerve any ſmell, but great beauty in the ſingular whiteneſs of the bractes mixed with the golden flowers; and it is remarkable that theſe bractes do not adhere to the peduncles, but to the fruit. Native of the Eaſt Indies and Cochinchina, Otaheite and Namoka iſlands in the South Seas.

2. Muſſænda glabra, or ſmooth muſſænda: branches and leaves of the branches and panicle very ſmooth. Branches round, purpliſh dotted with white, ſmooth; leaves petioled, three inches long. This appears to be quite different from the preceding, in having the leaves ſmooth on both ſides, and not, as in that, hoary underneath, with the bractes and calycine ſegments ſmaller; in the ſize, conſiſtence, and colour, of the leaf of the panicle, and in its orange-coloured flowers. Native of the Eaſt Indies.

3. Muſſænda Chinenſis, or Chineſe muſſænda: leaves in bundles; flowers ſolitary. This is a ſmall tree, with diffuſed unarmed branches. Leaves lanceolate, ſmooth, heaped. Flower terminating, with a berried, five-parted, calyx, having lanceolate ſegments. Berry ovate, crowned, pale, four-celled; containing many, almoſt kidney-form, bony, ſeeds. Native of China, near Canton.

4. Muſſænda pubeſcens, or downy muſſænda: branches and leaves downy; tube of the corolla many times longer than the ſegments of the calyx. Native of China; brought in 1805 to Kew, where it is kept in the greenhouſe, flowering from May to September.

5. Muſſænda arcuata, or jaſmine-flowered muſſænda: leaves elliptical, ſmooth; calyx-teeth linear, nearly equal; limb of the corolla externally ſmooth; tube with five hairy lines. Native of the iſland of Mauritius: Commerſon met with it cultivated in the gardens of Java. It is a nearly ſmooth ſhrub, with elliptical pointed ſhining leaves. Flowers fragrant, reſembling ſome of the larger ſpecies of Jaſminum; deſcribed by Commerſon as white, with a yellow eye. Fruit obovate, ſmooth, the ſize of a ſmall gooſeberry. An aſcending curvature in the baſe of the flower-ſtalks gave occaſion to the ſpecific name. This plant was called *Landia ſtelligera* by Commerſon, in compliment to his friend De la Lande, the aſtronomer, who had no pretenſions to botanical honours.

6. Muſſænda Landia, or broad-leaved muſſænda: leaves broad-ovate, ſmooth, with hairy ribs; calyx-teeth ovate, with long recurved points; corolla externally ſilky; internally downy; its ſegments taper-pointed. Native of the iſles of Mauritius and Bourbon. Leaves ſometimes eight inches by four. Footſtalks, flowerſtalks, and germen, clothed with ſcattered cloſe-preſſed hairs. Corolla probably white; its tube above an inch long, being four or five times the length of the calyx, denſely clothed with cloſe ſilky hairs.

7. Muſſænda holoſericea, or ſilky muſſænda: leaves ovate, pointed, ſilky beneath: calyx-teeth ovate, acute, ſtraight; corolla externally ſilky, internally downy, its ſegments taper-pointed. Gathered by Commerſon in the Iſle of Bourbon. The leaves are about four inches or more in length, tapering into a long ſharp point; their upper ſurface clothed with minute depreſſed ſcattered hairs; the under finely ſilky; ribs and numerous veins on both ſides hairy. This is a very handſome ſhrub, not unlike ſome of the fineſt ſpecies of Gardenia.

8. Muſſænda lanceolata, or lanceolate muſſænda: leaves lanceolate-wedge-ſhaped; flowers oppoſite, racemoſe; calyx abrupt, with five ſmall teeth. Native of the iſland of Mauritius.

9. Muſſænda citrifolia, or citron-leaved muſſænda: leaves three in a whorl, ovate, nearly ſeſſile; calyx-teeth long and permanent. Native of Madagaſcar, where it is called *charro*. The flowers are deſcribed as cymoſe, ſmall, yellow, and very numerous. Leaves coriaceous; ſmooth and ſhining above; ſlightly downy beneath.

10. Muſſænda longifolia, or long-leaved muſſænda: leaves three in a whorl, crowded, lanceolate, or oblong; capſule ribbed, crowned with the calyx. Native of Madagaſcar, where it is called *tamba-racha*. Said to reſemble the laſt, except that its leaves are narrower, and twice or thrice as long.

11. Muſſænda glomerulata, or tufted-flowered muſſænda:

ſænda: leaves ovate, acute; flowers terminal, in denſe round heads; corolla ſlightly downy at the outſide. Gathered by M. Richard at Guiana.

The ſeven laſt ſpecies are from Lamarck; but it will be evident to the botanical reader, that they have not the genuine character of Muſſænda.

12. Muſſænda formoſa. } See GARDENIA.
13. Muſſænda ſpinoſa. }

MUSSALE'E, a town of Hindooſtan, in the Carnatic: ſixteen miles weſt-north-weſt of Tritchinopoli.

MUSSA'ON, a town of Hindooſtan, in Baglana: thirty-three miles ſouth of Damaun.

MUSSA'RA, a town of Bengal: fifty miles north-weſt of Midnapour.

MUSSA'TO (Albertino), an early Italian poet and hiſtorian, was born of poor parents at Padua in 1261. He ſupported himſelf in his younger days by copying books for ſcholars; and afterwards became notary and pleader of cauſes, in which employments he obtained ſo much reputation, that about his thirty-fifth year he was made a knight, and was admitted into the public council. When the emperor Henry VII. received the iron crown at Milan in 1311, Muſſato was one of the Paduans deputed to aſſiſt at the ſolemnity. He was afterwards ſent to treat with the ſame emperor concerning the liberty of his countrymen; and, although the conditions he, with his fellow-deputy, firſt brought back, gave ſo much diſſatiſfaction, that the Paduans determined to vindicate their rights by arms, yet, upon cooler conſideration, they again had recourſe to negotiation by means of Muſſato and other ambaſſadors. Their efforts were ſo ſucceſsful, that the emperor granted peace to Padua on moderate terms; and the ambaſſadors on their return were received as ſaviours of their country. In 1312 he was again deputed to Henry on public buſineſs, which he brought to the deſired iſſue. The appointment of Can Grande, who was much hated by the Paduans, to the vicariate of the empire in Italy, occaſioned ſuch a flame, that the peace was ſoon broken; and Muſſato, though he had endeavoured to prevent this breach, took up arms in the cauſe of his country. The emperor died in 1313, but the war with Can Grande continued; and in the mean time a ſedition broke out in Padua, in which the populace were incited to attack the houſe of Muſſato, who was obliged to fly in order to ſave himſelf. The ſedition was however appeaſed by the death of its author, and Muſſato was honourably recalled. In 1321, he went into Germany on an embaſſy to Frederic duke of Auſtria, whom the Paduans elected as their lord, in order to induce him to defend them againſt the continued aſſaults of Can Grande. He again viſited Germany in 1324; but, in the mean time party-tumults revived in Padua, ſo that he was afraid to return, and remained at Vicenza. Whilſt he continued there he was involved in a charge of ſedition brought againſt his brother, his ſon, and others of his party, and was ſentenced to be baniſhed to Chiozza. There he reſided till death, in June 1329, at the age of ſeventy, cloſed the varied ſeries of his fortunes. His remains were ſome time after removed to Padua.

Muſſato, before he had become of conſequence as a public character, had diſtinguiſhed himſelf among the poets of the age; and in 1314 he received the honour then occaſionally conferred upon poetical eminence, that of the laurel crown, which was placed upon his head in great ceremony at Padua, in preſence of the whole univerſity, and a vaſt crowd of ſpectators. The ſenate further decreed, that on every anniverſary of this ſolemnity the univerſity ſhould go in a body to the houſe of Muſſato with preſents, and that ſome of his compoſitions ſhould be publicly recited.

The proſe-works of Muſſato conſiſt of ſixteen books De Geſtis Henrici VII. Imperatoris; twelve Books De Geſtis Italicorum poſt Henricum VII. (of theſe laſt, however, three are in hexameter verſe;) and De Ludovici Bavari Geſtis Liber. He wrote alſo, De Naturâ et Fortunâ, De Caſibus Fortunæ, De Vitâ et Moribus ſuis Librum Singulum; but this laſt remains inedited. Of his poetry we have two Latin tragedies: 1. Ecerinis, on the fate of Ecerinus, a tyrant of Verona; 2. Achilleis; both written on the plan of the Greek drama, and in imitation of Seneca, and the earlieſt ſpecimens in this kind of compoſition in the intereſting period of the revival of letters. Alſo Epiſtles, Elegies, Eclogues, Hymns, &c. Among his inedited poems are mentioned his Priapeia, ſuppreſſed by the prudence of the editors of his works.

The Latinity of Muſſato is reſpectable, conſidering the age in which he wrote; that his ſtyle is ſometimes harſh and obſcure, or his poetry occaſionally defective in quantity, is not ſurpriſing. To cenſure him for wanting the purity and preciſion of the Auguſtan age, or that of Leo X. were as abſurd as to expect the earlieſt dawn to beam with meridian ſplendour. He certainly made one of the earlieſt and moſt vigorous efforts to recal the Latin Muſes from their long exile, and his works deſerve more attention than they have hitherto met with. Warton obſerves, in his Hiſtory of Engliſh Poetry, vol. ii. p. 409. that the name and writings of Muſſato were hardly known until they were brought forward to the public notice in the Eſſay on Pope. As an hiſtoriographer, his character, for fidelity and veracity, ſtands very high; and his hiſtorical books are valuable as furniſhing the beſt account of the times and tranſactions of which they treat. He was eminently qualified, by the high ſtations which he filled, for an hiſtorian, being preſent, and frequently preſiding, in the affairs which he relates. To his diligence Petrarch bears teſtimony, who ſtyles him "Rerum ſatis anxius perquiſitor." He has recorded with freedom and impartiality, events disfigured or ſuppreſſed by other hiſtorians; and the jealouſy of the Italians has led them to caſtrate his works, by tearing out offenſive pages, ſo that it is rare to meet with a perfect copy of them. The only edition of the works of Muſſato, was printed at Venice, 1636, in folio, with notes by Oſius and Pignorius; who, however, both died, being infected with the plague, ſome time before it was publiſhed: hence their notes are incomplete. His hiſtorical works, with ſome additions from manuſcripts, with his Latin tragedies, may be found in Muratori's Rerum Italicarum Scriptores. *Monthly Mag.* Dec. 1810.

MUSSAX'O CO'SA, a town of Aſiatic Turkey, in the province of Diarbekir: forty miles ſouth-weſt of Tecrit.

MUSSCH'ENBROECK. See MUSCHENBROECK, p. 258.

MUS'SEL, *ſ. Muſcle*, the ſhell-fiſh, is ſometimes ſo written. *Todd.*

MUSS'ELBURGH, a ſea-port town and borough, ſituated on the ſouthern coaſt of the Frith of Forth, in the county of Midlothian, Scotland, derived its name from an extenſive muſcle-bank, which lies in the ſea below the town, and was probably the cauſe of its early population. This place may be ſaid to conſiſt of three villages. On the eaſt ſide of the river Eſk, and near to the ſhore, ſtands *Muſſelburgh*, properly ſo called, conſiſting of a broad well-paved ſtreet, with ſome adjoining lanes. The houſes here are moſtly two or three ſtories high, and are all built of ſtone, and covered with ſlates or tiles. Above Muſſelburgh, more inland, but connected with it by detached houſes, is the village and church of *Invereſk*, which gives name to the pariſh; and along the ſhore, on the weſtern bank of the Eſk, is the village of *Fiſherrow*. This laſt is upwards of half a mile in length; and here the only port or harbour belonging to the town is ſituated.

Muſſelburgh is a very ancient borough of regality, and was once named *Muſſelburghſhire*. Before the reformation it belonged to the abbacy of Dunfermline, but was taken from it by king James VI. who gave the ſuperiority of it to the earl, afterwards duke, of Lauderdale. In this family it remained till 1709, when it was purchaſed by the ducheſs of Monmouth and Buccleugh. It is now held by the duke of Buccleugh as lord ſuperior of the regality; and pays annually to that nobleman certain ſums, as quit-rent and feu-duty. It is reported that it received its firſt charter about 1340, from the earl of Marr; but the moſt ancient charter now extant is dated 11th December, 1562, and is granted by Robert, commendator of Dunfermline, with conſent of the whole members of the convent. This charter narrates, "that the title-deeds belonging to the borough were burnt by their enemies the Engliſh, after the fatal battle of Pinkie; therefore they *de novo* grant, diſpone, and confirm, to the preſent bailies, community, and inhabitants, of Muſſelburgh, and to their ſucceſſors," &c. This charter is confirmed by various charters and acts of parliament. In 1632, it was erected into a royal borough by a charter under the great ſeal; but the magiſtrates of Edinburgh found means to obtain a reduction of that charter before the privy-council, on the 30th November of the ſame year. It is governed by a town-council of eighteen members, ten of which are elected from Muſſelburgh, and eight from Fiſherrow. Out of theſe, two bailies and a treaſurer are annually elected; there are alſo ſeven incorporated trades. The magiſtrates are empowered to hold a court of record, and to grant infeoffments; and, upon the whole, it poſſeſſes all the privileges of a royal borough, except thoſe of voting for the election of a member of parliament, and of ſending a delegate to the convention of boroughs.

The annual revenue is eſtimated at ſomewhat more than 1500l. ariſing from the feu-duties paid by proprietors of houſes, from land and mills, and ſhore-dues. Theſe laſt have of late years conſiderably increaſed, in conſequence of the great reſort of ſhipping with grain for the Clements-Well diſtillery. It is not a little remarkable, that this town, though excellently ſituated for the purpoſe, carries on no extenſive manufacture. Some ſmall manufactories, however, of cloths, ſoap, ſtarch, and pottery, have been eſtabliſhed. In Fiſherrow are ſome ſalt-works, but all upon a very trifling ſcale, their whole produce being either ſold to dealers in the neighbourhood, or carried by the women in creels to Edinburgh, where they generally diſpoſe of it, by crying it about the ſtreets in the ſame way as fiſh are by fiſh-women. Of the latter a great number likewiſe belong to this town, who ſtill retain the ſame character and manners which diſtinguiſhed them a century ago. They are the wives and daughters of fiſhermen, who generally marry in their own caſt, or tribe. On the days not occupied in carrying, their buſineſs is to gather baits for their huſbands, fathers, or brothers, and to bait their lines. In their dealings with the public, they ſtill pertinaciouſly retain the ancient practice of ſmall traders, of demanding three times the ſum they will take for their goods. This, however, is not the reſult of a diſhoneſt principle, but merely of cuſtom; for it is remarked by thoſe who have ſtudied their character, that in all other tranſactions they are ſtrictly honeſt; and that, though ſcandalous to a proverb in their language, they are nevertheleſs virtuous and chaſte in their perſons. From the active ſhare theſe women have in the maintenance of their families, their ſway in them, as might be ſuppoſed, is great. As their work is maſculine, ſo are their ſentiments and manners. Their ſtrength is not inferior to that of their huſbands, nor are they leſs capable than they are of enduring fatigue, or the ſeverities of a northern climate. On holidays, their chief amuſement is playing at golf, and on Shrove Tueſday there is always a ſtanding match, at foot-ball, between the married and unmarried women, in which the former are generally the winners. This match uſually takes place on the *links*, or open downs, lying between Muſſelburgh and the ſhore, where are likewiſe held the annual fair, and the horſe-races.

Muſſelburgh contains four places appropriated to public worſhip; the pariſh-church, the epiſcopal meeting-houſe, a burgher's ſeceding meeting-houſe, and a church of relief. The duke of Buccleugh is patron of the eſtabliſhed church. Here is alſo an excellent grammar-ſchool, under the patronage of the magiſtrates and town-council, who allow the maſter a ſalary of 28l. per annum, in addition to the fees he receives from his pupils, which in the aggregate are pretty conſiderable. Several private ſeminaries in this town are likewiſe in high eſtimation, and there are Sunday-ſchools ſupported by the ducheſs of Buccleugh, and other charitable ladies, both in Muſſelburgh and Fiſherrow. The market-day in the former is Friday, and in the latter Tueſday.

In this town and its neighbourhood, many Roman remains have been diſcovered at different times; which Chalmers, in his Caledonia, ſays, "ſhew that the Romans had a poſt at Fiſherrow, and a poſt at Invereſk." Some Roman coins, and an altar with this inſcription, *Apolloni Granio*, were found in levelling the adjacent grounds ſeveral centuries ago; and, within theſe laſt twenty years, the ruins of a Roman bath were laid open by the workmen employed to erect a new parterre to the manſion of the proprietor of Invereſk-villa. Similar ruins of hypocauſta have been ſince diſcovered nearer to the ſhore, beſides many foundations of private houſes.

The church of Invereſk has been lately rebuilt, and is ſaid to be one of the fineſt pariſh-churches in Scotland. The old ſtructure, however, was more intereſting as an object of curioſity; its antiquity having been undoubtedly very remote. At the eaſt end of Muſſelburgh formerly ſtood the chapel of Loretto, a cell to the abbey of Dunfermline. Of this building there are very few remains, except one ſmall apartment covered by an artificial mount in a garden of a villa ſtill called the Loretto. It muſt, however, have been an edifice of very conſiderable extent, as the preſent tolbooth of Muſſelburgh was wholly built from its materials. Near the eaſt end of the town is the houſe in which the great Randolph earl of Murray died in 1332. Among the other remains of antiquity in this town, the bridge is the moſt remarkable, being, according to Dr. Carliſle, moſt probably a work of the Romans. The Scottiſh army paſſed over this bridge on the day of the fatal battle of Pinkie, which was fought near the houſe ſo called, formerly the reſidence of the Setons, earls of Dunfermline. Carberry-hill, immediately adjoining to the ſcene of action, was afterwards noted for the conference held by the unfortunate queen Mary with Kirkcaldy of Grange, which terminated in placing her perſon in the power of Morton and the confederate lords, who, regardleſs of their renewed oaths of allegiance and fidelity, confined her a priſoner till ſhe was enabled to effect her eſcape from Lochleven-caſtle. See the article Scotland.

The ſituation of the pariſh of Invereſk is one of the moſt beautiful in Scotland; and ſo celebrated is the village for its healthy climature, and the delightful proſpects it commands, that it was diſtinguiſhed of old by the name of the Montpellier of Scotland. Muſſelburgh, as a faſhionable ſummer-retreat, however, is now comparatively abandoned for Portobello, ſituated between it and the metropolis, where large and commodious baths have been lately erected. The ſcite of this now populous village, only a fews years ago was a deſert and barren heath. Lat. 55. 57. N. lon. 3. 3. W. *Chalmers's Caledonia.*

MUSSE'R, *ſ.* [from the Fr. verb.] A hiding-place; a term of hunting:

We can find
Your wildeſt parts, your turnings and returns,
Your traces, ſquats, the *muſſers* forms and holes
You young men uſe, if once our ſageſt wits
Be ſet a-hunting. *Ram Alley.*

MUSSIDAN'. See Mucidan, p. 158.

MUSS'IN, a town of the duchy of Warſaw: ten miles ſouth of Poſen.

MUSSIN'IA, *ſ.* [dedicated by Willdenow to the honour of the Ruſſian count Muſſin Puſkin, who undertook an arduous expedition to the Caucaſus in purſuit of botany, and in which he diſcovered many new plants.]

In botany, a genus conſiſting of ſeveral ſpecies referred by Thunberg to Gorteria. It belongs to the claſs ſyngeneſia, order polygamia fruſtranea, natural order compoſitæ capitatæ, *Linn.* (corymbiferæ, *Juſſ.*) Generic Characters—Common calyx: of one leaf, cylindrical, naked, toothed in the margin. Corolla: compound, radiated. Florets of the diſk numerous, perfect, with a funnel-ſhaped five-cleft corolla; thoſe of the radius fewer, female, with a ligulate lanceolate one. Stamina: (in the perfect florets only) filaments five, ſhort; antheræ united into a cylindrical tube. Piſtillum: (of the perfect florets) germen hairy; ſtyle thread-ſhaped, the length of its own little corolla; ſtigma cloven. In the female florets, the germen is obſolete and abortive; ſtyle none; ſtigma none. Pericarpium: none, except the calyx, falling off entire. Seeds: to the perfect florets only, ſolitary, roundiſh; down ſimple; receptacle villous.—*Eſſential Character.* Receptacle villous; down ſimple, compoſed of hairs; florets of the radius ligulate; calyx of one leaf, cylindrical, toothed. There are ſix ſpecies.

1. Muſſinia linearis: leaves linear, ſmooth, with fringed teeth at the baſe; ſtalk ſingle-flowered. This and all the following ſpecies are natives of the Cape of Good Hope. Leaves pointed; flower-ſtalk longer than the leaves.

2. Muſſinia uniflora. See GORTERIA uniflora.

3. Muſſinia ſpecioſa: leaves either pinnatifid or undivided, downy beneath; ſegments linear-lanceolate; ſtalk downy, ſingle-flowered; calyx downy. Root ſubdivided, fibrous. Leaves entirely radical; green above, and ſlightly downy; white with down beneath; revolute at the margin. Florets of the radius yellow, with a ſlight ſtreak on their lower ſide, and a dark ſpot at their baſe on the upper. Willdenow obſerves, that this differs from Gorteria rigens (vol. viii. p. 698.) in the ſtructure of its calyx, in having no ſtem, as well as on account of its annual root, and whole habit.

4. Muſſinia inciſa: leaves either pinnatifid or undivided, hairy, downy beneath; ſtalk ſingle-flowered, the length of the leaves; calyx ſmooth. Root annual, deſcending very deep. Leaves moſtly radical, on ſtalks, oblong; when pinnatifid. their ſegments are ovate-oblong, green and rough above, downy and white beneath, with reflexed margins; they are all erect, about three inches long, their ſtalks and ribs ſprinkled over with white hairs. Stalks round, ſlightly ſtriated.

5. Muſſinia othonna: leaves pinnatifid, ſmooth; ſtalk ſingle-flowered; calyx turbinate. The leaves are all radical, two or three inches long, and ſomewhat glaucous; their ſegments linear, with a cartilaginous, prickly-toothed, margin, and a terminal briſtle. Flower-ſtalk four inches high, erect, ſimple, with one linear bracte above the middle. Flower terminal, ſolitary, erect, an inch in diameter. Calyx ſtriated, ſmooth, with two rows of marginal teeth; the innermoſt furniſhed with long points, but much ſhorter than the radius, the florets of which appear to be yellow, with a brown ſtripe underneath.

6. Muſſinia pinnata: leaves pinnate, villous, downy-white beneath; leaflets elliptical, the terminal one larger and ſubdivided; ſtalk ſingle-flowered; calyx villous. See the article GORTERIA, vol. viii. alſo Thunb. Prodr. 162, 3. and the Copenhagen Tranſ. vol. iv.

MUSSITA'TION, *ſ.* [*muſſito*, Lat.] Murmur; grumble. *Bullokar.*—Their words ſeemed as if they came out of a bottle, or whoſe voice reſembled the murmur, or *muſſitation*, which liquor makes that is pent up in a bottle. *Young on Idolatrous Corruptions.*

MUSS'O, a town of Italy, in the department of the Lario: twenty-four miles north of Como.

MUSS'O (Cornelius), a learned Italian prelate, and one of the moſt celebrated preachers in the ſixteenth century, was deſcended from a noble family, and born at Placentia in the year 1511. When only nine years old he dedicated himſelf to the order of St. Francis, to fulfil a vow made by his mother when ſhe was pregnant with him, and entered a monaſtery in his native city. He early diſcovered great vivacity of genius, a prodigious ſtrength of memory, and talents peculiarly adapted for the pulpit; which induced his ſuperiors to place him under the beſt maſters, at Carpi, and in other places, in order to qualify him for the office of preacher. Under their inſtructions he made a rapid proficiency in claſſical learning, and the art of oratory; and, having commenced preacher, acquired a high reputation for pulpit-eloquence, when he was only nineteen years of age. But his ſuperiors, wiſely judging that to attain to excellence in this art required a more ſolid foundation of knowledge and literature than he at preſent poſſeſſed, ſent him with letters of recommendation to Venice, where they hoped that, by a diſplay of his abilities before the ſenate, he might ſecure an eſtabliſhment in ſome learned ſeminary. This deſign proved ſucceſsful; for, though upon his entrance into the pulpit at the church of St. Mark, his youthful appearance, diminutive ſtature, and ſickly countenance, created unfavourable impreſſions againſt him; he ſpeedily effaced theſe, and captivated his audience by the charms of his voice, the ſublimity of his conceptions, and the graces of his delivery. He now found many zealous patrons, who procured him an honourable poſt in the convent of the Franciſcans at Padua. Here, without neglecting the art of rhetoric, he diligently applied to the ſtudy of philoſophy, and of divinity; and, after he had taken the degree of bachelor, read lectures, and held diſputations, by which he acquired high reputation. He was honoured with the friendſhip of the famous Peter Bembo, afterwards cardinal, who aſſiſted him in his rhetorical ſtudies. He was inſtructed by Lampridius in the Greek language, and by other tutors in the Hebrew and Chaldee. Having aſſiduouſly availed himſelf of the advantages which he thus enjoyed for improvement, Muſſo reſumed his pulpit-labours, and roſe to decided pre-eminence among his contemporaries in Italy. He preached a courſe of Lent-ſermons at Padua, with great applauſe. He then maintained theſes for ſeveral ſucceſſive days; and, as a reward of his merit, was promoted to the degree of doctor of divinity. Afterwards he was appointed to preach, during a whole Lent, in the convent of his order at Venice. The ſame office he performed in ſeveral of the principal cities in Italy, particularly at Milan, where he was much eſteemed by the duke Francis Sforza. That prince appointed him profeſſor in ordinary of metaphyſics at the univerſity of Pavia, and frequently attended his lectures. Upon the diſperſion of the univerſity, after the death of Sforza, Muſſo was made profeſſor of metaphyſics at Bologna.

About the year 1537, cardinal Campegio, biſhop of Bologna, preſented Muſſo to pope Paul III. who appointed him theologian to the cardinal his grandſon, and preacher at St. Lawrence in Damazo at Rome. By his ſermons in this church he attracted very crowded auditories, and acquired ſuch celebrity, that his holineſs determined to raiſe him to the epiſcopal rank. Accordingly, in 1541, he was created Biſhop of Bertinozo, in the Romagna; and was ſoon after tranſlated to the ſee of Bitonto in Apulia; and in 1545, the ſame pope ſent him to the council of Trent, where he was ſelected to preach a Latin ſermon at the opening of the council, and diſtinguiſhed himſelf in the debates on the points of doctrine and diſcipline which took place in that aſſembly. After the interruption of the council which followed its tranſlation from Trent to Bologna, and the death Paul III. his ſucceſſor, Julius III. choſe the biſhop of Bitonto for his domeſtic prelate and aſſiſtant; in which capacity he was alſo employed by Pius IV. In the year 1560, he was ſent nuncio into Germany, together with the nephew of the pontiff laſt mentioned, and executed his commiſſion at the court of Ferdinand with great reputation. Afterwards he was employed at the court of Rome on various matters till the diſſolution of the council of Trent, when he retired to Bitonto, where he applied himſelf to the reformation of abuſes, and the diligent diſcharge of his epiſcopal functions. After a reſidence of ten years on his ſee, he paid a viſit to Rome, where pope Gregory XIII. detained him for his aſſiſtant till the death of our prelate in 1574, when he was nearly ſixty-three years of age.

His religious and moral character are highly commended by his biographers. He was the author of ſeveral works that were publiſhed after his death, among which are, 1. A Latin Commentary upon St. Paul's Epiſtle to the Romans, printed at Venice in 1581 and 1588. 2. An Italian Commentary upon the Magnificat; Cologne, 1618. 3. De Hiſtoria Divina, lib. v. Venice, 1587. 4. De Viſitatione et Modo viſitandi, containing the acts of a ſynod which he held at Bitonto. 5. Declaratio Pſalmi de profundis, &c. But his moſt celebrated writings are his "Sermons," publiſhed at Venice, 4 vols. 4to. in 1582 and 1590; ſeveral of which were tranſlated out of Italian into the French and Spaniſh languages. Dupin characterizes the author as a poliſhed and eloquent writer, both in Latin and Italian; and Tiraboſchi, when ſpeaking of his Sermons, obſerves, "If they do not prove that the biſhop of Bitonto was the firſt reformer of pulpit-eloquence, they at leaſt teſtify that he contributed greatly towards ſuch a reformation. They abound in ſolid matter, beautiful images, and eloquent expreſſions." *Gen. Biog.*

MUSS'UK, [Hindoo.] A ſkin in which water is carried: it is as much as one man can bear over the ſhoulders. *Roberts's Ind. Gloſſ.*

MUSS'ULMAN, *ſ.* [Arab. *ſalama*, which in the fourth conjugation is *aſlama*, to enter into the ſtate of ſalvation: hence *eſlam*, the ſaving religion; and *muſlimon*, or, as we call it *muſleman*, he that believeth therein. *Prideaux's Life of Mahomet.*] A Mahometan believer.—The chief duty of a *muſſulman* conſiſts in external ablutions, and ſtated repetitions of prayer. *Bryant.*—In the plural it is written different ways, as in the following examples.—Amongſt Mahometans, ſhe [Zaynab] is furnamed a mother of *muſſulmen*, or true believers. *Sir T. Herbert's Travels.*—With Turks they are good *Muſſelmans*, with Jews they paſs for Jews. *Maundrell's Travels.*

There are two kinds of Muſſulmans, very averſe to each other; the one called *Sonnites*, and the other *Shiites*. The Sonnites follow the interpretation of the Alcoran given by Omar; the Shiites are the followers of Ali. The ſubjects of the king of Perſia are Shiites; and thoſe of the grand ſignior Sonnites. See the article Mahometanism, vol. xiv. p. 144.

MUSSULMAN'ISH, *adj.* Mahometan.—They proclaimed them enemies to the *muſſulmaniſh* faith. *Herbert's Travels.*

MUSS'Y L'EVE'QUE, a town of France, in the department of the Aube: nine miles ſouth-ſouth-eaſt of Bar ſur Seine, and fifteen ſouth of Troyes.

MUSSY'R, one of the Kurile iſlands, which is round and ſtony, and lies at the diſtance of fifty-five verſts from Syaſkutan; its diameter is not more than three verſts. It is deſtitute of water, but is nevertheleſs frequented by great numbers of birds. Sea-lions abound here.

MUST, *verb imperfect;* [*mueſſen*, Teut.] To be obliged; to be by neceſſity. It is only uſed before a verb. *Muſt* is of all perſons and tenſes; and uſed of perſons and things.—*Muſt* I needs bring thy ſon unto the land from where thou cameſt? *Gen.* xxiv. 5.

Fade, flowers, fade, nature will have it ſo;
'Tis but what we *muſt* in our autumn do. *Waller.*

MUST, *ſ.* [*muſtum*, Lat.] New wine; new wort.—Othir ſcornyden and ſeiden, for theſe men ben ful of *muſt*, [preſent verſion, new wine.] *Wicliffe's Acts*, ii. 13.—If in the *muſt* of wine, or wort of beer, before it be tunned, the burrage ſtay a ſmall time, and be often changed, it makes a ſovereign drink for melancholy. *Bacon.*—Liquors in the act of fermentation, as *muſt* and new ale, produce ſpaſms in the ſtomach. *Arbuthnot on Aliments.*

As a ſwarm of flies in vintage-time,
About the wine-preſs, where ſweet *muſt* is pour'd,
Beat off, returns as oft with humming ſound. *Milton.*

To MUST, *v. a.* [*mws*, Welſh, ſtinking; *mos*, Dut. mouldineſs; or perhaps from *moiſt.*] To mould; to make mouldy.—Others are made of ſtone and lime; but they are ſubject to give and be moiſt, which will *muſt* corn. *Mortimer.*

To MUST, *v. n.* To grow mouldy.

MUST, *ſ.* The putrified moſſy matter generated on acids imperfectly admitted to atmoſpheric air. *Monthly Mag.* xliii. 109.

MUSTACE'UM, *ſ.* Among the ancient Romans, a kind of cheeſe-cake. It was compoſed of cheeſe, aniſeed, cummin, and ſuet added to flour, moiſtened with *muſtum*, or new wine.

MUSTA'CHE, or Mustachio, *ſ.* [*moſtaccio*, *muſtaccio*, Ital. from the Gr. *μύϛαξ*, the hair ſuffered to grow on the upper lip; whence the French word *mouſtache*. The word in uſe amongſt us is *muſtachio*, though Dr. Johnſon has only noticed *muſtaches*, in the plural, as uſed by Spenſer, who, however, uſes not that word, but the Italian termination, viz. *muſchachios*, evidently for *muſtachios*, in his State of Ireland. *Todd.*] A whiſker; hair on the upper lip.—Your *muſtachoes* ſharp at the ends, like ſhoemaker's aules; or hanging down to your mouth like goates' flakes. *Lily's Midas.*—The Engliſh then uſing to let grow on their upper lip large *muſtachios*, as did anciently the Britons. *Milton's Hiſt. of Eng.*

MUSTA'CHIO, or Mistachio, *ſ.* A Venetian meaſure for fluids: 38 muſtachi make a muid, and 76 an amphora.

MUS'TAFA PACH'A KU'PRI, a town of European Turkey, in Romania, on the Maria, over which is a celebrated ſtone bridge, built by Muſtapha Pacha: eighteen miles north-weſt of Adrianople.

MUS'TAFA PACH'A PALAN'KA, a town of European Turkey, in Bulgaria: fifty-ſix miles weſt-north-weſt of Sofia, and twenty-two ſouth-eaſt of Niſſa.

MUSTAN', a town of Hindooſtan, in Bengal: thirty-two miles north-north-eaſt of Nattore.

MUS'TAPHA, [Arabic, the Elect.] The name of ſeveral Emperors of Turkey. See that article.

MUSTAPHABAD', a town of Hindooſtan, in the circar of Sirhind: ſeven miles north of Tannaſar.—Alſo, a town of Hindooſtan, in Oude: ten miles north-north-weſt of Manickpour. Lat. 25. 58. N. lon. 81. 56. E.

MUSTAPHI'NA, a town of Ruſſia, in the government of Upha: twelve miles ſouth of Sterlitamatzk.

MUSTA'RAH, a town of Hindooſtan, in the circar of Gooty: thirty-three miles ſouth-weſt of Gooty.

MUS'TARD, *ſ.* [*muſtard*, Welſh.] A plant. See Sinapis.—*Muſtard*, in great quantities, would quickly bring the blood into an alkaline ſtate, and deſtroy the animal. *Arbuthnot.*

Sauce, like himſelf, offenſive to its foes,
The roguiſh *muſtard*, dang'rous to the noſe. *King.*

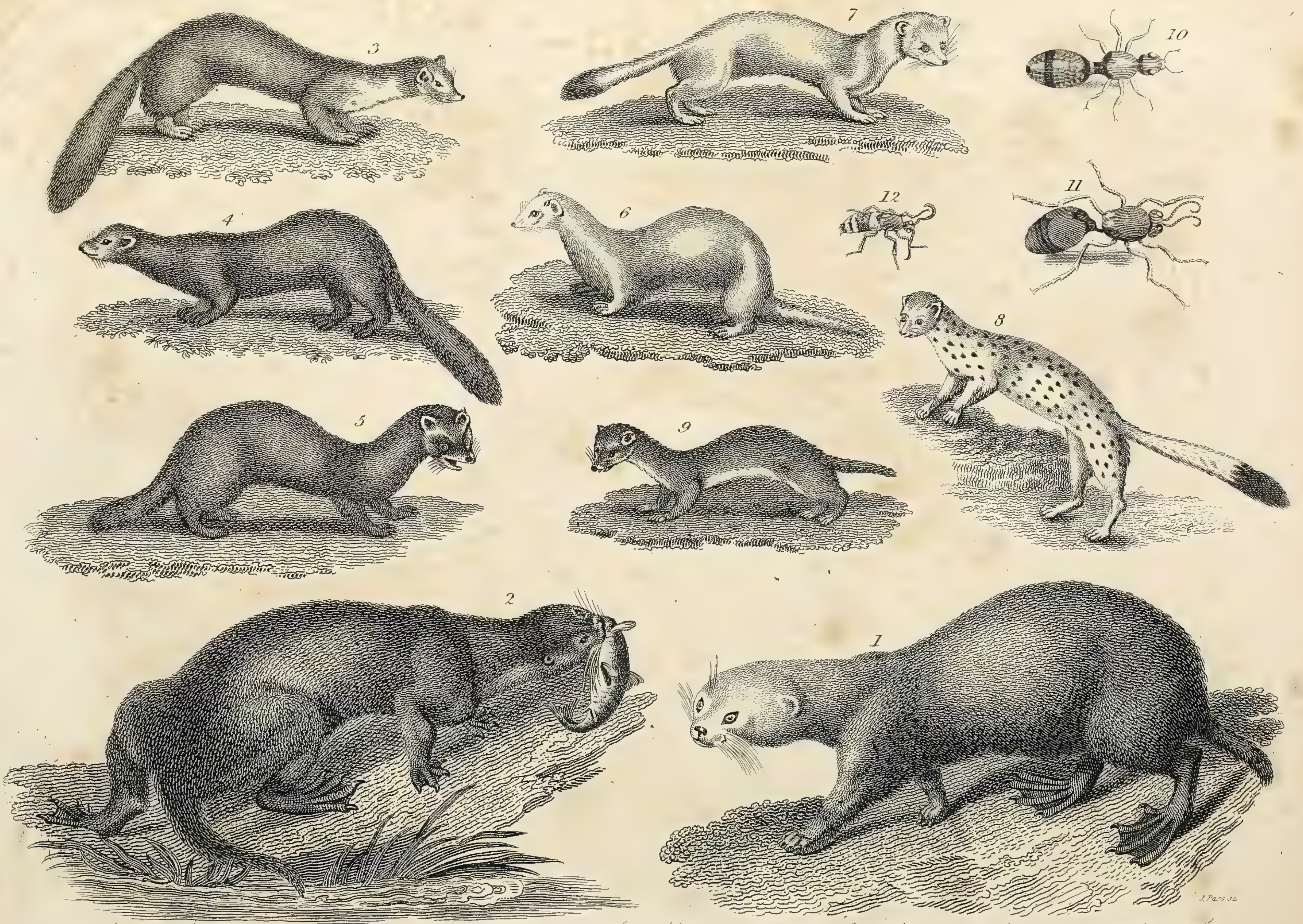
MUS'TARD, Baſe. See Cleome.
————, Buckler. See Biscutella, vol. iii.
————, Hedge. See Erysimum and Sisymbrium.
————, Mithridate. See Thlaspi.
————, Mithridate, (baſe.) See Iberis.
————, Tower. See Turritis.
————, Tower, (baſe.) See Arabis.
————, Treacle. See Clypeola and Thlaspi.

MUS'TARD-BOWL, *ſ.* A bowl uſed for bruiſing muſtard-ſeed. A vulgar name for a machine by which thunder is produced at the playhouſe:

'Tis your's to ſhake the ſoul
With thunder rumbling from the *muſtard-bowl.* *Pope.*

MUS'TARD-POT, *ſ.* A veſſel to hold muſtard for family-uſe.—Stick your candle in a bottle, a coffee-cup, or a *muſtard-pot.* *Swift.*

MUSTELA AND MUTILLA.



1. The Sea Otter. 2. The Common Otter. 3. The Marten. 4. The Sable. 5. Polecat. 6. The Ferret.
7. 8. Ermine and Stoat. 9. The Weasel. 10, 11, 12. Mutilla insects.

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MUSTELA, ſ. [Lat. from *mus*, a mouſe, and *tela*, a web, on account of the webbed feet and broad tails of ſome of the ſpecies.] In zoology, a genus of quadrupeds of the claſs mammalia, order feræ, including the OTTER, WEASEL, FERRET, SABLE, &c. Generic characters—Upper fore-teeth ſix, erect, acute, diſtinct; lower ſix, which are more obtuſe, and crowded: two are placed within.

In a variety of circumſtances otters and weaſels reſemble each other. Their bodies are long, and of the ſame thickneſs; their feet are ſhort, hair ſhining, and claws immovable; they burrow in the ground; prowl and prey by night. But the otters live moſtly in water, ſwim on the ſurface and under it, and feed chiefly on fiſh: they do not climb, nor leap with the body curved, and tail ſtretched, like the weaſels: the head is larger and thicker; the tongue is ſtrewed with ſoft prickles. Otters have five grinders in each jaw, on each ſide; weaſels have four, five, or ſix.

Naturaliſts are very much divided in their methods of claſſing animals of the kind now under conſideration. Mr. Pennant, who is followed by Dr. Shaw, unites the genus Muſtela with the Viverra; but Mr. Pennant includes in his genus the race of otters; Dr. Shaw preſerves the otters in a diſtinct genus, which he calls Lutra. We, of courſe, follow the Linnæan ſyſtem, as improved by Gmelin; in which the otters, whoſe hind-feet are palmate, are placed together in a ſection preceding the weaſels, whoſe feet are cleft like moſt other quadrupeds.

I. OTTERS. Hind-feet palmate; tongue rough.

1. Muſtela lutris, the ſea-otter. Specific character, hind-feet hairy; tail one-fourth part as long as the body. This is one of the largeſt of the otters, meaſuring about three feet from the noſe to the tail, and the tail is thirteen inches long. The colour of this ſpecies is a deep, gloſſy, browniſh-black; the fur being extremely ſoft and very fine; the hind-feet reſemble thoſe of the ſeal, the toes being connected by a ſtrong granulated membrane, with a ſkin ſkirting the outward toe, as in ſome of the water-fowl; the tail is ſhort, broad, depreſſed, and pointed at the end. The ſea-otter has been found to weigh ſeventy or eighty pounds. It is met with in great abundance in Behring's iſlands, Kamtſchatka, and the Aleutian or Fox iſlands, between Aſia and America. They will ſometimes come on ſhore in the Kurile-iſlands, but are never ſeen in the channel between the north-eaſt of Siberia and America. They breed once a-year, and are ſuppoſed to bring but one at a time: they are extremely harmleſs animals, and ſingularly affectionate to their young. This animal is killed for its ſkin; which is one of the moſt valuable of furs, being ſometimes ſold for 25l. to the Chineſe. Sea-otters are ſometimes taken with nets, but more frequently deſtroyed with clubs and ſpears. They are moſt harmleſs and inoffenſive creatures, moſt affectionate to their young; they will pine to death for the loſs of them, and die on the very ſpot where they have been taken from them. Before the young can ſwim, they carry them in their paws, lying in the water on their backs: they are ſwift in running, and very ſportive: they embrace and ſeem to kiſs each other: they ſwim often on their backs, on their ſides, and even in a perpendicular poſture. They inhabit ſuch ſhallows as abound with ſea-weeds; and feed on lobſters, fiſh, ſepiæ, and ſhell-fiſh: they breed only once a-year, bring but one a time, and ſuckle it for a year. The young are reckoned ſuch delicate meat, that their fleſh is ſcarcely to be diſtinguiſhed from that of a ſucking lamb. This is repreſented on the annexed Plate, at fig. 1.

β. M. lutris Braſilienſis, the Braſilian otter: black, with a yellow ſpot under the throat. This South-American variety has a round head, like that of a cat; it has feline teeth too; eyes ſmall, round, and black: large whiſkers, and round ears; its tail, which is flat and naked, reaches no lower than the feet; its hair is ſoft, and not long. It is entirely black, except the head, which is duſky, and the throat, which is yellow: it is about the bulk of a middling dog: it inhabits Braſil, Guiana, and the borders of Oronoko: it lives on fiſh, and cruſtaceous animals, ſuch as cray-fiſh, and is very dextrous in robbing nets of what it finds in them: it makes a noiſe like a young puppy. Its fleſh is reckoned delicate eating, and does not taſte fiſhy, notwithſtanding its food. They are extremely cleanly, live in ſociety, and go in troops; they are fierce, and make a vigorous defence againſt dogs; but, when taken young, may be tamed.

2. Muſtela Paraguenſis, the Paragay otter: mixed grey and black; feet palmate. Inhabits the Rio de la Plata: ſize of a cat; fur velvety; fleſh delicate.

3. Muſtela Chilenſis, the Chilian otter: tail long and round; feet very hairy. Inhabits the coaſt of Chili.

4. Muſtela felina, the chinchimen: ſhape and appearance of a cat. This is another Chilian otter; perhaps the ſame. Its head, whiſkers, ears, eyes, ſhape, and length of the tail, exactly reſemble the domeſtic cat; its feet are furniſhed with ſtrong crooked claws. The body is covered with two ſorts of hair; one very ſhort and fine, the other long and rough. Length from noſe to tail twenty inches. It inhabits the ſea, and very ſeldom quits that element; goes always in pairs; loves to baſk in the ſun; creeps to the ſummits of the rock, where it is taken in traps: has a hoarſe voice, and all the fierceneſs of the wild cat. *Molina's Chili*, 265.

5. Muſtela lutra, the common otter: hind-feet naked; tail half the length of the body. This is the greater otter of Pennant; and is found in almoſt every part of Europe, as well as in the colder regions of Aſia; inhabiting the banks of rivers, and feeding principally on fiſh. It is alſo to be met with in the northern parts of America, where it grows to a much larger ſize than the European ſpecies; but in the river Euphrates it is found no larger than a common cat: this, perhaps, is a different ſpecies. The uſual length of the common otter is nearly two feet, with a tail of ſixteen inches. The colour of the whole animal is brown, with ſome patches of different colours. The head is broad and flat; the mouth ſmall; the teeth ſtrong; the lips very muſcular; the ears ſhort and rounded; the eyes are ſmall, and the neck very thick; the legs are ſhort and thick, looſely joined to the body, and ſo placed as to be capable of being brought on a line with the body, and of performing the office of fins; the toes, which are five in number on all the feet, are connected by broad ſtrong webs, and the whole foot is naked, or without hair.

The otter ſhows great ſagacity in forming its habitation; it burrows under ground, in the banks of ſome river or lake; and always makes the entrance of its hole under water; working upwards to the ſurface of the earth; and, before it reaches the top, makes ſeveral lodges, that in caſe of floods it may have a retreat; to all theſe it forms an orifice for the admiſſion of the air. The natural food of the common otter is fiſh; but, when the weather is hard, and it is hardly driven for food, it will attack the ſmaller quadrupeds, as well as poultry. The female produces four or five young at a birth; and the male calls the female by a ſoft murmuring cry.

The otter is naturally a very fierce animal; and, when hunted with dogs, as is ſometimes the practice, will inflict very ſevere wounds on its antagoniſts. But the young otters, if taken at a very early age, may be ſucceſsfully tamed, and taught by degrees to hunt for fiſh, and bring them to their maſter. This taming of otters, and employing them in fiſhing, is mentioned by Aldrovandus (from Albertus Magnus) as a circumſtance familiarly known, and more eſpecially, according to Albertus, in Sweden, where he tells us that, in the houſes of the great, theſe animals were kept for that purpoſe, and would go out, at a ſignal from the cook, catch fiſh, and bring it into the kitchen in order to be dreſſed for dinner!

Buffon, in his deſcription of the otter, given in the 7th volume of his Nat. Hiſt. ſeems inclined to doubt the reality of the otter's having ever been properly tamed, ſo as to be rendered ſerviceable in fiſhing; but later experience has proved this to be perfectly practicable. An otter thus tamed has followed its maſter like a dog, and been found extremely uſeful. Inſtances of this kind are deſcribed in Mr. Bewick's work on Quadrupeds. A perſon near Inverneſs in Scotland had, according to this writer, a tame otter, which would follow him wherever he choſe; and, if called by its name, would immediately obey. When apprehenſive of danger from dogs, it would ſeek protection from its maſter, and endeavour to fly into his arms for ſecurity. It was frequently employed in catching fiſh, and would ſometimes take eight or ten ſalmon in a day: theſe it always made an attempt to break behind the ſmall back fin, if not prevented: as ſoon as one was taken away, it immediately dived for another, and, when tired, refuſed to fiſh any longer; and, after having been rewarded with a part of the ſpoil, would compoſe itſelf to ſleep, and in this ſtate was carried home. It would fiſh in the ſea as well as in freſh water. Another perſon, according to Mr. Bewick, who kept a tame otter, ſuffered it to follow him with the dogs; and it was found a very uſeful aſſiſtant in fiſhing, by going into the water, and driving the trouts, &c. into the nets. It was farther remarkable, that the dogs, though accuſtomed to hunt otters, were ſo far from giving it the ſmalleſt moleſtation, that they would not even hunt an otter while in its company. This method of fiſhing with a tame otter is alſo mentioned by Vaniere, in his truly Virgilian poem, the *Prædium Ruſticum:*

Si nidum teneroſque feræ deprendere pullos
Contigit; abſenti ſobolem furabere matri;
Et dum mollis adhuc ætas faciliſque doceri,
Piſcandi cicurem lutram formabis ad artes:
Namque ubi tranſverſo ſteterint ſuſpenſa fluento
Lina; cavernoſos rimabitur illa receſſus,
Ejectos ſpecubus piſces in retia trudens;
Ut canis excitos agit in venabula cervos,
Et leporum preſſo ſequitur veſtigia roſtro.

Should chance, within their dark receſs, betray
The tender young, bear quick the prize away.
Tam'd by thy care, the uſeful brood ſhall join
The wat'ry chace, and add their toils to thine;
From each cloſe lurking-hole ſhall force away
And drive within thy nets the ſilver prey:
As the taught hound the timid ſtag ſubdues,
Or o'er the dewy plain the panting hare purſues.

Laſtly, Buffon himſelf, in his ſixth ſupplemental volume, retracts his ſcepticiſm on this ſubject, and has publiſhed a letter from the marquis de Courtivron, relative to a tame otter kept in an abbey at Autun, in the year 1775, &c. This otter was a female, and had been taken extremely young, and reared with milk till it was two months old, when it was fed with ſoup, fruits, pulſe, meat, fiſh, &c. which latter, however, it would not eat unleſs perfectly freſh. It was as tame as a dog, and would come whenever it was called by its name. It would alſo play with a dog and cat with which it had been early acquainted, but ſhowed great animoſity againſt other dogs and cats which happened to approach it. This otter chiefly inhabited a room, and would lie by night on a bed, and, during the day-time, on a heap of ſtraw provided for it: it would occaſionally plunge its head and fore-feet into a veſſel of water, which always ſtood near it; and, after ſhaking itſelf, would go out into the court-yard for exerciſe, &c. and would often ſleep in the ſunſhine. It ſeemed in a manner to have loſt the natural habits of its kind; ſince, being carried one day to a pool of water, it ſeemed afraid, and would not go into it, but only wetted its head and feet, as in its chamber; and, when thrown in to the diſtance of ſome feet, it inſtantly made to the ſhore, as if in a kind of alarm, and followed readily to the abbey.

When the otter, in its natural or uneducated ſtate, has caught a fiſh, it immediately draws it aſhore, and devours the head and upper parts, leaving the remainder; and, when in a ſtate of captivity, will eat no fiſh but what is perfectly freſh, but will prefer bread, milk, &c. "The otter," ſays Buffon, "is as noxious in a fiſh-pond as the polecat in a hen-rooſt; ſince he frequently kills many more fiſh than he can eat, and then carries off one in his teeth. The otter will ſometimes devour vegetables of different kinds, and will gnaw the bark and twigs of young trees. The fleſh of the otter is rank and fiſhy. The Romiſh church permits the uſe of it on maigre-days; and Mr. Pennant declares, that, in the kitchen of the Carthuſian convent near Dijon, he ſaw one preparing for the dinner of the religious of that rigid order, who are prohibited, during their whole lives, the eating of fleſh. See the Plate, fig. 2.

6. Muſtela Canadenſis, the Canadian otter: black; fur ſmooth; tail long and tapering. It inhabits North America, particularly Canada, and is about two feet long; the tail ten inches.

7. Muſtela lutreola, the ſmaller otter: very hairy feet, equal toes, and a white mouth. This ſpecies very much reſembles the M. lutra, but is conſiderably ſmaller; the body is of a duſky colour, but with a tawny caſt; the chin and throat are white; the ears are roundiſh; the feet broad, webbed, and covered with hair, inſtead of being naked, as in the former animal. In North America this ſpecies is known by the name of *minx*, and is ſaid ſometimes to leave the water, and prey on poultry, &c. in the manner of a polecat; but in Poland and other parts of Europe, where it is found, it lives chiefly on fiſh, frogs, &c. Its fur is very valuable, and next in beauty to that of the ſable.

8. Muſtela Cayennenſis, the Cayenne otter: toes on the fore-feet unconnected; tail long, taper, naked. This ſpecies is the *ſaricovienne* of Pennant, and the *petite loutre d'eau douce de la Cayenne* of Buffon's Supplement. It is about the ſize of a cat, with a fur as fine as velvet, grey and black; and web-footed. It lives more in the water than on land: the fleſh is very delicate and good to eat. The body, ſays M. de Buffon, is ſeven inches (French) in length; the tail ſix inches and ſeven lines, ſlender, taper, tuberculated, convex above, flat beneath; ears rounded, and longer than uſual with otters; head, cheeks, and back, duſky, and the ſides marked regularly with the ſame colours, iſſuing from the back, extending almoſt to the belly; the ſpaces between of a yellowiſh grey; above each eye is a white ſpot; the throat, and whole under-ſide of the body, of the ſame colour; the toes before are divided, thoſe behind webbed.

M. de la Borde, as quoted by M. de Buffon, mentions another ſpecies of otter frequent in the rivers of Guiana, weighing from twenty to twenty-five pounds, and of a yellowiſh colour.

9. Muſtela gracilis, the ſlender otter. This ſpecies, from the noſe to the tip of its tail, is four feet four inches; of the tail about thirteen inches; diameter of the body ſcarcely more than five inches and a half; the fore-legs are about three inches and a half long; hind-legs about four inches. Head ſmall, eyes ſmall, ears moſt extremely ſmall, ſcarcely viſible; fore-feet webbed, hind-feet more ſtrongly ſo. Colour of the whole animal a very rich deep cheſnut or dark brown, rather paler beneath; cheeks and throat paler than the other parts, or more inclining to whitiſh. It inhabits Staten-Land.

10. Muſtela minx, the minx: colour deep cheſnut. Inhabits North America, on the banks of rivers. Feeds on fiſh, birds, and mice; and ſometimes haunts farm-yards.

II. Weaſels. Feet cleft; tongue ſmooth.

11. Muſtela barbata, the Guiana weaſel: black, with a white three-lobed ſpot under the neck. The ears are round, and covered with down; but the hair in general on the body is coarſe. It inhabits Braſil and Guiana; ſize of the marten. When it runs againſt trees, it leaves behind an unctuous matter that ſmells like muſk.

β. M. cuja. Dr. Gmelin conſiders this to be a variety of the above, though by Molina it is ſaid to have a great reſemblance, in ſhape, manners, and teeth, to a ferret; but has black hair and eyes, and a turned-up ſnout: the tail is as long as the body, and very full of hair. It is a native of Chili, and preys on mice. It breeds twice a-year, and has three or four young at a time.

12. Muſtela galera, the Guinea weaſel: entirely brown. The length of this ſpecies is about fourteen inches from noſe to tail, and of the tail, which tapers to the end, about ten: the ears nearly naked, round, and lying flat to the head: the tongue rough. The ſhape of the body like that of a rat: the hair is rough. It is an inhabitant of Madagaſcar and of Guinea, being very common about the negro-ſettlements, where it burrows like a rabbit, and is very fierce; when driven to neceſſity, it will fly at man or beaſt: it is very deſtructive to poultry.

13. Muſtela Afra, the Madagaſcar weaſel: body above brown, beneath pale yellow; tail blackiſh at the tip. It inhabits, as its trivial name imports, the iſland of Madagaſcar; and alſo the interior parts of Africa.

14. Muſtela viſon: body bright tawny; tail duſky. It inhabits North America; and is placed by Dr. Shaw among the otters. "It appears (he ſays) to approach ſo extremely near to the L. lutreola, or ſmaller otter, before deſcribed, as ſcarcely to differ in any other circumſtance but that of wanting the white throat, inſtead of which it is entirely of a fine brown, with a caſt of cheſnut: the fur is very fine and gloſſy. It is probable alſo, that this is the real *minx* of the Americans, and that what has been ſaid by Mr. Pennant relative to the minx, under the article of the leſſer otter, ſhould, in reality, be applied to this variety."

15. Muſtela pekan, the pekan: body blackiſh-tawny, on the breaſt a white ſpot. This is called Canadenſis in Gmelin; but, as we have already that name among the otters, we have adopted the name given it by Buffon, and retained by Pennant. The pekan has very long and ſtrong whiſkers, and his ears are a little pointed: the hair on his head, back, and belly, is cinereous at the roots, of a bright bay at the ends, and is very ſoft and gloſſy; there is a tinge of grey on the ſides, and between the fore-legs a white ſpot; the legs and tail are black; its toes, armed with ſharp claws, are covered with thick hair, both above and below. Its length is one foot ſeven inches; the length of its tail is about eleven. It is an inhabitant of North America.

16. Muſtela quadricolor, the white-cheeked weaſel. Mr. Pennant deſcribed this ſpecies from a living animal at London in 1774, but could not learn its native country. It had rounded ears, a broad and blunt noſe, duſky irides, and a flat head: its face, crown, legs, rump, and tail, were black; its chin and cheeks white, its throat of a rich yellow, its back and belly were of a pale yellow, intimately mixed with aſh-colour. Its body was eighteen inches long, its tail was of the ſame length, covered with long hair.

17. Muſtela foina, the marten: body blackiſh-tawny; throat and breaſt white. This is an animal of very elegant appearance. Its length from noſe to tail is about eighteen inches, and the tail is ten inches. It is a native of moſt parts of Europe, inhabiting woods and fields, and preying on birds and other ſmall animals. If taken young it may be eaſily tamed, and even rendered domeſtic. It breeds in the hollow of trees, and brings forth from three to five young at a time. The ſkin is uſed as a fur. It is repreſented at fig. 3.

18. Muſtela martes, the pine-marten: body blackiſh-tawny: throat and breaſt yellow. This ſpecies is found in the northern parts of Europe, Aſia, and America, and very rarely in the ſouth. It preys by night; lives by day in hollow trees, and ſquirrels' neſts; it feeds on young ſquirrels, mice, berries, ripe fruits, and honey: in the winter it will watch for and devour pigeons and poultry. It brings forth ſeven or eight young at a time.

19. Muſtela Guianenſis, the Guinea marten: dark-brown; forehead white; the neck has a long narrow ſtripe along the ſide. It inhabits Guinea, is about two feet long, with a tail of five inches. The fur is ſprinkled with black and white.

20. Muſtela laniger, the woolly marten: body covered with woolly hair; tail long and tapering. It inhabits Cayenne; and is ſixteen inches long, with a tail of five inches.

21. Muſtela grandis, the grey-headed marten: head, and upper part of the ſides and neck, greyiſh; the throat, and under ſide of the neck, white; and all the reſt of the body, limbs, and tail, black. Its length from the tip of the noſe to the tail is above two feet; of the tail (which is full of hair), eighteen inches. It inhabits Guiana. *Buffon's Suppl.* vi. 250.

22. Muſtela maculata, the ſpotted marten: duſky, ſpotted with white. This, which is deſcribed in Governor Phillips's Voyage to Botany Bay, is ſaid to meaſure eighteen inches from noſe to tail, and the tail nearly as much: the viſage is of a pointed ſhape; and the colour is ſaid to be black, marked all over, the tail not excepted, with irregular blotches of white: the tail is repreſented as thin, and gradually tapering to the end: the whiſkers very long.

23. Muſtela zibellina, the ſable. There are three varieties of this ſpecies: α. Body dark-tawny; forehead white; throat cinereous; β. ſnowy white; γ. has a collar of white or yellow ſpots round the neck. This ſpecies, highly valued for its fine fur, has long whiſkers, round ears, large feet, white claws, and a long and buſhy tail; the colour of the hair is black at the tips, cinereous at bottom; its chin is cinereous, ſometimes white, yellow, or ſpotted; the edges of its ears alſo yellowiſh: ſometimes its hair has a tawny caſt; for in ſpring, after changing its coat, its colour varies: there are inſtances of ſome being found of a ſnowy whiteneſs. In ſize, it is equal to that of the marten, which it alſo very much reſembles in form; but there is one ſpecific diſtinction worthy of notice; the tail of the marten is much longer than the hind-legs, when extended; that of the ſable is ſhorter. It inhabits the northern parts of Aſia and America; Siberia, Kamſchatka, and the Kurile iſles, between Kamſchatka and Japan. There are none to be found weſt of the Urallian mountains; but they increaſe in numbers as you advance thence to the eaſtward: they live in holes in the earth, or under the roots of trees: like the marten, they form neſts in the trees, and will leap with great agility from one tree to another: they are very lively, and much in motion during the night, but ſleep much in the day: they prey, during ſummer, on ermines, weaſels, and ſquirrels; but, above all, on hares; in winter, on birds; in autumn, on hurtle-berries, cranberries, and the berries of the ſervice-tree; but in that ſeaſon their ſkins are the worſt; as that kind of diet, it is ſaid, cauſes them to itch, and to rub off their fur againſt the trees. They bring forth at the end of March or beginning of April, and have from three to five at a time, which they ſuckle for four or five weeks: their excrements are moſt exceſſively fetid.

Formerly, in the Ruſſian empire, the hunting of theſe animals was the taſk impoſed on thoſe exiles who were baniſhed into Siberia. As that country became more populous, the ſables have, in a good meaſure, quitted it, and retired into the deſert foreſts and mountains. They uſually reſide on the banks of rivers, or on the ſmall iſlands near them. At preſent the ſable-hunters form themſelves into parties or troops, from five to forty each; the laſt ſubdivide into ſmaller parties, and each chooſes a leader; but there is one commander-in-chief that directs the whole. A ſmall covered boat is prepared for each party, laden with proviſion, a dog and a net for every two men, and a veſſel to bake their bread in. Each party has alſo an interpreter for the part of the country they intend to penetrate. Every party then ſets out, according to the courſe their leader points to them. They aſcend the rivers, drawing up their boats, till they arrive in the hunting-ing-country. There they ſtop, build huts, and wait till the waters are frozen, and the ſeaſon commences. Before they begin the chaſe, their leader aſſembles them; they join in a prayer to the Almighty for ſucceſs, and then ſeparate. The firſt ſable each party takes is called God's ſable, and is dedicated to the church. They then penetrate into the woods, and mark the trees as they advance, that they may know their way back. In their hunting-quarters they form huts of trees, and bank up the ſnow around them. Near theſe they lay their traps; then advance farther, and lay more traps; ſtill building new huts in every quarter, and returning ſucceſſively to every old one, to viſit the traps, and to take out the game, and to ſkin it, which none but the chief of the party muſt do. During this time they are ſupplied with proviſions by perſons who are employed to bring it on ſledges from the places on their route where they are obliged to form magazines. The traps are a ſort of pit-falls, with a looſe board placed over each, baited with fiſh or fleſh. When ſables grow ſcarce, the hunters trace them on the new-fallen ſnow to their holes, place their nets at the entrance, and ſometimes wait, watching two or three days, for the coming-out of the animal. It has happened that theſe poor people have, by the failure of their proviſions, been ſo pinched with hunger, that, to prevent the cravings of appetite, they have been reduced to take two thin boards, one of which they apply to the pit of the ſtomach, the other to the back, drawing them tight together by cords placed at the ends. Such, ſays Mr. Pennant, are the hardſhips our fellow-creatures undergo, to ſupply the wantonneſs of luxury!

The ſeaſon of chaſe being finiſhed, the hunters re-aſſemble, report to their leader the number of ſables each has taken, make complaints of offenders againſt their regulations, puniſh delinquents, and ſhare the booty. They then continue at the head-quarters till the rivers are clear of ice; when they return home, and give to every church the dedicated furs. The price of theſe furs varies from one to about ten pounds ſterling. Fine and middling ſkins are ſold without the bellies; the coarſe ones with them. The fineſt ſables are ſold in pairs perfectly ſimilar; and ſuch pairs are dearer than ſingle ones of the ſame goodneſs; for the Ruſſians want thoſe in pairs for facing caps, cloaks, and tippets. The blackeſt are reputed the beſt.

Sables are in ſeaſon from November to February; thoſe caught at any other time of the year are ſhort-haired. The hair of ſables differs in length and quality. The long hairs, which reach far beyond the inferior ones, are called *os:* the more a ſkin has of ſuch long hairs, and the blacker they are, the more valuable is the fur: the very beſt have no other but thoſe long black hairs. Below the long hairs there are, in the greater part of ſable-furs, ſome ſhorter, called *podoſie*, or under os. The more podoſie a fur has, the leſs valuable it is. Between the os and podoſie there is a low woolly kind of hair called *podſada:* the more podſada a fur has, the leſs valuable it is reputed; for the long hair will, in that caſe, take no other direction than the natural one; but the character of ſables is, that notwithſtanding the hair lies from the head towards the tail, yet it will lie in any direction you ſtroke your hand over it. Beſides various other particulars reſpecting the fur, furriers attend much to the ſize, always preferring, *cæteris paribus*, the biggeſt, and thoſe that have the greateſt gloſs. The gloſs vaniſhes in old furs: the freſh ones have what dealers in furs call a *bloomy* appearance; the old ones are ſaid to have "done blooming." The dyed ſables always loſe their gloſs, and become leſs uniform, whether the lower hairs have taken the dye or not; and the hairs are commonly twiſted or criſped, and not ſo ſtraight as the natural ones. Some fumigate the ſkins to make them look blacker; but the ſmell and the criſped condition of the long hair betray the cheat; but dying and fumigating are both detected by rubbing the fur with a moiſt linen cloth, which grows black in ſuch caſes. The Chineſe, however, have a way of dying the ſables, ſo that the colour not only laſts, which is more than the Ruſſian cheats can effect, but the fur keeps its gloſs, ſo that the fraud can only be detected by the criſped hairs

The country about the river Ud affords ſometimes ſables, of which one is often ſold for twelve or fourteen pounds ſterling. The bellies of ſables, which are ſold in pairs, are about two finger's breadth, and are, like the ſkins, tied together in parcels of forty each. One of theſe parcels ſells from one to two pounds ſterling; tails are ſold by the hundred. The very beſt furs muſt have their tails, but ordinary ones are often cropped: a hundred ſells from four to eight pounds. The common ſable is delineated on the Plate at fig. 4.

β. White ſables are rare; they are not common merchandiſe, but bought only as curioſities: ſome are yellowiſh, and are bleached in the ſpring on the ſnow: the common ſables are ſcarcely any thing better in hair and colour than the marten.

24. Muſtela Americanus, the American ſable: body light tawny; head and ears whitiſh. The ſable is alſo found in North America. The Ruſſians have often diſcovered the ſkins mixed with thoſe of the martens in the fur dreſſes which they get from the Americans by way of exchange. Their fur is more gloſſy than that of the Siberian ſable, and of a bright cheſnut colour, but of a coarſer quality. The length of the American ſable is about twenty inches; the trunk of the tail is only five; but from the rump to the end of the hairs, eight: its ears are more pointed than thoſe of the Aſiatic ſable; its feet are large and hairy, both above and below; it has five toes, with white claws on each foot: the colour of its head and ears is whitiſh; its whiſkers are ſhort and black; its whole body of a light tawny; its feet are brown.

25. Muſtela nigra, the fiſher-weaſel: back, belly, feet, and tail, black; ſides brown, face cinereous, noſe black. This ſeems deſcribed only by Mr. Pennant, who informs us that, notwithſtanding its name, it is not an amphibious animal. It is a native of North America, where it is ſuppoſed, from the number of ſkins imported, to be by no means uncommon; not leſs than 580 having been brought in one ſeaſon from New York and Pennſylvania. It varies in colour; and its length from noſe to tail is twenty-eight inches; of the tail, which is very full and buſhy, ſeventeen. The ears are broad, round, and duſky, edged with white: the fore legs are ſhorter than the hind: there are five toes on the fore-feet, and the ſame number, but ſometimes only four, on the hind; the claws are large, white, and crooked.

26. Muſtela putorius, the polecat, or fitchet: body blackiſh yellow; mouth and ears white. This is an animal well known, and eaſily diſtinguiſhed. There is a proverbial expreſſion, "I ſmell a rat;" but any one coming near it may ſoon ſmell a polecat, as it is exceſſively fetid, being furniſhed, like ſeveral others of the weaſel tribe, with certain receptacles which ſecrete a thickiſh fluid of a peculiarly ſtrong and offenſive odour. The general colour of the animal is an extremely-deep blackiſh-brown, with a tawny caſt ſlightly intermixed: the ears are edged with white, and the ſpace round the muzzle is alſo whitiſh. The general length of this animal is ſeventeen inches, excluſive of the tail, which meaſures about ſix inches. See the Plate, fig. 5.

The polecat is found in moſt parts of Europe; alſo in ſome of the Aſiatic regions, as in Siberia, where it is ſaid to be generally found with the rump of a whitiſh or yellowiſh tinge, ſurrounded with black. It commonly forms itſelf a ſubterraneous retreat, ſometimes beneath the roots of large trees, and ſometimes under hay-ricks, and in barns. It preys indiſcriminately on the ſmaller animals, and is very deſtructive to poultry. It is alſo, like the ferret, a cruel enemy to rabbits, which it deſtroys by ſucking their blood, inſtead of tearing them immediately in pieces. It ſteals into barns, pigeon-houſes, &c. where it occaſionally makes great havock;

biting off the heads of fowls and pigeons, and then carrying them away to its retreat; and ſometimes it carries off the heads alone. During the ſummer, however, it principally frequents rabbit-warrens, or the hollow trunks of trees, &c. &c. and prowls about in queſt of young birds, rats, field-mice, &c. According to M. de Buffon, a ſingle family of polecats is ſufficient to deſtroy a whole warren of rabbits; and he obſerves, that this would be a ſimple method of diminiſhing the number of rabbits where they are too abundant. In Spain the ferret is ſaid to have been formerly introduced for a ſimilar purpoſe. The polecat alſo preys occaſionally on fiſh: of which a curious inſtance is recorded in Bewick's Hiſtory of Quadrupeds. During a ſevere ſtorm, one of theſe animals was tracked in the ſnow from the ſide of a rivulet to its hole, at ſome diſtance from it: as it was obſerved to have made frequent trips, and as other marks were ſeen in the ſnow, which could not eaſily be accounted for, it was thought a matter worthy of more diligent enquiry; its hole was accordingly examined, the animal taken, and eleven fine eels were diſcovered to be the fruits of its nocturnal excurſions, the unuſual marks in the ſnow having been made by the motion of the eels while dragged along in the animal's mouth. That the polecat, however, ſometimes feeds in this manner, is, in reality, no new obſervation; ſince Aldrovandus aſſures us, that it will occaſionally take up its reſidence in the hollow banks of rivulets, in order to lie in wait for, and prey upon, fiſh. The polecat is alſo delighted with milk, and will viſit the dairy in order to indulge in this article: it has been known to attack bee-hives in the winter-ſeaſon, and to feed on the honey. The ſpring is the ſeaſon in which it breeds; the female producing three or four at a birth, which ſhe is ſaid to ſuckle but a ſhort time, accuſtoming them early to ſuck the blood of the animals which ſhe brings to them, as well as eggs, &c. The polecat has been known to breed with the ferret: and it is ſaid to be a practice with warreners, who keep theſe animals, to procure a mixed breed from time to time, which are of a colour between the ferret and the polecat, or of a dingy yellowiſh-brown.

The polecat is a ſtrong and active creature, and will ſpring with great vigour and celerity when preparing to attack its prey, or to eſcape from purſuit; at which time it arches its back conſiderably, in order to aſſiſt its effort. The fur is beautiful, and the ſkin, when properly dreſſed, is numbered among the commercial furs, and uſed for tippets and other articles of dreſs. It is added by Aldrovandus, that the furriers endeavour to obtain ſkins taken from ſuch animals as have been killed during the winter, as being far leſs fetid than thoſe killed in the ſpring and ſummer.

β. M. putorius Guianenſis, the South-American fitchet: colour lighter; tail ſhorter. This variety has a long ſharp noſe; its cheeks, its throat, and the ſides of its neck, are black; its forehead, and the ſides of its head, to its ears, are white; its ears are ſhort, round, and edged with white; from each ear a narrow ſtripe extends along the ſides of its neck: its body is covered with coarſe hair, grey at the baſe, black and white at the ends; its legs and feet are black, tinged with red; its toes are not unlike thoſe of a rat: the length of this animal is above twenty-one inches; its tail is buſhy, of a bright cheſnut, mixed with white. It is rather ſhorter in proportion than the common polecat: it inhabits Guiana. *Buffon's Suppl.* iii.

27. Muſtela furo, the ferret: eyes red and fiery. In manners and form the ferret reſembles the polecat, but is a ſmaller animal; its uſual length being about fourteen inches, excluſive of the tail, which is about five. Linnæus ſeems to entertain a doubt whether it may be truly diſtinct from the polecat; it is, however, a native of Africa, and not of Europe, and ſupports with difficulty the cold of an European winter; whereas the polecat is found not only in the temperate, but alſo in the colder, parts of the European regions; to which may be added, that, excluſive of its ſmaller ſize, it is of a more ſlender ſhape, and the ſnout is ſharper in proportion than in the former animal. The ferret is uſed for rabbit-hunting in preference to the polecat, becauſe it is more eaſily tamed; but it is neceſſary to keep it in a warm box, with wool or ſome other ſubſtance in which it may imbed itſelf. It ſleeps almoſt continually; and, when awake, immediately begins to ſearch about for food. It is uſually fed with bread and milk; but its favourite food is the blood of the ſmaller animals. It is by nature an enemy to the rabbit; and it is affirmed by Buffon, that, whenever a dead rabbit is preſented for the firſt time to a young ferret, he flies upon it in an inſtant, and bites it with great fury; but, if it be alive, he ſeizes it by the throat and ſucks its blood. When let into the burrows of rabbits, the ferret is always muzzled, that it may not kill them in their holes, but only drive them out in order to be caught in the nets. If the ferret be put in without a muzzle, or happens to diſengage himſelf from it, he is often loſt; for after ſucking the blood of the rabbit, he falls aſleep, and cannot be regained, except ſometimes by ſmoking the hole, in order to oblige him to come out; but, as this is a practice which does not always ſucceed, it continues to lead a rapacious and ſolitary life in the warren, as long as the ſummer continues, and periſhes by the cold of the winter.

We are told by Strabo, that the ferret was brought into Spain from Africa, and it is ſuppoſed that this was done in order to free that country from the vaſt number of rabbits with which it was overrun; and from Spain it was gradually introduced into other European countries. The ferret is an animal of iraſcible nature; and, when irritated, his odour, which is at all times diſagreeable, becomes far more ſo than uſual. The general colour of the ferret is a very pale yellowiſh-brown, or cream-colour; and the eyes are of a bright and lively red. See fig. 6.

28. Muſtela Sarmatica, the Sarmatian weaſel: under parts black; upper parts variegated with brown and yellow. The Sarmatian weaſel meaſures about fourteen inches to the tail, and the tail ſix inches. The head, feet, and under ſides of the body, are black, the upper parts brown, variegated with irregular ſpots or patches of tawny yellow: the mouth is ſurrounded with white; the face is croſſed by a white band beyond the eyes, paſſing beneath the ears on each ſide down to the throat; another white band croſſes the back part of the head, and runs down on each ſide over the ſhoulders; and the upper part of the neck is varied with yellow: the tail is black, but intermixed with white and fulvous hairs. This ſpecies inhabits Poland and the ſouthern provinces of Ruſſia; in Aſia, the mountains of Caucaſus, Georgia, and Bucharia. It is a moſt voracious creature, feeding on the marmots, mice, and ſmaller animals, where it reſides. It ſeizes its prey, and firſt ſucks out the blood. It lives uſually in holes made by other beaſts; but is not incapable of digging a burrow for itſelf. It ſleeps little, preys by night, and is very fierce and untameable. Its eyes are of a flaming brightneſs. It is very active, and moves by frequent jumps; its ſmell is very fetid, eſpecially when it erects its tail, which it does when angry. It copulates in the ſpring, goes two months, and brings from four to eight young ones, according to the report of the natives.

29. Muſtela Sibirica, the Siberian weaſel: body tawny; feet very hairy. This has a black face, whitiſh about the noſtrils, and ſpotted towards its eyes; the reſt of the animal is of a deep yellow, nearly approaching to fox or orange colour; its throat is ſometimes ſpotted with white; its tail is very buſhy, and of a deeper colour than the body; its hair in general is looſe and long, and the ſoles of its feet are deeply covered with fur. Its body is more ſlender than that of the polecat, and approaches nearer to the form of the ſtoat. Its length is about twelve inches; its tail ſix. It begins to appear in the Altaic Mountains, between the Oby and the Irtiſh; from whence it is common, on wooded mountains, to the Amur and the Lake

Baikal. In its haunts, manners, and food, it has a great reſemblance to the ſable; but it does not extend ſo far north.

30. Muſtela erminea, the ermine and ſtoat. There are two varieties: α. M. erminea æſtiva, the ſummer ermine, or ſtoat; having the body tinged or ſpotted with red; β. M. erminea hyberna, the winter or proper ermine, which is entirely white: but in both varieties the tail is black at the tip; this, therefore, is the ſpecific character. This animal reſembles the weaſel in general appearance, but is conſiderably larger; the body, excluſive of the tail, meaſuring ten inches, and the tail five and a half: the tip of the tail is alſo conſtantly black, whatever may be the gradation or caſt of colour on the body; for the ſtoat, in the northern regions, becomes milk-white during the winter, in which ſtate it is commonly called the *ermine*. It is ſometimes found of this colour in our own country; and Mr. Pennant ſays, that in 1780 he ſaw, in his own grounds, two in the ſtate of the moſt perfect and beautiful ermines.

They are met with alſo in Newfoundland and Canada: their ſkins are a great article of commerce in Norway and Siberia. In the latter country, they are found in plenty, in birch foreſts; but there are none in thoſe of fir or pine. Their ſkins bring on the ſpot from two to three pounds per hundred. In Norway they are taken in traps, baited with fleſh; in Siberia, they are either ſhot with blunt arrows, or taken in a trap made of two flat ſtones, propped by a ſtick, to which is faſtened a baited ſtring, which, on the leaſt touch of the animal, falls down and kills it. Pontoppidan in his Hiſtory of Norway ſays, that the furs of Norway and Lapland are better than thoſe of Ruſſia, which ſooner turn yellow; and for this reaſon the former are in greater requeſt, even at Peterſburgh.

The ermine catches mice like the cat; and, when practicable, carries off his prey. He is particularly fond of eggs; and, when the ſea is calm, he ſwims over to the iſlands which are near the coaſt of Norway, where there are vaſt quantities of ſea-fowls. It is alleged, that, when the female brings forth in an iſland, ſhe conducts her young to the continent upon a piece of wood, piloting them with her noſe. This animal, though ſmall, kills thoſe of a much larger ſize, as the rein-deer and bear; he jumps into one of their ears when they are aſleep, and adheres ſo faſt by his teeth and claws, that thoſe creatures cannot diſengage him. He likewiſe ſurpriſes eagles and heath-cocks, by fixing on them, and never quitting them, even when they mount in the air, till the loſs of blood brings them to the ground. Theſe, however, are Pontoppidan's ſtories, which are generally to be received with ſome grains of allowance. The ermine differs from the common weaſel in this particular; that it does not enter houſes, but confines itſelf to the fields. The ermine is ſhown at fig. 7. and the ſtoat, or ſpotted ermine, at fig. 8.

31. Muſtela vulgaris, the common weaſel: body pale reddiſh-brown, beneath white; tail ſimilar in colour to the body. The common weaſel is one of the ſmalleſt ſpecies in this numerous tribe of quadrupeds. Its general length is about ſeven inches, excluſive of the tail, which meaſures near two inches and a half. Its colour is a pale reddiſh or yellowiſh-brown, and beneath it is entirely white; but below the corners of the mouth, on each ſide, is a brown ſpot: the ears are ſmall and rounded, and the eyes are black. See fig. 9.

This little animal is poſſeſſed of a conſiderable degree of elegance in its aſpect, and its motions are light and eaſy; but it has the ſame unpleaſant ſmell with the ſtoat, and ſome other ſpecies. It is an inhabitant of the cavities under the roots of trees, as well as of banks near rivulets, &c. from which it occaſionally ſallies forth in queſt of birds, field-mice, &c. It even attacks young rabbits, and other animals of far ſuperior ſize to itſelf; but its chief prey, at leaſt in this country, ſeems to be the field-mouſe, of which it deſtroys great multitudes. From the extreme flexibility of its body, and its wonderful activity, it readily aſcends the ſides of walls, and by this means purſues its prey into the moſt diſtant retirements; and is a frequent inhabitant of barns and granaries. The weaſel produces four or five young at a time; preparing for them a bed of moſs, graſs, &c. An inſtance is given by M. de Buffon, of a weaſel's neſt being found in the carcaſe of a wolf, which had been hung up near a wood: the neſt was made in the cavity of the thorax. The count, in his firſt deſcription of the weaſel, affirmed that it was a perfectly untameable animal; but he afterwards received very authentic accounts of weaſels which had been ſo completely tamed as to exhibit every mark of attachment to their benefactors, and to be as familiar as a cat or a lap-dog. An account of this kind is given by one of his correſpondents in the 7th ſupplemental volume of his Natural Hiſtory, which amply confirms the truth of this; and, among other curious particulars, it is obſerved, that, when aſleep, the muſcles of this little animal are in a ſtate of extreme flaccidity, ſo that it may be taken up by the head, and ſwung backwards and forwards, in the manner of a pendulum, ſeveral times before it wakes. Mademoiſelle de Laiſtre, in a letter on this ſubject, gives a very pleaſing account of the education and manners of a weaſel which ſhe took under her protection. She affirms, that, far from having any predilection for meat in a ſtate of putrefaction, it, on the contrary, always delighted moſt in that which was perfectly freſh. For the two or three firſt days it was fed with warm milk; and afterwards with veal, beef, or mutton. It frequently ate from her hand, and ſeemed to be more delighted with this manner of feeding than any other. It was very fond of milk: "If I pour (ſays M. de Laiſtre) ſome milk into my hand, it will drink a good deal; but, if I have not this complaiſance, it will ſcarcely drink a drop. When it is ſatisfied, it generally goes to ſleep: my chamber is the place of its reſidence, and I have found a method of diſpelling its ſtrong ſmell by perfumes: by day it ſleeps in a quilt, into which it gets by an unſown place on the edge, which it has diſcovered. By night it is kept in a wired box or cage, which it always enters with reluctance, and leaves with pleaſure. If it be ſet at liberty before my time of riſing, after a thouſand little playful tricks, it gets into bed, and goes to ſleep in my hand or on my boſom. If I am up firſt, it ſpends a full half hour in careſſing me, playing with my fingers like a little dog, jumping on my head, on my neck, running round my arms and body, with a lightneſs and elegance which I never beheld in any other animal. If I preſent my hands, at the diſtance of three feet, it jumps into them without ever miſſing. It ſhows a great deal of fineſſe and cunning in order to compaſs its ends; and ſeems to diſobey certain prohibitions merely through frolic. During all its actions it ſeems ſolicitous to divert and to be noticed; looking, at every jump and at every turn, in order to ſee whether you obſerve it or no; and, if no notice be taken of its gambols, it ceaſes them immediately, and betakes itſelf to ſleep; and, even when moſt aſleep, if you wake it, it inſtantly reſumes its gaiety, and frolics about in as ſprightly a manner as before. It never ſhows any ill-humour, unleſs when confined, or teazed too much, in which caſe it expreſſes its diſpleaſure by a ſort of murmur, very different from that which it utters when pleaſed. In the midſt of twenty people this little animal diſtinguiſhes my voice, ſeeks me out, and ſprings over every body to come at me. His play with me is the moſt lively and careſſing; with his two little paws he pats me on the chin with an air and a manner expreſſive of delight: this, and a thouſand other preferences, ſhow that his attachment to me is real. When he ſees me dreſſed for going out, he will not leave me, and it is not without ſome trouble that I can diſengage myſelf from him: he then hides himſelf behind a cabinet near the door, and jumps upon me, as I paſs, with ſo much celerity that I frequently can ſcarcely ſee him. He ſeems to reſemble a ſquirrel in vivacity, agility, voice, and manner of murmuring. During the ſummer, he ſqueaks and runs about all night long;

but, ſince the commencement of the cold weather, I have not obſerved this.

"From his delight in drinking milk out of my hand, into which I pour a very little at a time, and his cuſtom of ſipping the little drops and edges of the fluid, it ſhould ſeem that he drinks dew in the ſame manner. He very ſeldom drinks water, and that only with great caution, and in defect of milk; and then ſeems only to refreſh his tongue once or twice: he even ſeems to be afraid of water. During the hot weather it rained a good deal. I preſented to him ſome rain-water in a diſh, and endeavoured to make him go into it, but could not ſucceed. I then wetted a piece of linen cloth in it, and put it near him, when he rolled upon it with extreme delight. One ſingularity in this charming animal is his curioſity; it being impoſſible to open a drawer or a box, or even to look at a paper, but the little creature will examine it alſo. If he gets into any place where I am afraid of permitting him to ſtay, I take a paper or a book, and look attentively at it; when he immediately runs upon my hand and ſurveys with an air of curioſity whatever I happen to hold. I muſt farther obſerve, that he plays with a young cat and dog, both of ſome ſize, getting about their necks, backs, and paws, without their doing him the leaſt injury."

But we have alſo the teſtimony of Aldrovandus in favour of the weaſel's being ſometimes completely tamed; ſo that Buffon might have found an exception to his general character of the animal, even if he had not received theſe modern atteſtations. Aldrovandus even expreſsly aſſerts, that weaſels are eaſily tamed, and that, when tame, they are remarkably playful; adding, at the ſame time, from Cardan, that their teeth ſhould be rubbed with garlick, after which they will not preſume to bite: "Cæterum animadvertendum eſt inter animalia muſtelas facile cicurari, et præcique quando ad mentem Cardani, illarum dentes allio perfricantur, quia impoſterum quempiam mordicus apprehendere non audent, et cicuratæ colluſionibus quotidie indulgent." Aldrovandus alſo quotes (from Strozza) part of an elegy on the death of a tame weaſel:

Nil poterat puero te gratius eſſe, nec illi
Morte tua quicquam triſtius eſſe poteſt.
Tu digitos molli tentabas improba morſu,
Porrecto ludens ſemiſupina pede,
Et mollem e labiis noras ſorbere ſalivam,
Et quiddam exiguo murmure dulce queri.

Loving and lov'd, thy maſter's grief!
Thou could'ſt th' uncounted hours beguile;
And, nibbling at his fingers oft,
Watch anxious for th' approving ſmile:
Or, ſtretching forth the playful foot,
Around in wanton gambols rove,
Or gently ſip the roſy lip,
And in light murmurs ſpeak thy love.

β. M. nivalis: body white; a few black hairs at the tip of the tail. It appears that in ſome inſtances, and in ſome countries, the weaſel turns white, like the ſtoat, but ſtill preſerving the black tip to the tail.

32. Muſtela melina, the pale weaſel: back and belly pale cinereous-yellow; face, crown, legs, and tail, black. Head flat; ears rounded; noſe broad, blunt; cheeks and chin white; throat rich yellow. Length eighteen inches; tail long as the body.

33. Muſtela quiqui: brown, with cuneiform ſnout. This ſpecies inhabits Chili, living under ground, and feeding on mice, &c. It is principally diſtinguiſhed by its cuneiform or wedge-ſhaped ſnout. The ears are ſhort and round, with a white ſpot in the middle; the legs and tail ſhort; the feet like thoſe of a lizard. The length of the animal from noſe to tail thirteen inches.

34. Muſtela touan: body above ferruginous, beneath white: tail naked towards the tip. This is a very ſmall ſpecies, leſs than the common weaſel, and is a native of Cayenne, living in hollow trees, and feeding on worms and inſects. The upper part of the ſnout, the head, and the whole body as far as the tail, is blackiſh; the ſides of the body and limbs bright ferruginous; and the lower parts, from throat to tail, white.

The following are perhaps included in ſome of the foregoing deſcriptions, though under other names.

35. The ermined weaſel, deſcribed by Pennant in his edition of 1793, and by Harriſon, N° 78. Body white and ſpotted; tail annulated, ears roſe-coloured.

36. The lobſter-weaſel, common in Norfolk and Suffolk, ſomewhat like a polecat, but the volume of its body larger; colour reddiſh brown or bright chocolate; throat white, tinged with yellow; ſnout ſharp: ſmell when hunted very fetid.

37. The muſky weaſel. This has the upper part of the body cinereous, daſhed with yellow, and marked with ſome obſcure duſky lines: the noſe, part of the cheeks, the legs, and end of the tail, black: on the middle of the cheeks is a white ſpot. It is a native of Bengal, and is ſaid to have a ſtrong muſky ſcent. Size not mentioned. Deſcribed by Mr. Pennant from a drawing

38. The ſlender-toed weaſel. This is a ſmall ſpecies, meaſuring from noſe to tail ſeven inches, and the tail is of the ſame length: the ears ſhort and rounded: the fur grizzled minutely with black and rufous: the toes five in number, and very long and ſlender; each lobated at the bottom of the firſt joint: claws ſmall: the upper part of the toes and part of the legs covered with ſhort velvet-like down: the tail is buſhy, and covered with long rat-coloured hair. This ſpecies is deſcribed by Mr. Pennant from a drawing. It is ſaid to be a native of Cochinchina.

MUS'TEOUS, *adj.* Containing muſt; reſembling muſt. *Aſh.*

MUS'TER, a town of the duchy of Courland: fifty-ſix miles ſouth-eaſt of Seelburg.

To MUS'TER, *v. a.* [*mouſteren*, Dut. *mouſtre*, old Fr. a ſhow or exhibition.] To bring together; to form into an army.—The captain, half of whoſe ſoldiers are dead, and the other quarter never *muſtered* nor ſeen, demands payment of his whole account. *Spenſer on Ireland.*—Having *muſtered* up all the forces he could think of, the clouds above, and the deeps below; Theſe, ſays he, are all the ſtores we have for water; and Moſes directs us to no other for the cauſes of the deluge. *Woodward's Nat. Hiſt.*

Could *muſter* up, as well as you,
My giants and my witches too. *Donne.*

To MUS'TER, *v. n.* To aſſemble in order to form an army.—Why does my blood thus *muſter* to my heart? *Shakeſpeare.*

They reach the deſtin'd place,
And *muſter* there, and round the centre ſwarm,
And draw together. *Blackmore's Creation.*

To PASS MUSTER. To be allowed.—Such excuſes will not *paſs muſter* with God, who will allow no man's idleneſs to be the meaſure of poſſible or impoſſible. *South's Sermons.*—Double-dealers may *paſs muſter* for a while; but all parties waſh their hands of them in the concluſion. *L'Eſtrange.*

MUS'TER, *ſ.* A review of a body of forces:

All the names
Of thy confederates too, be no leſs great
In hell than here; that, when we would repeat
Our ſtrengths in *muſter*, we may name you all. *B. Jonſon.*

A regiſter of forces muſtered.—Deception takes wrong meaſures and makes falſe *muſters*, which ſounds a retreat inſtead of a charge, and a charge inſtead of a retreat. *South Sermons.*

It is needleſs to enquire into the antiquity of muſters, ſince they muſt have exiſted ever ſince an army has been aſſembled. Without a muſter it would not be known whether the feudal tenants, or others liable to furniſh ſoldiers, has provided their due number; nor could a general otherwiſe know the true ſtrength of his army, the ground they would occupy, the quantity of proviſion and forage neceſſary for their ſubſiſtence, and that of their horſes; nor the money required for paying them. The object of a muſter was not only to aſcertain the number of men and horſes, but likewiſe to examine their armour and weapons.

Great abuſes having crept into the practice of muſtering the troops in this kingdom, ſo that the real effective ſtrength of the army could never be exactly aſcertained, a new regulation has taken place, in virtue of which the ſeveral regiments and corps are muſtered every month by the regimental paymaſter, and detachments of regiments in the reſpective diſtricts in which they are ſtationed, by an officer called paymaſter of the diſtrict. Theſe have ſuperſeded the commiſſaries of muſters; and the pay-liſts and muſter-rolls of the army are thus made to tally with each other. By 49 Geo. III. c. 12. every regiment, troop, or company, is to muſter twice a-year at leaſt. The muſter is a review on a ſmaller ſcale, and is often uſed preparatory to a REVIEW. See that word.

MUS'TER-BOOK, *ſ.* A book in which the forces are regiſtered.—Shadow will ſerve for ſummer: prick him; for we have a number of ſhadows to fill up the *muſter-book. Shakeſpeare's Hen. IV.*

MUS'TER-MASTER, *ſ.* One who ſuperintends the muſter to prevent frauds.—*Muſter-maſters* carry the ableſt men in their pockets. *Raleigh.*

MUS'TER-ROLL, *ſ.* A regiſter of forces.—How many inſignificant combatants are there in the Chriſtian camp, that only lend their names to fill up the *muſter-roll*, but never dream of going upon ſervice! *Decay of Piety.*

One tragick ſentence, if I dare deride,
Which Betterton's grave action dignify'd;
Or well-mouth'd Booth with emphaſis proclaims,
Though but perhaps a *muſter-roll* of names. *Pope.*

MUS'TERFIELD, a town in South Carolina: ten miles eaſt of Kingſton.

MUS'TERING, *ſ.* The act of calling over a liſt of a ſhip's company, or a regiment, or any particular detachment thereof, who are accordingly ſummoned to anſwer by their names on the occaſion.

MUSTEWA'H, a mountain of Algiers: forty miles ſouth of Conſtantina.

MUS'TILY, *adv.* Mouldily.

MUS'TINESS, *ſ.* Mould; damp foulneſs.—Keep them dry and free from *muſtineſs. Evelyn.*

MUS'TY, *adj.* Mouldy; ſpoiled with damp; moiſt and fetid.—Piſtachoes, ſo they be good and not *muſty*, made into a milk, are an excellent nouriſher. *Bacon's Nat. Hiſt.*—Let thoſe that go by water to Graveſend prefer lying upon the boards than on *muſty* infectious ſtraw. *Harvey.*

Waſt thou fain, poor father,
To hovel thee with ſwine, and rogues forlorn,
In ſhort and *muſty* ſtraw. *Shakeſpeare's K. Lear.*

Stale; ſpoiled with age.—While the graſs grows—the proverb is ſomewhat *muſty. Shakeſpeare.*—Vapid with fetidneſs:

Let not, like Nævius, every errour paſs;
The *muſty* wine, foul cloth, or greaſy glaſs. *Pope.*

Dull; heavy; wanting activity; wanting practice in the occurrences of life.—Xantippe, being married to a bookiſh man who has no knowledge of the world, is forced to take his affairs into her own hands, and to ſpirit him up now and then, that he may not grow *muſty* and unfit for converſation. *Addiſon.*

MUSTYGAN'NIM, MOSTAGAN, or MOSTAGANIN, a ſeaport town of Algiers, in the province of Maſcara or Tremecen, ſuppoſed to be the *Cartennæ* of Pliny and Ptolemy. It is built in the form of a theatre, with a full proſpect of the ſea; but in every other direction it is ſurrounded with hills. In one of the vacant ſpaces about the middle of it are the remains of a Mooriſh caſtle. The north-weſt corner of the city, which overlooks the port, is ſurrounded with a wall of hewn ſtone; and has another caſtle built in a more regular manner, defended by a Turkiſh garriſon; however, the chief ſecurity of the place depends upon the citadel, which is built on one of the adjoining eminences, and commands both the city and country. The town is well ſupplied with water, and its haven is commodious and ſafe. Nevertheleſs, though it is one of the largeſt towns in the province of Maſcara, it is neither beautiful, nor has any flouriſhing trade or manufacture. Behind it riſes Mount Magaraba, ſo called from a people of that name, who inhabit it. This mount extends itſelf about ten leagues from eaſt to weſt along the Mediterranean coaſt. The occupiers live in tents, feed a great multitude of flocks, and pay 12,000 crowns yearly to the dey of Algiers. The town is diſtant eight miles north-eaſt from Tremecen. Lat. 36. 6. N. lon. 0. 30. E.

MUSUE'LA, a town of Spain, in the province of Jaen, on the left bank of the Guadalquivir: ſeven miles north-eaſt of Jaen, and fifty north of Grenada.

MUSU'MA, a town of Japan, in the iſland of Niphon: ſixty-five miles weſt of Meaco.

MUSU'RUS (Marcus), a modern Greek poet and critic, was born in the iſle of Crete about the year 1481; from thence he went to Italy, where he ſtudied under the learned John Laſcaris, and by an almoſt inceſſant application he acquired a thorough knowledge of Greek and Latin literature. From 1503 to 1509, he was Greek profeſſor in the univerſity of Padua, where his ſalary was trifling, and his labour very great. When the univerſity of Padua was broken up by the wars, Muſurus went to Venice, where he publicly taught Greek many years with great applauſe. At the ſame time he aſſiſted Aldus Manutius in his editions of the Greek writers, many of which he corrected, prefixing to them Greek epigrams or prefaces of his own compoſition. Of theſe, his Elegy prefixed to the Aldine edition of Plato, in 1513, is the moſt celebrated. In 1516, he was invited to Rome by Leo XI. who preſented him with the archbiſhopric of Malvaſia, but he enjoyed this dignity only a ſhort time. He died in the following year, at the early age of thirty-ſix, juſt at the period when the higheſt expectations were entertained by the learned of his future ſervices in the cauſe of literature. Of his epigrams, ſeveral have been publiſhed, with his Encomium of Plato; and to him we are indebted for the firſt complete editions of Ariſtophanes and Athenæus.

MUSWELL HILL', a village in Middleſex, five miles and a half north from London, in the pariſh of Hornſey. It derives its name from a famous well on the hill, where, formerly, the fraternity of St. John of Jeruſalem, in Clerkenwell, had their dairy, with a large farm adjacent. Here they built a chapel for the benefit of ſome nuns, in which they fixed the image of our Lady of Muſwell. Theſe nuns had the ſole management of the dairy; and it is ſingular, that the ſaid well and farm do, at this time, belong to the pariſh of St. James, Clerkenwell. The water of this ſpring was then deemed a miraculous cure for ſcrofulous and cutaneous diſorders. For that reaſon it was much reſorted to; and, as tradition ſays, a king of Scotland made a pilgrimage hither, and was perfectly cured!

There is not within one hundred miles of London a village more rural and pleaſant, or that can boaſt more varied and extenſive proſpects. Here are alſo many genteel ſeats of perſons of reſpectability. *Wilkes's Britiſh Directory.*

MUT, a town of Hindooſtan, in Bahar: twenty-five miles ſouth of Patna.

MUT-BE'DR, a town of Egypt, on the eaſt branch of the Nile: four miles ſouth-weſt of Manſora.

MUT-KA'MAR, a town of Egypt, on the eaſt branch of the Nile: twenty-three miles north of Cairo, and twenty-ſix ſouth of Manſora.

MUT-EL-KO'LI, a town of Egypt: twelve miles ſouth of Damietta.

MU'TA, in mythology, the goddeſs of liberty. *Aſh.*

MUTABE'A, or MOUTABEA, *ſ.* in botany. See CRYPTOSTOMUM.

MUTABIL'ITY, *ſ.* [*mutabilité*, Fr. *mutabilis*, Lat.] Changeableneſs; not continuance in the ſame ſtate.—The *mutability* of that end, for which they are made, maketh them alſo changeable. *Hooker.*—Plato confeſſes that the heavens and the frame of the world are corporeal, and therefore ſubject to *mutability*. *Stillingfleet.*

My fancy was the air, moſt free,
And full of *mutability*. *Suckling.*

Inconſtancy; change of mind:

Ambitions, covetings, change of prides, diſdain,
Nice longings, ſlanders, *mutability*. *Shakeſpeare's Cymb.*

MU'TABLE, *adj.* Subject to change; alterable.—Of things of the moſt accidental and *mutable* nature, accidental in their production, and *mutable* in their continuance, yet God's preſcience is as certain in him as the memory is or can be in us. *South.*—Inconſtant; unſettled.—I ſaw thee *mutable* of fancy. *Milton.*

For the *mutable* rank-ſcented many,
Let them regard me as I do not flatter. *Shakeſpeare.*

MU'TABLENESS, *ſ.* Changeableneſs; uncertainty; inſtability.

MU'TABLY, *adv.* Changeably; inconſtantly.

MUTA'TION, *ſ.* [Fr. from *mutatio*, Lat.] Change; alteration.—To make plants grow out of the ſun or open air is a great *mutation* in nature, and may induce a change in the ſeed. *Bacon.*

His honour
Was nothing but *mutation*; ay, and that
From one bad thing to worſe. *Shakeſpeare's Cymbeline.*

MUTATIO'NES, *ſ.* Among the Romans, poſt-ſtages, or places where the public couriers were ſupplied with freſh horſes.—The *mutationes* were wholly deſigned for the uſe of theſe couriers, or meſſengers of ſtate; in which reſpect they differ from *manſiones*. *Chambers.*

MUTBUN'NY, a town of Hindooſtan, in Bahar: twenty-three miles ſouth-ſouth-eaſt of Bettiah. Lat. 26. 28. N. lon. 85. 2. E.—Another town of Hindooſtan, in Bahar: fifteen miles north-eaſt of Durbungah. Lat. 26. 20. N. lon. 86. 16. E.

MUTCHANG', a town of Meckley: 104 miles ſouth-ſouth-eaſt of Munnypour.

MUTCH'KIN, *ſ.* A liquid meaſure uſed in Scotland; it contains four gills, and is the fourth part of a Scotch pint. *Ency. Brit.*

MUTE, *adj.* [*muet*, Fr. *mutus*, Lat. *μυδος*, Gr. Chaucer writes *muet*.] Silent; not vocal; not having the uſe of voice:

Mute ſolemn ſorrow, free from female noiſe,
Such as the majeſty of grief deſtroys. *Dryden.*

Having nothing to ſay.—The heav'nly choir ſtood *mute*. *Milton.*

Say ſhe be *mute*, and will not ſpeak a word;
Then I'll commend her volubility. *Shakeſpeare.*

In mineralogy, metals which do not ring when ſtruck with other hard ſubſtances.

MUTE, or *ſtanding mute*, in law, is when a perſon, being arraigned, either cannot ſpeak or refuſes to anſwer or plead. A priſoner may ſtand mute two ways. 1. When he ſpeaks not at all: in which caſe it is inquired, whether he ſtand mute of malice, or by the act of God; if by the latter, then the judge, *ex officio*, ought to inquire whether he be the ſame perſon, and of all other pleas which he might have pleaded if he had not ſtood mute. 2. When he pleads not directly, or will not put himſelf upon the inqueſt to be tried. If he be found to be obſtinately mute, then, if it be on an indictment of high treaſon, it is clearly ſettled that ſtanding mute is equivalent to a conviction, and he ſhall receive the ſame judgment and execution. So likewiſe, in petty larceny, and in all miſdemeanors, ſtanding mute is equivalent to conviction. But in appeals or indictments for other felonies, or petit treaſon, it was the cuſtom till of late not to conſider him convicted, ſo as to paſs judgment for the felony; but for his obſtinacy he was to receive the terrible ſentence of penance, or *peine forte et dure*. Before this was pronounced, the priſoner was allowed not only *trina admonitio*, but alſo a convenient reſpite for a few hours, and the ſentence was diſtinctly read to him, that he might know his danger; and, after all, if he continued obſtinate, and his offence was clergyable, he was allowed the benefit of his clergy, even though he was too ſtubborn to pray it.

The judgment of *penance* for ſtanding mute was as follows: That the priſoner be remanded to the priſon from whence he came; and put into a low dark chamber, and there be laid on his back, on the bare floor, naked, unleſs where decency forbids; that there be placed upon his body as great a weight of iron as he could bear, and more; that he have no ſuſtenance, ſave only on the firſt day three morſels of the worſt bread; and on the ſecond day three draughts of ſtanding water, that ſhould be neareſt to the priſon-door; and in this ſituation this ſhould be alternately his daily diet, *till he died*, or (as anciently the judgment ran) *till he anſwered*. *Brit.* iv. 22. *Flet.* i. 34. § 33.

It has been doubted whether this puniſhment ſubſiſted at the common law, or was introduced in conſequence of ſtat. Weſt. 1. 3 Ed. I. c. 12. which latter ſeems to be the better opinion. For not a word of it is mentioned in Glanvil or Bracton, or in any ancient author, caſe, or record, (that hath yet been produced,) previous to the reign of Edward I. but there are inſtances on record in the reign of Henry III. where perſons accuſed of felony, and ſtanding mute, were tried in a particular manner, by two ſucceſſive juries, and convicted; and it is aſſerted by the judges in 8 Hen. IV. that by the common law, before the ſtatute, ſtanding mute on an appeal amounted to a conviction of the felony. This ſtatute of Edward I. directs ſuch perſons "as will not put themſelves upon inqueſts of felonies, before the judges at the ſuit of the king, to be put into (or rather ſhall be ſent back to) hard and ſtrong priſon (*ſoient mys*, the beſt copies read *remys*) *en la priſone fort et dure*, as thoſe which refuſe to be at the common law of the land." And immediately after this ſtatute, the form of the judgment appears in Fleta and Britton to have been only a very ſtrait confinement in priſon, with hardly any degree of ſuſtenance; but no weight is directed to be laid upon the body, ſo as to haſten the death of the ſufferer: and indeed any ſurcharge of puniſhment on perſons adjudged to *penance*, ſo as to ſhorten their lives, is reckoned by Horne, in the Mirror, as a ſpecies of criminal homicide. *Mirr.* 9. It alſo clearly appears, by a record of 31 Ed. III. that the priſoner might then poſſibly ſubſiſt for forty days under this lingering puniſhment. It ſeems, therefore, that the practice of loading him with weights, or as it was uſually called, *preſſing him to death*, was gradually introduced between 31 Ed. III. and 8 Hen. IV. at which laſt period it firſt appears upon our books; being intended as a ſpecies of mercy to the delinquent, by delivering him the ſooner from his torment; and hence it ſeems alſo that the duration of the penance was then firſt altered; and inſtead of continuing *till he anſwered*, it was directed to continue *till he died*, which muſt very ſoon happen under an enormous preſſure.

To account for the riſe of this puniſhment, it has been conjectured, that *peine forte et dure*, "hard and violent puniſhment," was abbreviated and corrupted from *priſone forte et dure*, "cloſe and ſtrait confinement;" or that *priſone*, the old French law-term, was at length corrupted into *preſſing*; ſo that a man, inſtead of being "cloſely impriſoned" till he died, was to be "cloſely preſſed" between the bare ground and a large weight. At any rate, the uncertainty of the origin of this horrid puniſhment, and the doubts that were conceived of its legality, and the repugnance of its theory (for it rarely was carried into practice) to the humanity of the laws of England, all concurred to require a legiſlative abolition of this proceſs, and a reſtitution of the ancient common law; whereby the ſtanding mute in felony, as well as in treaſon and in treſpaſs, amounted to a confeſſion of the charge. It is therefore enacted by ſtat. 12 Geo. III. c. 20, that every perſon who, being arraigned for felony or piracy, ſhall ſtand mute or not anſwer directly to the offence, ſhall be taken to be convicted of the ſame; and the ſame judgment and execution (with all their conſequences in every reſpect) ſhall be thereupon awarded, as if the perſon had been convicted by verdict or confeſſion of the crime. Standing mute, therefore, at preſent, in all caſes, amounts to a conſtructive confeſſion.

To adviſe a priſoner to ſtand mute, is a high miſpriſion, a contempt of the king's court, and puniſhable by fine and impriſonment. *Jacob's Law Dict.*

MUTE, *ſ.* One that has no power of ſpeech.—He that never hears a word ſpoken, no wonder if he remain ſpeechleſs; as one muſt do, who from an infant ſhould be bred up amongſt *mutes*, and have no teaching. *Holder.*—*Mutes* and dwarfs make their fortune in the grand ſignior's ſeraglio. The *mutes* ſerve as executioners to take off perſons of the firſt rank. *Chambers.*

Your *mute* I'll be;
When my tongue blabs, then let mine eyes not ſee.
Shakeſpeare.

A letter which without a vowel can make no ſound.—Grammarians note the eaſy pronunciation of a *mute* before a liquid, which doth not therefore neceſſarily make the preceding vowel long. *Holder's Elem. of Speech.*—The mutes in the Greek alphabet are nine; three of which, viz. π, κ, τ, are termed *tenues*; three, β, γ, δ, termed *mediæ*; and three, φ, χ, θ, termed *aſpiratæ*. The mutes of the Latin alphabet are alſo nine, viz. B, C, D, G, I, K, P, Q, T. They are called mutes, becauſe a liquid cannot be ſounded in the ſame ſyllable before them, as *rpo*; but a mute may be pronounced in the ſame ſyllable before a liquid, as *pro*.

To MUTE, *v. n.* [*mutir*, F.] To dung as birds.—Mine eyes being open, the ſparrows *muted* warm dung into mine eyes. *Tob.* ii. 10.

I could not fright the crows,
Or the leaſt bird from *muting* on my head. *B. Jonſon.*

MUTE, *ſ.* The dung of birds:

An ancient obeliſk
Was rais'd by him, found out by Fiſk;
On which was written, not in words,
But hieroglyphick *mute* of birds,
Many rare pithy ſaws! *Hudibras.*

MUTEFERRI'RA, *ſ.* A body of horſe kept up in Egypt, in the ſervice of the grand ſignior; theſe, with the chaouſes, were originally the guards of the ſultans of Egypt. This is a body of the greateſt dignity, and is expreſſed by the word, which ſignifies "a choſen people."

MUTELLI'NA, *ſ.* in botany. See PHELLANDRUM.

MU'TELY, *adv.* Silently; not vocally:

Driving dumb ſilence from the portal door,
Where he had *mutely* ſat two years before. *Milton.*

MU'TENESS, *ſ.* Silence; averſion to ſpeak.—Who knows not that the baſhful *muteneſs* of a virgin may oft-times hide all the unliveLineſs, and natural ſloth, which is really unfit for converſation? *Milton.*

MUTETGUNG', a river of New Jerſey, which runs into the Atlantic in lat. 39. 57. N. lon. 74. 12. W.

MUTH'EL (Johann-Godfried), a German muſician ſettled at Riga, who, though but little known in his own country, was a muſician of great abilities both as a compoſer and performer. He was a diſciple of Sebaſtian Bach, and had reſided ſome time at Schwerin before he went to Riga. When a ſtudent at Leipſic, he vanquiſhed all the difficulties to be found in the leſſons and organ-pieces of his maſter and of Handel; then he ſeems to have made Emanuel Bach his model of compoſition.

The firſt of Müthel's works that we can trace were Odes, printed at Hamburgh in 1759; the reſt, which are all for the harpſichord, appeared in the following order: Three Sonatas and two Airs, with twelve Variations; Nuremberg, 1760. Two Concertos, printed by Hartknock, Riga and Mittau, 1767. Duetto for two Clavichords, two Harpſicords, or two Piano-fortes, printed by Hartknock, Riga, 1771.

Though the ſtyle of this compoſer reſembles that of Emanuel Bach more than any other, the paſſages are entirely his own, and reflect as much honour on his head as his hand. Indeed his productions abound with difficulties, which to common hearers, as well as common players, muſt, thirty years ago, have appeared too ſtudied and elaborate; for even his accompaniments are ſo charged as to require performers for each inſtrument of equal abilities to his own.

We think Müthel much inferior to Emanuel Bach in grace; but ſuperior to him in the ſolo parts given to the harpſichord, in which there are many common and unmeaning diviſions; but in no one of Müthel's ſolo parts in his concertos is there a ſingle common or vulgar paſſage to be found. He is, we believe, the firſt who wrote appoggiaturas in large notes, the exact length they ſhould be played. If not the firſt who uſed the double dot in Germany, he was, at leaſt, the ſecond after Emanuel Bach. Dr. Burney uſed it in 1760 in a book of leſſons, before he had ſeen the productions of either.

Müthel's works are become very ſcarce, and, on account of their difficulty, were never much known. The Duet is ſtill a curious compoſition, manifeſting a powerful hand, great fertility of invention, and a taſte and refinement unknown, at the time, to all Europe, except to the Bach ſchool. *Burney*, vol. iii.

MU'THILL, a town of Scotland, in the county of Perth, containing about 140 houſes, and in the whole pariſh 2880 ſouls: two miles ſouth of Crieff.

MUTH'LABBEN, *ſ.* [from the Heb. ſignifying to move the heart.] A kind of muſical inſtrument.

MUTIA'NO (Girolamo), a diſtinguiſhed painter, was born in 1528, of an ancient family, at Aquafredda in the territory of Breſcia. After acquiring the principles of painting under Romanino at Breſcia, he went to Venice and Rome, where he perfected himſelf by ſtudying the works of the great maſters, and made himſelf known as an artiſt. He was employed by cardinal d'Eſte in embelliſhing his villas, and by pope Gregory XIII. in works for St. Peter's and the gallery of the Vatican. His manner of deſign is grand; his colouring good, both in freſco and in oil; and his heads expreſſive and graceful. Though a ſtudent of the antique, he was alſo one of nature; and had a particular talent for landſcape, with which his pictures are often richly decorated. He touched his trees ſomewhat in the Flemiſh ſtyle with fine effect; and was particularly fond of introducing the cheſnut, which he reckoned the moſt pictureſque of trees in the diſpoſition of its branches. Mutiano married and ſettled at Rome, where he acquired general eſteem, and accumulated conſiderable property. A part of this he employed in the eſtabliſhment of the Academy of Painting, named "St. Luke's," which was founded by Gregory XIII. at his ſolicitation. He died in 1590, at the age of ſixty-two.

The principal works of this maſter are in the churches of Rome. There is a fine picture of his in diſtemper at the cathedral of Rheims, repreſenting Chriſt waſhing the feet of his diſciples, with all the figures as large as life, which was purchaſed by the regent duke of Orleans, but returned in default of payment. Several pieces of this maſter have been engraved, eſpecially ſome large landſcapes, by C. Cort. ***Pilkington's Dict.***

To MU'TILATE, *v. a.* [*mutiler*, Fr. *mutilo*, Lat. Our word was conſidered by P. Heylin, in 1656, as uncouth and ſtrange. It is, however, in the dictionary of Cotgrave, long before that time; and was much in uſe before the reſtoration.] To deprive of ſome eſſential part.—Such, fearing to concede a monſtroſity, or *mutilate* the integrity of Adam, preventively conceive the creation of thirteen ribs. ***Brown's Vulg. Err.***—Among the *mutilated* poets of antiquity there is none whoſe fragments are ſo beautiful as thoſe of Sappho. ***Addiſon.***

MU'TILATE, *adj.* Deprived of ſome eſſential part.—Cripples, *mutilate* in their own perſons, do come out perfect in their generations. ***Brown.***

MUTILA'TION, *ſ.* Deprivation of a limb, or any eſſential part.—This alteration [from Hoſeah to Jehoſuah] was not made by a verbal mutation, as when Jacob was called Iſrael; nor by any literary change, as when Sarai was called Sarah; nor yet by diminution or *mutilation;* but by addition; as when Abram was called Abraham. ***Pearſon on the Creed.***—The ſubject had been oppreſſed by fines, impriſonments, *mutilations*, pillories, and baniſhments. ***Clarendon.***—*Mutilations* are not tranſmitted from father to ſon, the blind begetting ſuch as can ſee: cripples, mutilate in their own perſons, do come out perfect in their generations. ***Brown.***

MU'TILATOR, *ſ.* One that mangles, or deprives of ſome eſſential part.—The Ebionites were *mutilators* of the ſacred text. ***Quart. Rev.***

MUTIL'LUS, *ſ.* in entomology, a genus of inſects of the order hymenoptera. Generic characters—Antennæ filiform; feelers four, the articulations obconic, ſeated on the tip of the lip; jaw membranaceous at the tip; lip projecting, obconic. A few only are winged; in thoſe that are provided with theſe inſtruments, they are reſplendent like pearl, and laid horizontally upon the back. The body is covered with down; the thorax is retuſe at the baſe; and the ſting is concealed within the abdomen.

The common reſidence of the Mutillæ is upon the ground, below moſs, eſpecially where there is a hollow ſpace between the moſs and the earth. They are gregarious; and, when diſturbed in their retreats, make their eſcape by running very ſwiftly. In many particulars the inſects of this genus reſemble the ants, but are of a larger ſize, and more lively colours. The ſpecies are thirty-eight in number, and moſtly inhabitants of foreign climes.

1. Mutilla helvola: the colour of this ſpecies is pale claret-red, as its name imports; the abdomen is cylindrical, pubeſcent at the tip; and the thighs are compreſſed. It inhabits the Cape of Good Hope.

2. Mutilla coccinea: ſcarlet; abdomen marked with a black belt. This is called *occidentalis* by Linnæus, though for what reaſon does not appear, as it ſeems to inhabit only North America, and perhaps ſome parts of the north of Europe. It has been noticed by Cateſby and Fabricius; from whom we have adopted the epithet *coccinea*, as ſcarlet is the prevailing colour: there is a black band acroſs the abdomen. The ſting is filiform, and pretty long. See the preceding Plate, at fig. 10.

3. Mutilla Antiguenſis: ſcarlet; tip of the abdomen black, with white ſtreaks. Inhabits Antigua.

4. Mutilla Guineenſis: thorax ſubſpinous, variolous, piceous; abdomen black, with two white dots, and an interrupted band. It inhabits Guinea, and is large.

5. Mutilla diadema: black; abdomen with two large yellow dots at the baſe, and an interrupted band in the middle: the tip has a white line. It is found in Surinam.

6. Mutilla Americana: black; abdomen with four red ſpots, and three white lines. An elegant ſpecies; of a black colour, with the abdomen marked on the firſt ſegment by four red ſpots, and on each of the reſt by three large white ones, giving the appearance of three longitudinal white ſtripes on that part. It is a native of South America. See fig. 11.

7. Mutilla formicaria: black; abdomen with a line of whitiſh dots down the back. Inhabits New Holland. There is a ſpecimen of it in the muſeum of ſir J. Banks.

8. Mutilla exulans: black; abdomen with two yellow dots at the baſe, an interrupted ſtreak in the middle, and a line behind. Inhabits America.

9. Mutilla aurata: bluiſh; abdomen with a large ſpot. Inhabits New Holland; and may be ſeen in ſir J. Banks's muſeum.

10. Mutilla Europea: black; thorax rufous; ſegments of the abdomen with white margins. This is deſcribed in Mr. Donovan's intereſting work on Engliſh Inſects; but more particularly by Barbut, in his *Genera Inſectorum*, as follows: "The thorax is of a carroty red, mingled with black velvety down; the abdomen, the commanding colour of which is black, is adorned with two, ſometimes more, yellowiſh bands; the head is coal-black; the eyes of a beautiful pearl white; the legs are velvety, black and hairy; the antennæ bent, and black. Theſe beautiful inſects are inhabitants of the ground, and to be met with under moſs. Walking in Hyde Park the latter end of the ſummer in purſuit of inſects, upon turning up the moſs, I had the pleaſure of ſeeing a moſt beautiful company of theſe animals. Their wings, which ſhone like pearl, were laid horizontally on their back; and, but few of them being alatæ, gave the group a ſplendid appearance. They were ſo ſwift in motion, that I could not catch any more than one. I believe there might be twenty together, which convinces me they live in ſociety ſimilar to that of the ants. Some were of a brown hue, covered with a ſilky dun-coloured down: thoſe were the winged ones; the apterous correſpond with that depicted in the Plate, fig. 12."

11. Mutilla ruficornis: black; antennæ rufous; tail whitiſh. Found in New Holland; a ſpecimen is preſerved in ſir J. Banks's muſeum.

12. Mutilla atrata: black; upper part of the thorax rufous; abdomen blue, with two white bands. It is an African inſect.

13. Mutilla maura: black; abdomen with four white ſpots; thorax rufous. Found in divers parts of Europe.

14. Mutilla Hungarica: black; front cinereous; thorax rufous; abdomen with ſix white dots, and a ſtreak behind. Found in Saxony.

15. Mutilla coronata: black; front cinereous; thorax rufous; abdomen with a ſilvery white dot, with two ſtreaks. Found in Saxony.

16. Mutilla Halenſis: hairy and black; thorax rufous; abdomen with two white dots, and a band behind. This alſo inhabits Saxony.

17. Mutilla arenaria: hairy, black; front and back of the thorax white; abdomen with four white ſpots. Found in the ſandy plains of Spain.

18. Mutilla Barbara: hairy and black; fore part of the thorax white; abdomen with two white bands. Inhabits Barbary.

19. Mutilla ephippium: hairy black; thorax rufous on the back. Inhabits Saxony.

20. Mutilla Italica: hairy and black; ſecond ſegment of the abdomen rufous. Inhabits Italy.

21. Mutilla Pædemontana: hairy and black; fore-part of the thorax cinereous; abdomen with two cinereous bands; the ſecond ſegment rufous. Inhabits Italy; and is as big again as the M. Italica.

22. Mutilla verſicolor: abdomen black at each end, and rufous in the middle, with a white band, in which is a black dot. It inhabits America.

23. Mutilla regalis: hairy, black; front cinereous; thorax rufous; abdomen with four white dots, the middle one elongated. Found in Hungary.

24. Mutilla ruficollis: hairy and black; thorax rufous. Found in Italy.

25. Mutilla ciliata: hairy, black; thorax rufous; ſegments of the abdomen edged with a cinereous fringe. Inhabits Saxony.

26. Mutilla erythrocephala: hairy and black; head rufous; abdomen with three gold bands.

27. Mutilla glabrata: ſmooth, black; thorax and abdomen rufous beneath. It is found in the Eaſt; and is a ſmall inſect.

28. Mutilla rufipes: hairy and black; antennæ, thorax, and legs, rufous; abdomen with a white dot, and two approximate bands. It inhabits Saxony; and is ſmall.

29. Mutilla melanocephala: hairy and rufous; head and tip of the abdomen black. Inhabits France.

30. Mutilla nigripes: rufous; tail black, with approximate white ſtreaks; legs black. Inhabits the Eaſt.

31. Mutilla Indica: black; abdomen with a pale yellow band and white line. Found in the Eaſt Indies and South America.

32. Mutilla brutia: black; thorax rufous; abdomen with ſix ſilvery-white ſpots and band. Inhabits Calabria.

33. Mutilla littoralis: black; thorax rufous; forepart of the abdomen with a two-lobed white ſpot; the five hind ſegments edged with white. This is alſo found in Calabria.

34. Mutilla ſpinoſa: yellowiſh, varied with black; thorax with four ſpines on each ſide; the ſecond ſegment of the abdomen has two teſtaceous ſpots. It inhabits America.

35. Mutilla cephalotes: head large and black, ſpinous on each ſide; abdomen with a gold ſpot, and three white interrupted bands. Found in Georgia.

36. Mutilla bifaſciata: black; head and thorax red; abdomen with two red bands; the wings are violet-black. Found in New York.

37. Mutilla ſex-punctata: black; thorax ſubcylindrical, immaculate; abdomen with three whitiſh dots on each ſide. Inhabits Africa.

38. Mutilla ſex-maculata; black; thorax rufous above; abdomen with a row of three whitiſh ſpots on each ſide. Inhabits India.

MUTI'NA, in ancient geography, a municipal city of Gallia Ciſpadana, ſituated towards the eaſt, and near Scultena. It received a Roman colony about the year 182 B.C. Now *Modena*, which ſee.

MU'TINE, *ſ.* [*mutin*, Fr.] A mutineer; a mover of inſurrection. *Not in uſe.*

In my heart there was a kind of fighting,
That would not let me ſleep; methought I lay
Worſe than the *mutines* in the bilboes. *Shakeſpeare.*

To MU'TINE, *v. n.* [*mutiner*, Fr. This is the old word. Hickes derives *mutiny* from moꞇ, Sax. a meeting.] To riſe in mutiny.—Upon all occaſions ready to *mutine* and rebel. *Burton's Anat. of Mel.*—The ſoldiers ſo *mutined*, that at laſt the generals were conſtrained to embarque themſelves and come home to England. *Lord Herbert's Hen.* VIII.—Againſt this decree all the whole faction of clergymen fretted and *mutined*. *Bp. Hall.*

MUTINEE'R, *ſ.* [from *mutin*, Fr. Our word was formerly written *mutiner*, full as often as *mutineer*; and is ſo in our old lexicography.] A mover of ſedition; an oppoſer of lawful authority.—They have caſhiered ſeveral of their followers as *mutineers*, who have contradicted them in political converſations. *Addiſon.*

Set wide the mufti's garden-gate;
For there our *mutineers* appoint to meet. *Dryden.*

MU'TING, *ſ.* The dung of birds.—The bird not being able to digeſt the fruit, from her inconverted *muting* ariſeth this plant. *Brown's Vulg. Err.*

With hooting wild
Thou cauſeſt uproars; and our holy things,
Font, table, pulpit, they be all defil'd
With thy broad *mutings*. *More's Life of the Soul.*

MU'TINOUS, *adj.* Seditious; buſy in inſurrection; turbulently.—The laws of England ſhould be adminiſtered, and the *mutinous* ſeverely ſuppreſſed. *Hayward.*

Lend me your guards, that, if perſuaſion fail,
Force may againſt the *mutinous* prevail. *Waller.*

My ears are deaf with this impatient crowd;
Their wants are now grown *mutinous* and loud. *Dryden.*

MU'TINOUSLY, *adv.* Seditiouſly; turbulently.—Men imprudently often, ſeditiouſly and *mutinouſly* ſometimes, employ their zeal for perſons. *Sprat's Sermons.*

MU'TINOUSNESS, *ſ.* Seditiouſneſs; turbulence. *Aſh.*

To MU'TINY, *v. n.* To riſe againſt authority; to make inſurrection; to move ſedition.—When Cæſar's army *mutinied*, and grew troubleſome, no argument could appeaſe them. *South's Sermons.*

The people *mutiny*, the fort is mine,
And all the ſoldiers to my will incline. *Waller.*

MU'TINY, *ſ.* Inſurrection; ſedition.—Soldiers grow pernicious to their maſter who becomes their ſervant, and is in danger of their *mutinies* as much as any government of ſeditious. *Temple.*

I' the war,
Their *mutinies* and revolts, wherein they ſhew'd
Moſt valour, ſpoke not for them. *Shakeſpeare's Coriol.*

An act is annually paſſed by parliament, called the *munity-act*, "to puniſh mutiny and deſertion, and for the better payment of the army and their quarters." This regulates the manner in which they are to be diſperſed among the ſeveral inn-keepers and victuallers through the kingdom, and eſtabliſhes a law martial for their government. By this, beſides other things compriſed in the Articles of War, enumerated and enforced in this act, (ſee 49 Geo. III. c. 12.) it is enacted, that if any officer or ſoldier ſhall excite or join any mutiny, or, knowing of it, ſhall not give notice to the commanding officer; or ſhall deſert, or liſt in any other regiment, or ſleep upon his poſt, or leave it before he is relieved, or hold correſpondence with a rebel or an enemy, or ſtrike or uſe violence to his ſuperior officer, or ſhall diſobey his lawful commands; ſuch offender ſhall ſuffer ſuch puniſhment as a court-martial ſhall inflict, though it extends to death itſelf. After the abdication of James II. and the acceſſion of William III. the military code obtained the ſanction of parliament, though paſſed only from year to year, under the denomination of the *munity-act*. The firſt of theſe acts paſſed on the 12th of April, 1689, and was to continue in force to the 10th of November in the ſame year.

MU'TINYING, *ſ.* The act of reſiſting lawful authority.

MU'TIS (Joſeph-Celeſtine), a learned Spaniſh phyſician and divine, celebrated for his botanical diſcoveries in the country of New Granada, and no leſs diſtinguiſhed by the excellence of his character than the extent and variety of his knowledge, was born at Cadiz in 1734, of an Italian father and a Spaniſh mother. His parents placed him under the tuition of Don Pedro Virgilio, principal navy-ſurgeon, and profeſſor in the military academy of Cadiz, honourably mentioned in Loefling's Letters to Linnæus. Mutis devoted himſelf to the ſtudy of medicine till his twenty firſt year, when he entered at the univerſity of Seville. His late preceptor being ſoon afterwards ſummoned, with other eminent medical practitioners, to a conſultation upon the declining health of Ferdinand VI. and his queen, Mutis was choſen to accompany him to Madrid. There the young man procured many friends, and much reputation, by the talents he diſplayed in various branches of knowledge connected with his profeſſion, and was eſpecially patronized by the miniſter, Wall, who offered him a penſion to enable him to travel. This ſcheme was defeated by the death of the king, and a change in the miniſtry; but Mutis obtained a profeſſorſhip of anatomy, and ſignalized himſelf by his phyſiological knowledge. He turned his mind to the foundation of an Academy of Sciences at Madrid, led by the growing taſte for natural knowledge of all kinds, which the youth of Spain, like thoſe of other countries, had, for ſome time paſt, imbibed in the courſe of their medical ſtudies under Boerhaave.

In 1760, the marquis della Vega, being appointed viceroy of New Granada, ſolicited Mutis to accompany him as his phyſician. This propoſal was joyfully accepted; not probably with any view to a final ſettlement in that diſtant region, but rather as a ſtep to future advancement at home, after his curioſity had been in ſome meaſure gratified abroad. On his arrival at Santa Fé de Bogotá, the capital of New Granada, our ardent and intelligent young philoſopher immediately anticipated the probability of his communicating, as well as acquiring, knowledge. By the permiſſion of the viceroy, he undertook to introduce the mathematics as a branch of ſtudy in the univerſity; and his lectures on that ſubject were received with enthuſiaſtic attention and admiration. But it was not to be expected that the monkiſh profeſſors ſhould equally reliſh ſuch novelties. To acquire or to diffuſe knowledge was neither their aim nor their ambition, and it was certainly not for their intereſt nor their peace. They declared that Mutis was a conjurer, who, by an alliance with the devil, taught a magical, divinatory, and diabolical, art, unwarranted by law and prohibited by religion: "How elſe," ſaid they, "could a mortal meaſure the diſtance of the ſun or of the moon, or foretell eclipſes?" Their repreſentations were not without effect. Some well-meaning but not well-informed perſons forbade their children to frequent the ſchools of a necromancer; and thus the uſefulneſs of the new profeſſor was limited, and his fame in part eclipſed; for ſuch prohibitions could not fail to foſter a certain maſs of prejudice againſt him and the more enlightened party which daily increaſed under his genial influence. Nor was the power of the inquiſition allowed to be idle in ſo holy and juſt a cauſe. From this however the higher power of the viceroy was able to ſhield the intended victim, who gradually roſe ſuperior to prejudice and perſecution, and was, at length, by the authority of the Spaniſh government, eſtabliſhed profeſſor of philoſophy, mathematics, and natural hiſtory, at Santa Fé.

Mutis, like a true patriot, was anxious to turn his own knowledge to the practical ſervice of his country. Conſidering the gold and ſilver mines as the moſt important national objects in Mexico and Peru, he directed his attention to a more ſucceſsful mode than had hitherto been practiſed, for working the mines of the laſt-mentioned metal. Gold is procured chiefly by patience and manual labour, in a metallic ſtate, from the ſands of the rivulets; but ſilver can be obtained by chemical means only, from recondite ſources in the bowels of the mountains. Its mines are not only, like thoſe of gold, a ſort of lottery, but to derive a due profit from its ores requires knowledge and obſervation, as well as labour and conſiderable expenſe. All mining-countries abound with traditions of their former riches, and liberal conjectures reſpecting their latent ſtores. By theſe our philoſopher was miſled. He ſpent many years of indefatigable application, and exhauſted his pecuniary reſources, with the zeal and the diſappointment of an alchemiſt. He reaped indeed abundance of experience and of natural knowledge, as he explored the receſſes of the Cordilleras, and inveſtigated the productions of their ſoil, as well as the ſecrets of their geology; but his worldly proſpects were ruined. Theſe he might have retrieved by accepting ſome civil employment or magiſtracy, offered him by his conſtant friend the viceroy, to whoſe propoſals of this kind he is reported to have anſwered, that "he aſpired after no government but that of himſelf, nor any authority but over his own paſſions." In conformity to ſuch ſentiments, he found the clerical profeſſion more congenial to his feelings; and to that he for a while devoted himſelf, as it appears, excluſively, reſiding for ſome time in the capital.

But a miner ſeldom gives up his purſuit; and the former propenſities of Mutis revived, as he anticipated afreſh the means of indulging them. His ſucceſs was fruitleſs, as before, with regard to its original object, but not as to the future happineſs and utility of his life. The reſidence he had choſen, for the proſecution of his purpoſe, was fortunately one of the moſt delightful in the world, at Sapo, in the government of Mariquita. His houſe ſtood on a riſing ground, commanding the moſt enchanting proſpects, over an extenſive valley, watered by the meandering river Luiſa. The groves of palm-trees, and the rural ſcenery of the valley, are encompaſſed by a chain of hills, whoſe proud tops riſe one above another, till they are loſt in the clouds. Here our philoſopher enjoyed a pure air and temperate climate, equally remote from the cold of the mountains, and the oppreſſive atmoſphere of the vale below. In this ſequeſtered abode he divided his time between the ſuperintendance of the mines and the ſtudy of natural hiſtory; while he fulfilled his clerical duties, and benefitted his neighbours by the exerciſe of his original profeſſion. He was ſoon conſoled for his diſappointment in the firſt of theſe objects, by the general eſteem and reſpect which his character and conduct inſpired; inſomuch that he reſigned himſelf for life to this delightful retirement, without a ſigh for the vanities or the buſtle of the world. Here botany conſtituted his moſt favourite amuſement. The country within his reach was found rich in plants of peculiar beauty as well as ſingularity, which indeed may be ſaid in general of all the vegetable productions of New Mexico. Splendid compound flowers, ſhrubs whoſe ſhining leaves are inveſted beneath with a denſe woolly clothing, giving a great peculiarity as well as richneſs of habit, are ſtriking characteriſtics of the Mexican Flora; which is further enriched by no ſmall proportion of the magnificent tribe of palms. To theſe laſt Mutis paid particular attention; but the hiſtory of them, which he is ſaid to have prepared, has, as yet, not been given to the public. His correſpondence with Linnæus was as frequent as circumſtances would permit, but it appears that many of their letters and communications never reached their reſpective deſtinations. To him he ſent numerous dried ſpecimens, many manuſcript deſcriptions, and a folio volume of Indian-ink drawings, quoted in the Supplementum. Among the ſpecimens were ſome of the noble *Mutiſia*, firſt deſcribed in that work, to which ſeveral new ſpecies have ſince been added. See the next article.

The year 1778 makes an epocha in the life of Mutis. That year a new archbiſhop, Don Antonio Caballero y Gorgora, arrived at Santa Fé, who, among the numerous letters of congratulation from the ſubordinate clergy on his arrival, had penetration to diſcover, and good ſenſe enough to admire, in that of Mutis, ſomething very ſuperior to the reſt. He viſited the writer in his retirement, and his favourable prepoſſeſſions were confirmed. He determined that ſuch a man ſhould be made uſeful to his country; and, as Mutis had embarraſſed his circumſtances afreſh by his mining-projects, the good archbiſhop obtained, from the government at home, a ſum for the payment of his debts, a handſome penſion, and the appointments of botaniſt and aſtronomer to the king. He now became the head of a botanical ſchool as it were; the ſuperintendant of a tribe of botanical adventurers, employed by the Spaniſh government to inveſtigate the plants of America. From their labours have originated ſeveral publications, eſpecially the ſplendid *Flora Peruviana*; and the names of Eſcallon, Pavon, Ruiz, Valenzuela, and Zea, are now celebrated in the botanical hiſtory of that country. Mutis, attended by ſome of his pupils, and ſeveral draughtſmen, made a tour through the kingdom of New Granada in 1783. By his diligence much new light was thrown upon the hiſtory of the Peruvian bark, or Cinchona, and its various ſpecies, as there had already been upon that of the balſam of Peru, the ipecacuanha, the elaſtic gum, &c. He alſo taught his countrymen the culture and the value of indigo. His health having ſuffered from the climate of Mariquita, he was directed to repair to Santa Fé, and to fix on ſome of his pupils, whoſe youth and conſtitutions might be more adequate to ſuch labours. In 1791 or 1792, Zea was ſent to collect living plants and ſeeds, for the eſtabliſhment of a public botanic garden at Santa Fé. But in the political ferment of that period new inquiſitors aroſe, as wiſe as thoſe who had condemned Mutis for a magician. The innocent Zea was ſeized, and laid in priſon, under the charge of ſome rebellious conſpiracy, till the year 1797, when, with other victims of malice or folly, he was brought over to Spain to be tried. Their innocence was readily proved; they were honourably acquitted, and each was reinſtated in his former ſituation. Mutis, with his accuſtomed vigilance, took advantage of this opportunity to viſit Paris, to conſult with Juſſieu, and the other eminent botaniſts of that capital, concerning the compoſition of a *Flora Bogotenſis*, and to make himſelf maſter of all the new improvements and diſcoveries. He remained at Paris till 1801, when he went back to Madrid. Whether he ſubſequently returned to his native country, we know not; but in 1804 he was appointed to the profeſſorſhip of botany, and ſuperintendance of the royal garden, at Madrid, in the place of Cavanilles, whoſe death happened that year.

The venerable Mutis was now eſtabliſhed in fame and reputation; but his advancing age made repoſe in ſome meaſure neceſſary. He continued however to be ſerviceable to the government of his native country, and to the proſperity of that in which he had ſo long been naturalized. He was regularly conſulted by the viceroys on all difficult and important queſtions; and, conſcious that the happineſs of the people was the real intereſt as well as duty of the government, he made it the leading object of all his advice. He lived to an advanced age; but of the preciſe date of his death we are not informed. A pleaſing and well-executed portrait of this excellent man, his head encircled with a diadem of ſtars, is prefixed to one of the late ſplendid botanical publications of his countrymen. We ought not to conclude this article without recording, that Mutis was the means of introducing ſtrawberries into the country of New Granada. He mentions in a letter to Linnæus, that, on his departure from Spain, he adviſed the viceroy to take with him ſome of that fruit in a dried ſtate, the ſeeds of which vegetated in America, and the ſubſequent propagation and ſucceſs of the plant were truly wonderful. He adds that the tables were daily furniſhed at Santa Fé with this delicious fruit, and with other products of the kitchen-garden, all the year round, which the Italians might envy. *Sims and Konig's Annals of Botany*, vol. i.

MUTIS'IA, *ſ.* [ſo named by Linnæus in honour of the ſubject of the preceding article.] In botany, a genus of the claſs ſyngeneſia, order polygamia ſuperflua, natural order of diſcoideæ, (corymbiferæ, *Juſſ.*) Generic Characters—Calyx: common oblong, cylindric, imbricate; ſcales lanceolate; the inner ones longer. Corolla: compound radiate; corollets of the diſk three times more than of the ray, hermaphrodite; of the ray eight, female. Proper of the hermaphrodites tubular, trifid; the outer ſegment lanceolate, the inner ſegments linear. Female oval-oblong, entire, with a linear claw. Stamina: in the hermaphrodites; filaments five, linear; antheræ cylindric, longer than the floret, with decurrent briſtles at the baſe. In the females none; but only the rudiments of two filaments. Piſtillum: germen ſhort; ſtyle filiform; ſtigma in the hermaphrodites ſimple; in the females two, briſtle-ſhaped. Pericarpium: none. Seeds: ſomewhat oblong; down feathered. Receptacle: naked.—*Eſſential Character.* Calyx cylindric, imbricate; corollets of the ray oval-oblong; of the diſk trifid; down feathered; receptacle naked. There are eleven ſpecies, in two diviſions.

I. Leaves pinnate. 1. Mutiſia clematis, or woolly-leaved mutiſia: leaves pinnate with tendrils; leaflets elliptical, denſely woolly beneath. This is a climbing plant, like Clematis: when young, tomentoſe all over. Stem ſhrubby, ſtriated, long, branched, twining. Leaves alternate, remote, pinnate; with the rachis ending in a tendril; leaflets oblong-ovate, ſubſeſſile, alternate or oppoſite, ſeven, by age becoming ſmooth above, but very tomentoſe underneath. Flowers the ſize and form of a large pink; calyx tomentoſe; corolla purple, the length of the ray of the calyx itſelf. It was found in New Granada by Mutis, in the year 1762. According to Cavanilles, it was gathered by Lewis Née, in ſtony places, not far from San Buenaventura el viejo, in Peru, flowering in June and July. This noble plant does not appear to have been ſeen alive in Europe, any more than the reſt. Fine ſpecimens are in the Linnæan Herbarium. Juſſieu remarks, that it has the calyx of Scorzonera; and, independent of the flower, the habit of Vicia. Joſeph de Juſſieu had given it the Peruvian name *guariruma;* and it is allied on one ſide to Chuquiraga, and on the other to Barnadeſia.

2. Mutiſia peduncularis, or long-ſtalked mutiſia: leaves pinnate, with tendrils; leaflets lanceolate, ſmooth, alternate; flower-ſtalks axillary, very long. Gathered by L. Née, in the ſame part of Peru with the preceding, flowering in July. This is ſmooth in all its parts. The leaflets are ten or twelve on each ſide of the common ſtalk, alternate, lanceolate, acute, ſomewhat decurrent, near an inch and a half long, half an inch wide. Flower nearly as large as the foregoing; calyx ſmooth; radiant florets ſcarlet, their terminal teeth very minute; thoſe of the diſk yellowiſh-red, about fifteen in number; ſeeds of both all fertile. *Cavanilles.*

3. Mutiſia viciæfolia, or vetch-leaved mutiſia: leaves pinnate, with tendrils; leaflets lanceolate, ſmooth; the lower ones oppoſite; flower-ſtalks terminal. Found near Valparaiſo, in Chili, flowering in May. This is very nearly akin to the laſt, but ſmaller in all its parts; and is perhaps a variety.

II. Leaves ſimple. 4. Mutiſia ilicifolia, or ilex-leaved mutiſia: leaves roundiſh-heart-ſhaped, claſping the ſtem, bordered with ſpinous teeth; tendrils ſimple. Native of dry hilly places in Chili, flowering in January. The ſtem is ſhrubby, branched, climbing, ſtriated, reddiſh, three feet or more in height. Leaves alternate, ſeſſile, claſping the ſtem, but not decurrent, roundiſh-heart-ſhaped, an inch wide, and ſomewhat more in length, coriaceous, bordered with ſtrong, ſpreading, ſpinous teeth, their termination ſingularly abrupt, with two much longer divaricated teeth; their upper ſurface ſmooth; the under ſomewhat downy and glaucous, eſpecially when young; their mid-rib terminates in a ſimple ſpiral tendril, thrice the length of the leaf. Flowers purple, on ſhort ſolitary ſimple terminal ſtalks; calyx ſmooth; its ſcales yellowiſh, with a membranous edge. Radiant florets narrower than in the pinnated ſpecies.

5. Mutiſia runcinata, or lion-toothed mutiſia: leaves oblong, runcinate, decurrent; woolly beneath; tendrils cloven. Gathered by L. Née, flowering in December, in dry barren ſituations, near Port Deſire on the coaſt of Patagonia. Stem ſhrubby, zigzag, a foot and a half long, branched, round, not winged, except as far as the baſes of the leaves extend. Leaves lanceolate-oblong, about three inches in length, acute; ſtrongly runcinate, ſomewhat revolute; decurrent, and tapering at the baſe. Flowers terminal, yellow. Willdenow calls this ſpecies *retrorſa.*

6. Mutiſia ſinuata, or blunt-toothed mutiſia: leaves linear-oblong, bluntly toothed, decurrent; tendrils ſimple.

Gathered by the ſame botaniſt on the Cordillera del Planchon, Chili, in dry ſituations, flowering in January. Similar in habit to the laſt, as well as in the colour of its flowers and the pointed ſcales of its calyx; but the marginal florets appear to be broader and ſhorter. The leaves are bordered with much ſmaller, and far more numerous, blunt, prominent, not-runcinate, teeth, and are uſually quite ſmooth on both ſides.

7. Mutiſia ſubſpinoſa, or ſharp-toothed mutiſia: leaves linear, ſharply toothed; arrow-ſhaped at the baſe; tendrils ſimple; ſtem winged. Gathered by Née, near the town of Gauamantanga, in Peru, flowering in July; and on the Cordillera del Planchon, in February. The ſtem is about a yard high, ſmooth, with three leafy ſharply-toothed wings. Leaves ſeſſile, claſping the ſtem with their ſlightly arrow-ſhaped baſe, which is connected with the wings of the ſtem, but not properly decurrent, or tapering. Flowers large and handſome, ſolitary, on a ſhort terminal bracteated ſtalk: their radius yellow, or ſometimes purple; diſk yellow.

8. Mutiſia ſagittata, or arrow-leaved entire mutiſia: leaves lanceolate, entire; arrow-ſhaped at the baſe; tendrils ſimple; ſtems winged. Native of the higheſt mountains of Chili, flowering in January: Née alſo found it in Peru. Stem two feet high, or more; downy, with four leafy downy wings, whoſe teeth are ſharp and hooked. Leaves four or five inches long, quite entire, woolly beneath, claſping the ſtem with their broad arrow-ſhaped baſe, gradually tapering from thence to a narrow point, ending in a long ſimple tendril. Flower terminal and ſolitary, as in all the ſimple-leaved ſpecies; florets of the radius often ten, purple, without any barren ſtamens. Cavanilles calls it *haſtata*. Willdenow juſtly thought himſelf obliged to change the name, as the leaves are by no means haſtate: *ſquarroſa* would have been a ſtill more expreſſive appellation.

9. Mutiſia decurrens, or decurrent entire-leaved mutiſia: leaves elliptic-lanceolate, decurrent, entire, ſmooth; tendrils cloven. Native of the Cordillera del Planchon above mentioned, flowering in February. Stem ſmooth, zigzag, branched, two feet high. Flower large, with about twelve radiant florets, which are purple, as well as the diſk.

10. Mutiſia inflexa, or narrow curve-leaved mutiſia: leaves linear, very narrow, deflexed at the baſe, incurved; tendrils ſimple; bractes awl-ſhaped. Native of various places in Chili. Stem branched, climbing to the height of ten or twelve feet, ſmooth. Leaves numerous, ſcattered, ſeſſile, thick, very narrow, ſmooth, three inches long. Flower large, with ſeveral awl-ſhaped bractes; florets of the radius eight (or ten), deep purple; diſk yellow.

11. Mutiſia linearis, or linear cloſe-leaved mutiſia: ſtem erect; leaves linear, revolute, erect, ſpinous-pointed, without tendrils. Native of the mountains of Chili. This is ſingular in its genus, for the want of tendrils. The ſtem is ſhrubby, a foot high, ſlightly branched. Leaves numerous, crowded, about an inch long. Flowers terminal, ſeſſile, ſolitary, ſmaller than any of the foregoing.

MU'TIUS (Caius), ſurnamed *Codrus*, and afterwards *Scævola*, was one of the illuſtrious Roman family of the Mutii, and rendered his name famous in the war between Porſenna king of Tuſcany and the Romans. That prince, reſolving to reſtore the family of Tarquin the Proud, went to beſiege Rome 507 B.C. Mutius reſolved to ſacrifice himſelf for the ſafety of his country; and, boldly entering the enemy's camp, killed Porſenna's ſecretary, whom he took for Porſenna himſelf. Being ſeized and brought before Porſenna, he told him boldly, that three hundred young men like himſelf had ſworn to murder him; "but, ſince this hand has miſſed thee," continued he, "it muſt be puniſhed;" then, putting his right hand on the burning coals, he let it burn with ſuch conſtancy as aſtoniſhed the beholders. The king, amazed at the intrepidity of this young Roman, ordered that he ſhould have his freedom and return to Rome; and ſoon after concluded a peace with the Romans. From this action Mutius obtained the ſurname of *Scævola*, or "left-handed," which was enjoyed by his family. See the article Rome.

MU'TIUS-SCÆV'OLA (Quintus), called the *Augur*, a Roman of great authority as a lawyer, married the daughter of Lælius, and was the father-in-law of Lucius Craſſus. He was prætor in Aſia, and conſul in the year B.C. 117, with Metellus, with whom he had the honour of a triumph. On various occaſions he performed great ſervices to the ſtate; and though, at that period, far advanced in years, he took part with Marius againſt Sylla. Cicero was inſtructed by this venerable perſon in the principles of wiſdom; and, in gratitude for his attentions to him, he made his preceptor one of the interlocutors in his firſt dialogue De Oratore.

MU'TIUS-SCÆV'OLA (Quintus), an eminent Roman, who was tribune of the people in the year B.C. 106, and conſul in 95 B.C. with Caius Licinius Craſſus. He was prætor in Aſia, over which he ruled with ſo much prudence and juſtice, that he was propoſed as a model for all future governors. His character was extremely high for legal knowledge, with which he unqueſtionably poſſeſſed a moſt maſculine eloquence. Craſſus, in Cicero's dialogue De Oratore, ſtyles him "the beſt orator among lawyers, and the beſt lawyer among the orators." Quintilian gives the ſame character of him. He was killed in the civil wars between the Marian and Sylla factions, in the year B.C. 82, in the Temple of Veſta; and his body was thrown into the Tiber. He is thought to have been the firſt perſon who reduced the civil law to a methodical ſyſtem: on this ſubject he wrote eighteen books, which are often referred to by the ancient lawyers. He is ſometimes confounded with the preceding; both having been conſuls, both lawyers, both praiſed by Cicero, and both concerned in the unfortunate civil wars: their names being the ſame, an attention to dates is neceſſary to diſtinguiſh them.

Others of the family of Mutius Scævola were eminent as juriſconſults and pleaders.

MUTIUSCHI'CA, a bay or gulf in the Frozen Sea, on the north-weſt coaſt of Nova Zembla. Lat. 75. 50. N. lon. 57. 14. E.

MUT'NANG, a town of Bengal: twenty miles weſt of Toree.

MU'TON, *ſ.* A ſpear, or fiſh-gig, uſed by the natives of New Holland. See Grant's Voyage.

MUTO'VA. See Motoua, p. 119.

MUT'QUIN, a town of South America, in the province of Tucuman: twenty-five miles north-eaſt of Fernando.

MUTSCHCOU'R, a town of Perſia, in the province of Irak: thirty-five miles north of Iſpahan.

MUT'SCHEN, or Mutzschen, a town of Saxony, in the circle of Leipſic. In the neighbourhood is found a ſpecies of cryſtal, to which they give the name of Mutſchen diamond: twenty-two miles weſt of Meiſſen, and twenty eaſt of Leipſic. Lat. 51. 14. N. lon. 12. 48. E.

MUT'SCHNITZ, a town of Germany, in the principality of Coburg: nine miles north-eaſt of Coburg.

MUTT, a town of Hindooſtan, in Bahar: thirty-ſeven miles ſouth-ſouth-weſt of Arrah.

MUTTAHARR'OW, a town of Hindooſtan, in Guzerat, at the mouth of the Surſooty: twenty-five miles north-weſt of Puttan Sumnaut.

MUTTAMUSKEE'T, a lake of North Carolina, twenty miles long, and five wide: three miles north of Pamlico Sound.

MUTTE'AH, a town of Hindooſtan, in Bahar: ten miles north-north-weſt of Bettiah. Lat. 26. 55. N. lon. 84. 35. E.

MUTTE'AH, a town of Hindooſtan, in Bahar: twelve miles north-north-eaſt of Bettiah.

MUTTEA'RY, a town of Hindooſtan, in Bahar: twenty-two miles ſouth-eaſt of Bettiah. Lat. 26. 38. N.

lon. 85. 10. E.—A fort of Hindooſtan, in Bahar: thirty-ſix miles north-north-weſt of Chuprah. Lat. 26. 17. N. lon. 84. 28. E.

MUT'TEN, a town of Swiſſerland, in the canton of Schwitz, ſituated in a valley called *Muttenthal*, watered by a ſmall river, called alſo *Mutten*, which runs into the lake of the four cantons: ſix miles eaſt of Schwitz.

To MUT'TER, *v. n.* [*mutire*, *muſſare*, Lat. or *muttra*, Su. Goth.] To grumble; to murmur.—They may treſpaſs, and do as they pleaſe; no man dare accuſe them, nor ſo much as *mutter* againſt them. *Burton.*

What would you aſk me, that I would deny,
Or ſtand ſo *mutt'ring* on? *Shakeſpeare's Othello.*

To MUT'TER, *v. a.* To utter with imperfect articulation; to grumble forth.—Your lips have ſpoken lies, your tongue hath *muttered* perverſeneſs. *Iſa.* lix. 3.

A hateful prattling tongue,
That blows up jealouſies, and heightens fears,
By *muttering* poiſonous whiſpers in men's ears. *Creech.*

MUT'TER, *ſ.* Murmur; obſcure utterance:

Without his rod revers'd,
And backward *mutters* of diſſevering power,
We cannot free the lady. *Milton's Comus.*

MUT'TERER, *ſ.* Grumbler; murmurer.—The words of a *mutterer* are as wounds going into the innermoſt part of the belly. *Barrow on the Decalogue.*

MUT'TERING, *ſ.* Murmur; utterance of a low voice.—The magicians came with wicked diſpoſitions, to ſet themſelves againſt Moſes, and uſed all their wicked arts and incantations, *mutterings*, and diabolical ceremonies. *Fleetwood on Miracles.*

MUT'TERINGLY, *adv.* With a low voice; without diſtinct articulation.

MUT'TERSTADT, late a town of France, in the (now diſſevered) department of Mont-Tonnerre, and chief place of a canton, in the diſtrict of Spire. The place contains 1415 inhabitants.

MUT'TON, *ſ.* [*mouton*, Fr.] The fleſh of ſheep dreſſed for food.—The fat of roaſted *mutton* or beef, falling on the birds, will baſte them. *Swift.*—A ſheep. *Now only in ludicrous language.*—Here's too ſmall a paſture for ſuch ſtore of *muttons*. *Shakeſpeare.*—The fleſh of *muttons* is better taſted where the ſheep feed upon wild thyme and wholeſome herbs. *Bacon.*—Within a few days were brought out of the country two thouſand *muttons*. *Hayward's Edw.* VI.—A courtezan.—The old lecher hath gotten holy *mutton* to him; a nunne, my lord. *Green's Friar Bacon.*—I have a piece of *mutton* and a feather-bed for you at all times. *Marſton's Dutch Courtezan.*—Sometimes with *laced* prefixed.—Cupid hath got me a ſtomach, and I long for *laced mutton*. *Middleton's Blurt, Mr. Conſtable.*

MUTTON BA'Y, a bay on the north ſide of the river St. Lawrence, on the coaſt of Canada. Lat. 48. 25. N. lon. 69. W.

MUTTON-FIS'T, *ſ.* A hand large and red:

Will he who ſaw the ſoldier's *mutton-fiſt*,
And ſaw thee maul'd, appear within the liſt
To witneſs truth? *Dryden's Juvenal.*

MUT'TON-MONGER, *ſ.* A wencher.—Is't poſſible the Lord Hipolito ſhould be a *mutton-monger?* *Dekker's Honeſt Whore.*

MUT'TRA. See Matura, vol. xiv.

MUT'TY, a town of Hindooſtan, in Guzerat: ſixty miles weſt of Noanagur.

MUTTYA'RA, a town of Bengal: fourteen miles eaſt of Kiſhenagur.

MU'TUAL, *adj.* [*mutuel*, Fr. *mutuus*, Lat.] Reciprocal; each acting in return or correſpondence to the other:

Note a wild and wanton herd,
Fetching mad bounds, bellowing and neighing loud,
If they perchance but hear a trumpet ſound,
You ſhall perceive them make a *mutual* ſtand,
By the ſweet power of muſick. *Shakeſp. Merch. of Ven.*

What ſhould moſt excite a *mutual* flame,
Your rural cares and pleaſures are the ſame. *Pope.*

Vaugelas, the celebrated French grammarian, makes a diſtinction between mutual and reciprocal. *Mutual*, according to him, is underſtood of what is between two only; and *reciprocal* of what is between more than two. But this diſtinction is little regarded in common uſe.

Mutual Testament is that made by two perſons who leave their effects reciprocally to the ſurvivor.

MUTUA'LES. See Metuales, vol. xv.

MUTUAL'ITY, *ſ.* Reciprocation.—Villanous thoughts, Roderigo! when theſe *mutualities* ſo marſhal the way, hard at hand comes the incorporate concluſion. *Shakeſp.*

MU'TUALLY, *adv.* Reciprocally; in return.—The tongue and pen *mutually* aſſiſt one another, writing what we ſpeak, and ſpeaking what we write. *Holder.*

May I the ſacred pleaſures know
Of ſtricteſt amity, nor ever want
A friend with whom I *mutually* may ſhare
Gladneſs and anguiſh. *Philips.*

MUTUAPOL'LAM, or Mooteapollam, a town of Hindooſtan, in the Carnatic: five miles ſouth of Cuddalore.

MUTUA'TION, *ſ.* The act of borrowing.—Here is a ſale, there a lending: in both there ſeems to be a valuation of time; which, whether in caſe of *mutuation* or ſale, may juſtly be ſuſpected for unlawful. *Bp. Hall's Caſes of Conſcience.*

MUTUATI'TIOUS, *adj.* Borrowed; taken from ſome other.—Her goodly wares of mercenary maſſes, of pardons and indulgences, of the *mutuatitious* good works of their pretended holy men and women. *More againſt Idolatry.*

MUTU'CHI, *ſ.* in botany. See Pterocarpus.

MU'TULE, *ſ.* in architecture, a part of the Doric cornice, appearing to ſupport the corona and the ſuperior members, formed by three vertical parallelograms at right angles, and an inclined plane which deſcends towards the front of the cornice, until it meets the rectangular vertical plane, the inclined plane being the ſoffit, and the two vertical parallel planes being at right angles to the ſurface of the frieze, and the vertical plane on the front parallel thereto. Mutules had their origin from the ends of rafters in the original wooden ſtructures, and are, therefore, properly repreſented with a declination towards the front of the corona; though repreſented by an architect of the laſt century with a level ſoffit.

In Grecian architecture, a triglyph is placed at each angle of the building, and, conſequently, a mutule over each triglyph at the ſame place, and a triglyph and a mutule are placed over each intermediate column; alſo over each intercolumn there is only one triglyph, except in the Doric portico, which has two in the middle intercolumniations, in order to allow greater room for paſſage. The mutules are the ſame breadth as the triglyphs. In the Grecian Doric, three rows of drops, parallel to the front of the corona, are hung from each ſoffit of a mutule; the number in each row being ſix, agreeing with thoſe in the architrave under the triglyphs.

MUTU'NUS, or Mutinus, a deity among the Romans, much the ſame as the Priapus of the Greeks. The Roman matrons, and particularly new-married women, diſgraced themſelves by the obſcene ceremonies which cuſtom obliged them to obſerve before the ſtatue of this impure deity. *Auguſt. de Civ. Dei.*

MU'TUUM, *ſ.* in the civil law, denotes a loan ſimply ſo called; or a contract introduced by the law of nations, whereby a thing conſiſting in weight, as ſuppoſe bullion; in number, as money; or in meaſure, as corn, timber, wine, &c. is given to another, upon condition that he ſhall return another thing of the ſame quantity, nature, and value, on demand. This, therefore, is a contract without reward; ſo that, where uſe or intereſt ariſes, there muſt be ſome particular article in the contract whereon it is founded.

MUT'WAL, a river of Ceylon, called alſo *Calana Ganga*, one of the branches by which the Muliwaddy falls into the ſea, about three miles from the fort of Columbo, after having nearly ſurrounded a large tract of level country in that neighbourhood, of which it forms a very beautiful peninſula. The country along the banks of the Mutwal, for many miles, is extremely pictureſque and delightful.

MUTYHA'RA, a town of Bengal: thirty-three miles north-north-eaſt of Purneah.

MUT'ZA, or MUZZA, a river of Italy, which runs into the Adda eight miles ſouth-eaſt of Lodi.

MUT'ZA, a town of Italy, in the department of the Adda, on a river of the ſame name: three miles ſouth-eaſt of Lodi.

MUT'ZIG, a town of France, in the department of the Lower Rhine: twelve miles weſt of Straſburg.

MUX, *ſ.* [a corruption of *muck.*] Dirt; Exmore dialect. *Groſe.*

MUXACAR'. See MUJAXAR.

MUXADABAD', [i. e. the town of one's choice.] See MOORSHEDABAD, vol. xv. p. 758.

MUXILLO'NES, a ſmall iſland in the South Pacific Ocean, near the coaſt of Chili. Lat. 29. 30. S.

MUXOODPORUM', a town of Bengal: fourteen miles ſouth-eaſt of Mahmudpour.

MUXOODPOU'R, a town of Hindooſtan, in Bahar: thirty miles ſouth-weſt of Bahar.

MUX'Y, *adj.* [from the corrupt word *mux.*] Dirty; gloomy. *Lemon.*

MUY (Le), a town of France, in the department of the Var: ſix miles ſouth-ſouth-eaſt of Draguignan.

MUY'DEN, a town of Holland, ſituated on the river Vecht, near the Zuyder See; there is a ſluice here, by means of which all the adjacent country can be laid under water. The chief trade carried on is making of ſalt. It is ſix miles weſt of Naarden, and ſix eaſt of Amſterdam. Lat. 52. 23. N. lon. 4. 55. E.

MUY'DERBERG, a town of Holland: three miles eaſt of Muyden.

MUYS (Wyer-William), a phyſician of the mathematical ſect, was born at Steenwyk, in Overyſſel, in January 1682, where his father practiſed the ſame profeſſion. His early education was obtained in his native town; and he then paſſed three years at the college of Kempen, for the ſtudy of the claſſics, and afterwards was inſtructed in the firſt principles of medicine, algebra, and geometry, at Vollenhove. At the age of ſixteen he commenced his ſtudies at Leyden, and went from thence to Utrecht, where he received the degree of doctor in 1701. He ſettled at firſt in his native town, and afterwards removed to Arnheim, where he practiſed with reputation and ſucceſs. An offer of a profeſſorſhip at Groningen was at firſt rendered void by the diſputes of a cabal; but his diſappointment was repaid by an election to the mathematical chair in the univerſity of Franeker in 1709, and to the medical chair in the ſame ſchool in 1712, which he exchanged for that of chemiſtry in 1720. He was afterwards choſen profeſſor of botany, which comprehended the inſpectorſhip of the botanic garden. The houſe of Orange ſubſequently retained him as conſulting phyſician, with a conſiderable ſalary, which he received to the end of his life. He was cut off by a lingering diſeaſe, in April 1744, at the age of ſixty-two. He had been five times rector of the univerſity of Franeker, and was a member of the Royal Academy of Sciences of Berlin. His writings were partly medical and partly philoſophical, and bore the following titles: 1. Oratio de Uſu Matheſeos in perficiendo ingenio et judicio; Franeker, 1711. 2. Elementa Phyſices methodo mathematico demonſtrata; Amſt. 1711. 3. Oratio inauguralis de Theoriæ uſu, atque rectâ illam excolendi ratione; Franc. 1714. 4. Diſſertatio et Obſervationes de Salis Ammoniaci præclaro ad febres intermittentes uſu, 1716. 5. Diſputationes duæ, de Materia Luminis, ſeu Ignis Caloris, et Lucis naturâ, 1721. 6. Inveſtigatio Fabricæ quæ in partibus muſculos componentibus exſtat; Leyden, 1738, 1741, and 1751, 4to. This is a laboured and copious compilation of all that had been previouſly diſcovered reſpecting the ſtructure of the muſcular fleſh and its fibres, the diviſions and ſubdiviſions of which he had traced with extreme minuteneſs, and illuſtrated by three good microſcopical plates, drawn by himſelf. 7. After his death a work of his was publiſhed in French, entitled, Diſſertation ſur la Perfection du Monde corporel et intelligent, &c. Leyden, 1745 and 1750, 12mo. 8. Opuſcula poſthuma, ſeu Sermones Academici de ſelectis Materiis, 1749, edited by his ſon.

John Muys, the father of the preceding, who removed to Leyden, and practiſed phyſic there, was author of a work entitled "Praxis Medico-chirurgica rationalis, which was publiſhed in twelve decades, between the years 1684 and 1690; and "Podalirius redivivus," a ſupplement to the former work, in 1686. *Eloy Dict. Hiſt. de la Med.*

MU'ZA, in ancient geography, a port of Arabia Felix, in the country of the Eliſari, placed by Ptolemy between Sacacia and the port of Soſippus. Arrian places it 12,000 ſtadia ſouth of Berenice.

MUZA'NA, a town of Aſia, ſituated north of Melitené, on the bank of the river Melas, and near the mountains.

MUZILLAC', a town of France, in the department of the Morbihan: ſeven miles north-weſt of La Roche Bernard, and twelve ſouth-eaſt of Vannes.

MUZIM'BAS. See ZIMBAS.

MU'ZIO (Girolamo), a copious Italian writer, was born at Padua in 1496, of a family ſettled at Capo d'Iſtria. The family-name was *Nuzio;* but he aſſumed that of Muzio in conformity with the pedantic taſte of antiquity which then prevailed. He ſtudied at Padua; and, his father dying when he was eighteen years of age, he found himſelf obliged to ſeek for a maintenance in the courts of different princes. For a number of years he lived a wandering life; and in one of his letters he complains, that "it has always been his lot to gain his bread by ſerving ſometimes in armies, ſometimes in the courts of popes, emperors, kings, and other princes; now in this, now in that, Italian capital; now in France, now in Upper or Lower Germany." The nature of his ſervices is not clear; for, though he is ſaid to have been a doctor of laws and an eminent juriſt, none of his writings turn upon legal topics. He was honoured by Leo X. with the title of Cavalier. For ſome time he was at the court of Ferrara, where he became an ardent lover of the celebrated Tullia of Arragon, whom he celebrated in his verſes; but his love appears to have been merely ſentimental. The accompliſhed marquis del Vaſto had him in his ſervice ſeveral years, and ſent him to reſide with the duke of Savoy. After the death of the marquis, he paſſed into the ſervice of Don Ferdinand Gonzago, whoſe affairs he managed at ſeveral Italian courts. The duke of Urbino next appointed him governor to his ſon, afterwards duke Francis II. In this court, about 1550, he married a maid of honour of the ducheſs, by whom he had no iſſue. In his younger days he had two natural children, whom he decorated with the noble names of Julius Cæſar and Paulus Emilius. About the year 1569 he was at Rome, where pope Pius V. retained him with a handſome penſion, to be employed ſolely in writing, for he had now made himſelf diſtinguiſhed as a vigorous adverſary of the reformers. The death of that pontiff, however, deprived him of his penſion; and he was again reduced to that poverty which was the ſubject of his complaint during the greateſt part of his life. He was afterwards in the ſervice of cardinal Ferdinand de Medici. He died in 1576 at the age of eighty-one, at the houſe of Lodovico Capponi, in Tuſcany, who had kindly invited him to repoſe under his roof.

Of the numerous works of this writer, it will ſuffice to notice a very few. In 1551 he publiſhed, along with other Italian poems, his "Arte Poetica," in three books, compoſed in blank verſe, and much valued at the time for the elegance of the language, and the judiciouſneſs of the precepts. It is a remarkable circumſtance, that, in a letter written in 1566 to Bolognetti, Muzio mentions that he had entertained a deſign of compoſing an epic poem on the ſubject of the recovery of Jeruſalem by the knights under Godfrey of Bouillon, but that he had dropped his intention. And in reply to an anſwer of Bolognetti's, probably announcing Taſſo's projected poem on the ſame topic, he ſays, "that young Taſſo had engaged in this undertaking, I was totally ignorant. He has ſpirit and a good ſtyle. If the other parts correſpond, he will do himſelf honour." Of his proſe-writings, beſides letters, hiſtories, moral treatiſes, &c. he wrote ſeveral tracts againſt the innovators in religion, eſpecially thoſe of the Italian nation, who at that time were numerous. He firſt attacked Vergerio, who had been his travelling companion, and is ſaid to have been denounced by him to the Inquiſition, in conſequence of what he had diſcovered of his opinions. He then contended with Ochino, and Betti; and afterwards carried the war beyond the mountains againſt Bullinger, Viret, and others. In his polemical writings, ſays Tiraboſchi, "he is not ſo much a profound theologian, as a ſtout and wary combatant, who well knows how to uſe the arms with which the good cauſe ſupplies him, lays open the frauds and deceptions of his antagoniſts, purſues and preſſes on them with vigour, and enforces his arguments with art and eloquence." His books, in the opinion of that writer, had no ſmall efficacy in preventing the ignorant vulgar from being ſeduced by the new opinions. As a counterbalance to the proteſtant writers of eccleſiaſtical hiſtory, called the Magdeburg Centuriators, Muzio, in 1570, publiſhed a Catholic Hiſtory of the Two Firſt Centuries, which made up in polemic zeal for what it wanted in ſound erudition. He carried the work no lower, probably diſcovering that he had not the neceſſary qualifications for ſuch a taſk. *Gen. Biog.*

MUZI'RIS, in ancient geography, a ſeaport-town of India, on the weſtern or Malabar coaſt, forty days' ſail from Ocelis (Gella) in the Red Sea, juſt within the Strait of Babelmandel. This was the firſt port of merchandiſe by which the ancients carried on their commerce between Berenice down the Red Sea with India. From Berenice to Ocelis it was reckoned thirty days' navigation, and from thence to Muziris forty days' ſail; and, as they left Berenice about Midſummer, they might arrive in India in the latter end of Auguſt, when the violence of the ſouth-weſt monſoon was abated, and the coaſting-navigation ſafe and eaſy. Muziris is ſaid by Pliny to have been an incommodious place of merchandiſe, becauſe the ſhallowneſs of the port, or river's mouth, made it neceſſary to diſcharge or take in the cargo in ſmall boats, at a diſtance from the emporium; and beſides, there was danger from the pirates at Nitria. It is not eaſy to aſcertain the preciſe ſcite of the ancient Muziris; but major Rennell, from an attention to the ſeveral circumſtances mentioned by Pliny and Ptolemy, concludes that it was the place now denominated *Meerzaw*, or *Meerjee;* he obſerves that they bear ſome affinity in the ſound; and their ſituation is ſimilar, both being ſeated on a river, and at ſome diſtance from the ſea. See MEERJEE, vol. xv.

MU'ZOS, the name of a people in New Granada, who inhabit a province of the ſame name, celebrated for rich mines of the moſt precious emeralds in the world. They are neighbours and enemies of the Moſcos, or Mueſcas. Their country is mountainous, hot, and moiſt; and from the ſummits may be diſcerned the polar ſtars, both of the north and ſouth; while, towards the end of Auguſt and the middle of March, the ſun throws no ſhade at noonday. This ſavage tribe is diſtinguiſhed by many ſingularities. They have among them a fabulous tradition, that in ancient times there was on the other ſide of the great river Magdalena, a kind of ſhadow of a man called Ari, who, having amuſed himſelf with making in wood faces of many men and women, threw them into the river; and, when they came out alive, he married them, and taught them to cultivate the earth; after which they diſperſed and became the parents of all the Indians, who are inferior to the Europeans, becauſe their heads were made of wood. They had no deities, nor did they adore the ſun and moon, as other people of Bogota did; thoſe ſplendid bodies having been created, according to their creed, after the wooden men, and merely to give them light. When girls arrived at the age of ſixteen, they were married by their parents, without any previous notice. The huſband then went to careſs his wife, when ſhe received him with blows of a cudgel; but in a ſhort time became appeaſed. In caſe of adultery, the huſband broke all the veſſels of wood or clay that were in the houſe, and retired to the mountains, till the wife ſhould have replaced them. The dead were dried before a ſlow fire, and not interred till the end of a year; the widow being obliged to cultivate the ground for her ſuſtenance, till her relations took her home after the interment. *Eſtalla,* cited by Pinkerton in his Geog. vol. ii.

MUZ'ZLE, *ſ.* [*muſeau,* Fr. Hence our word was at firſt written *moſel,* and then *moozle.* "With *moſel* faſt ybound." *Chaucer.*] The mouth of any thing; the mouth of a man in contempt.—But ever and anon turning her *muzzle* toward me, ſhe threw ſuch a proſpect upon me, as might well have given a ſurfeit to any weak lover's ſtomach. *Sidney.*—Huygens has proved, that a bullet, continuing in the velocity with which it leaves the *muzzle* of the cannon, would require twenty-five years to paſs from us to the ſun. *Cheyne.*—If the poker be out of the way, or broken, ſtir the fire with the tongs; if the tongs be not at hand, uſe the *muzzle* of the bellows. *Swift's Directions to Servants.*—A faſtening for the mouth, which hinders to bite.—With golden *muzzles* all their mouths were bound. *Dryden.*

The fifth Harry from curbed licence plucks
The *muzzle* of reſtraint; and the wild dog
Shall fleſh his tooth on ev'ry innocent. *Shakeſpeare.*

To MUZ'ZLE, *v. n.* To bring the mouth near.—The bear *muzzles,* and ſmells to him, puts his noſe to his mouth and to his ears, and at laſt leaves him. *L'Eſtrange.*

To MUZ'ZLE, *v. a.* To bind the mouth:

All through the town with ſlow and ſolemn air,
Led by the noſtril, walks the *muzzled* bear. *Gay.*

To fondle with the mouth cloſe. *A low word.*—The nurſe was then *muzzling* and coaxing of the child. *L'Eſtrange.* —To reſtrain from hurt:

My dagger *muzzled*
Leſt it ſhould bite its maſter, and ſo prove,
As ornaments oft do, too dangerous. *Shakeſp. Wint. Tale.*

MUZ'ZY, *adj.* [a corruption of *muſy* or *muſing;* or from the Fr. *muſard.*] Abſent; forgetful; dreaming; bewildered by thought; bewildered by liquor. *A low expreſſion.*

MY, *pronoun poſſeſſive.* [See MINE, vol. xv.] Belonging to me. *My* is uſed before a conſonant, and *mine* anciently and properly before a vowel. *My* is now commonly uſed indifferently before both. *My* is uſed when the ſubſtantive follows, and *mine* when it goes before: as, This is *my* book; this book is *mine.*—I conclude *my* reply with the words of a Chriſtian poet. *Bp. Bramhall.*

If *my* ſoul had free election
To diſpoſe of her affection. *Waller.*

MY'A, *ſ.* the PEARL-OYSTER; in helminthology, a genus of teſtaceous worms. Generic characters—Animal an aſcidia: ſhell bivalve, generally gaping at one end; hinge with broad thick ſtrong teeth, ſeldom more than one, and not inſerted into the oppoſite valve. Theſe animals perforate into the ſand and clay at the bottom of the ſea, burying themſelves and their ſhells, wholly or in part, in the mud, like the muſcle, with which they were ranked till Linnæus parted them; hence the fiſhing for them is attended with conſiderable difficulty. There are twenty-ſix ſpecies enumerated in Gmelin's laſt edition of Linnæus's Syſtem of Nature:

1. Mya truncata: ſhell ovate, truncate, and gaping greatly behind; tooth projecting forwards and very obtuſe. It inhabits the European Seas; is two inches and a half long; the ſhell is of a dirty-white covered with a yellowiſh-brown ſkin; the inhabitant is frequently eaten, and is the principal food of ſea-birds. It is deſcribed and figured, as are ſeveral of the following ſpecies, in Pennant's Brit. Zool. vol. iv.

2. Mya declivis: ſhell brittle, ſemitranſparent; ſloping downwards near the open end; the hinge is ſlightly prominent. Found about the Hebrides; the fiſh is in general eſtimation among the inhabitants of thoſe iſlands.

3. Mya arenaria: ſhell ovate, rounded behind; tooth projecting forwards, rounded, and furniſhed with a lateral ſmaller one. This ſpecies is found in the European Seas, under the ſand; is two inches and a half long, and of a yellowiſh reddiſh-brown.

4. Mya pictorum, or painter's mya: ſhell ovate: with a ſingle, longitudinal, crenulate, tooth, in one hinge, and two in the other. There are ſeveral varieties of this ſpecies, deſcribed by different naturaliſts: ſome of them are found in the freſh waters of this country, and other parts of Europe; ſome in Barbary, and ſome in Tranquebar. The ſhell, which is nearly four inches long, and half as broad, is commonly uſed to put water-colours in, whence we have its name; it is covered with a browniſh or blackiſh coat, under which it is yellowiſh or green; it is very thin and brittle, and does not gape at either end.

It was this ſpecies, or one of its varieties, that M. Faujas St. Fond ſuppoſes to be the pearl-oyſter he met with in Scotland, during his travels in Great Britain ſome years ago, and of which he has ſince publiſhed an account at Paris. The following extracts from his work contain ſome facts in natural hiſtory which we believe are little known:

“ The maſter of the inn, who obligingly exerted himſelf reſpecting every thing that could gratify my curioſity, brought me two fiſhermen whoſe particular employment was ſearching for pearls. They conducted us to the river, which runs in a very pure ſtream upon a bottom of ſand or pebbles; and they ſoon brought up ſeveral dozens of ſhells, from three and a half to four inches long, and a little more than two broad; their exterior colour was a deep brown, inclining a little to green; the upper ſhell was thick, and of a fine mother-of-pearl colour within, ſlightly tinged with roſe-colour. I regarded this ſpecies as belonging to the Mya pictorum of Linnæus, or at leaſt as very nearly reſembling it. The fiſhermen, in conſequence of a handſome reward which we promiſed them, engaged to open theſe ſhells in our preſence upon the bank; but they ſtipulated for the reſervation of the pearls, if any ſhould be found, that they might ſell them to us at a ſeparate price: and to this propoſition we acceded.

“ Imagining from this that we ſhould put a higher value on thoſe pearls which might be found while we were preſent, theſe artful practitioners brought ſome with them, which they dexterouſly introduced into ſeveral of the ſhells in opening them: they appeared to be well practiſed in this petty ſort of impoſition, which however I detected in a manner that aſtoniſhed and perplexed them, and which deſerves to be mentioned, as it depended upon a memorable fact reſpecting one of the cauſes which contribute to the formation of pearl. I deſired them to open the muſcles before my fellow-travellers, whilſt I went to amuſe myſelf with fiſhing ſome of them; but they were to inform me when they diſcovered any pearls. I was ſoon called, and ſhown a very fine pearl, perfectly round, and of a good colour. I looked at the ſhell and the pearl, and then told them that the pearl was not found in the muſcle ſhown to me. The fiſhers aſſured me that it was, and appealed to the teſtimony of my companions, who confirmed their aſſertion. I aſſured my friends, however, that they were deceived; and begged them to watch the fiſhers more narrowly the next time. I retired a few ſteps, and in a minute or two, I heard one exclaim, We have found another. I went up; and, on examining the muſcle, pronounced that the pearl had for that time alſo been ſlipped into the ſhell. The pearl was beautiful; but the price they demanded for it was ſix times its value. The fiſhers exhibited the utmoſt aſtoniſhment; for, as I was at ſome diſtance from them, it was clear I could not have obſerved their motions. My fellow-travellers, who attentively watched them, were themſelves deceived, or at moſt entertained only a vague ſuſpicion; ſo well ſkilled were theſe men in an art which procured them a few additional ſhillings from travellers.

“ My art was ſo ſupernatural in their eſtimation, that they confeſſed the impoſition, and frankly ſhowed us ſome other pearls which they had in reſerve for the ſame purpoſe. They were very anxious to learn my ſecret, which would ſave them the pains of frequently opening a vaſt number of ſhells to no purpoſe; for they ſeldom found above one or two pearls in a week. But, as they knew no other language than the Erſe, and not even ſo much as a word of Engliſh, I could explain myſelf only by ſigns and geſtures; and, though my inſtructions were not very difficult, I doubt whether they were completely intelligible in a converſation of this ſort. My ſecret conſiſted merely in examining attentively the outſide of the muſcles; and, when neither of the parts had any cavity or perforation, but preſented a ſurface ſmooth and free from calloſities, I could pronounce, without any apprehenſion of being deceived, that there was no pearl in ſuch a ſhell. If, on the contrary, the ſhell was pierced with auger-worms, and indented by other worms of the ſame kind, there were always found pearls more or leſs valuable, or, at leaſt, the embryos of pearls. This obſervation, which I have found invariably true hitherto, was the reſult of ſome enquiries, in which I had been engaged a long time before, reſpecting the formation of that beautiful animal product. Buffon introduces the information, which I communicated to him upon this ſubject, in his article upon pearls, in vol. iv. of the Natural Hiſtory of Minerals. At that time I had diſcovered that the pearl-fiſh is attacked by two claſſes of enemies. One is a very ſmall auger-worm, which penetrates into the inſide, near the edge of the valve, by working a longitudinal paſſage between the different laminæ that compoſe the cover. This ſmall channel, on extending to an inch or an inch and a half in length, doubles back in a line parallel to the firſt, and is ſeparated from it by a very thin partition of ſhelly matter. Theſe two parallel lines diſcover the direction of the worm in entering and returning, which is alſo diſtinguiſhable on the ſurface by two ſmall holes, cloſe to the edge, and in general near the mouth of the ſhell. The paralleliſm of the two paſſages may be demonſtrated by introducing a pin into each orifice. At the inner extremity, however, there is a ſmall circular portion, formed by the worm in turning round. As theſe ſmall channels or covert-ways are excavated in the part neareſt the mother-of-pearl, or ſilvery internal coat, the pearly juice ſoon extravaſates, and produces protuberances, in that direction. The cylindrical bodies thus formed, may be conſidered as elongated pearls, adhering to the internal lining of the ſhell. When ſeveral worms of this kind penetrate near each other, and unite their labours, the reſult is a ſort of pearly wen, with irregular protuberances, in which the iſſues of the paſſages which they have formed are eaſily diſtinguiſhable. Another ſea-worm, much larger, and of the family of the multivalvous ſhell-fiſh, attacks the pearl-ſhells in a much more ingenious manner. This worm is a Pholas, of the ſpecies of dactylus. I have in my cabinet an oyſter from the coaſt of Guinea pierced by one of theſe pholades, which are ſtill as they were found in the heel of the oyſter. The ſhells of theſe ſingular pholades are hinged in the form of a crooked bill: the ſmall holes which they bore are in the figure of a pear; and pearls of this ſhape are ſometimes found, which were in much eſtimation among the ancients, and are at preſent very valuable in the Eaſt Indies. There are undoubtedly ſeveral kinds of worms which pierce the ſhell, and form cavities more or leſs round, in which the juice conſolidates into pearls. It is this obſervation, which has no doubt been made by others beſides me, that probably firſt ſuggeſted to ſome perſons concerned in the pearl-fiſhery, the trick of making artificial perforations in the ſhells, and thus forcing them to produce pearls. At London, I ſaw ſome ſhells brought from China, which muſt have undergone this operation; for the artificial hole was filled up with a piece of braſs wire, rivetted on the outſide of the ſhell like the head of a nail, and the part of the wire which pierced the interior ſhining coat, was covered with a well-ſhaped pearl, which ſeemed as if ſoldered to its extremity. It is probable that, with the Chineſe, who have been ſo long ſkilled in the arts, and whoſe aſtoniſhing and multiplied induſtry teaches us that we are but a comparatively new people, this is not a diſcovery of a very modern date.

"Brouſſonet, with whom I had a converſation upon this ſubject in London, at the houſe of ſir Joſeph Banks, told me that a perſon had aſſured him, that there is ſtill another method of obtaining pearls. The ſhell, on which the experiment is to be made, muſt be opened with the greateſt care, in order to prevent the animal from being injured. A ſmall portion of the inner ſurface is then ſcraped off, and in its room is inſerted a ſpherical piece of mother-of-pearl about the ſize of a very ſmall grain of lead-ſhot. This globule ſerves as a nucleus to the pearly juice, which concretes around it, and, at a certain diſtance of time, produces a fine pearl. He ſaid, that experiments of this nature had been tried in Finland, and repeated alſo in other countries. From theſe obſervations, it may be inferred that the production of pearls depends, perhaps, much more upon an external and accidental cauſe than upon a natural ſuperabundance or extravaſation of the juice of which they are formed.

"There are very excellent pearls found in the river-ſhells of Loch Tay, if we may judge from ſome which the fiſhers of Killin offered to ſell us at more than double the price of thoſe which are in current ſale. But theſe fine pearls are far from numerous; on the contrary, a very great number are found which the jewellers reject, but which, though they may be not well calculated to form decorations for the ladies, are yet very intereſting for the cabinet of the naturaliſt, ſince they afford a confirmation of the theory which I have now mentioned. The greater part of theſe pearls have little or no luſtre; ſome are round, oval, or elongated, and cylindrical; others are hemiſpherical, reſembling a button; ſeveral oblong ones have a contraction towards the middle, which gives them the appearance of two joined together; others alſo are ſomewhat conical; and all are of a pretty large ſize, and of a pale and red or brown colour. The end of the pearl touching the tegument of the ſhell, which forms what is called mother-of-pearl, is ſo deeply impregnated with the ſhining ſubſtance, that it exhibits a ſingular contraſt with the ſurrounding brown colour of the other parts, and ſeems to derive additional ſplendour from it. This coating is of an orient bordering on roſe-colour, which is extremely agreeable to the eye, and is therefore heightened in its effect by the contraſt. Pearls of this kind are ſo ſeldom met with, that they might at firſt be taken for oculated agates prepared for being ſet, or rather for ***buffonites***, particularly thoſe which have no mother-of-pearl. Their texture is very hard, and yields with great difficulty to the file. The augur-worm, which occaſions the formation of the pearls of Loch Tay, pierces the whole thickneſs of the ſhell, which is of conſiderable denſity and of a fallow brown colour; and, as the ſhelly juice oozes out from all parts of the orifice which the worm has formed, it neceſſarily reſults, that the pearl muſt participate in the quality and colour of the ſubſtance of the ſhell, from the exterior layer to that which lines and embelliſhes its inner ſurface. Hence originate thoſe rude but ſingular gems above-mentioned, which have only a thin coating of mother-of-pearl upon one ſide. There are, however, ſome inſtances in which the pearl is pure and brilliant throughout; proceeding probably from an extravaſation of the interior coating only; which may have been occaſioned by another kind of augur-worm attacking the ſhell ſolely in the direction of that coating. It is the province of thoſe naturaliſts, whoſe attention it has more particularly engaged, to inveſtigate more profoundly this very intereſting ſubject, our knowledge of which muſt yet be conſidered as nothing more than a rude outline."

5. Mya margaritifera, the true pearl-oyſter. This ſpecies has been fully deſcribed under the article CONCHOLOGY, vol. v. p. 33.

6. Mya perna: ſhell oblong, dilated, the narrower baſe compreſſed. It inhabits the Magellanic Straits, and the ſhores of Barbary. It is ſaid to reſemble a ham, or leg of mutton; it is ſmooth, blue and white, and open at one end.

7. Mya vulſella: ſhell tongue-ſhaped; the hinge is terminal, depreſſed, and ſemi-orbicular. The ſhell of this ſpecies varies in form according to its age.

8. Mya arctica: ſhell ſtriate; the valves with two ſubſpinous ridges; hinge without teeth. It is found in the North Seas among algæ; ſize of a bean; pale yellow, and milk-white within.

9. Mya edentula: ſhell oval, equivalve, wide, gaping, and ſtriate; hinge without teeth. It inhabits the ſandy ſhores of the Caſpian Sea, and is about an inch long. The ſhell is thin, white, with about thirty-three ſtriæ in each valve.

10. Mya radiata: ſhell equivalve, pellucid, very finely ſtriate tranſverſely, yellowiſh-green with livid rays; valves very broad on one ſide and very narrow on the other. There is a variety which is browniſh, with blue radiate lines. It inhabits the rivers of Malabar.

11. Mya oblonga: ovate-oblong; one valve with a broad ſtrong tooth let into a hollow of the other valve, and a ſmaller tooth inſerted between two ſmall ones of the oppoſite valve.

12. Mya anatina: ſhell globular, ſnowy, pellucid; primary tooth of the hinge prominent and rounded. It inhabits Guinea, and reſembles the Solen anatinus.

13. Mya Nicobarica: ſhell equivalve, ſnowy, ovate-oblong, with decuſſate ſtriæ; tooth of the hinge ſingle, broad, perpendicular, and ſpoon-ſhaped. It inhabits, as its name imports, the Nicobar-iſlands.

14. Mya auſtralis: ſhell ovate-compreſſed, cloſed; hinge with two lateral teeth. Found in New Zealand.

15. Mya gaditana: ſhell rounded, flattiſh, tranſverſely ſtriate. It inhabits the ſhores of Cadiz.

16. Mya corrugata: ſhell rhombic, green; the protuberant parts wrinkled. It is found in the rivers of Coromandel, and is nearly an inch long.

17. Mya rugoſa: ſhell oval, wrinkled, outwardly greeniſh, within pearly; primary tooth of the hinge crenulate, with a longitudinal lateral one, double in the other valve. It inhabits the rivers on the coaſt of Coromandel.

18. Mya nodoſa: ſhell oval, thin, greeniſh; the protuberant parts knotty.

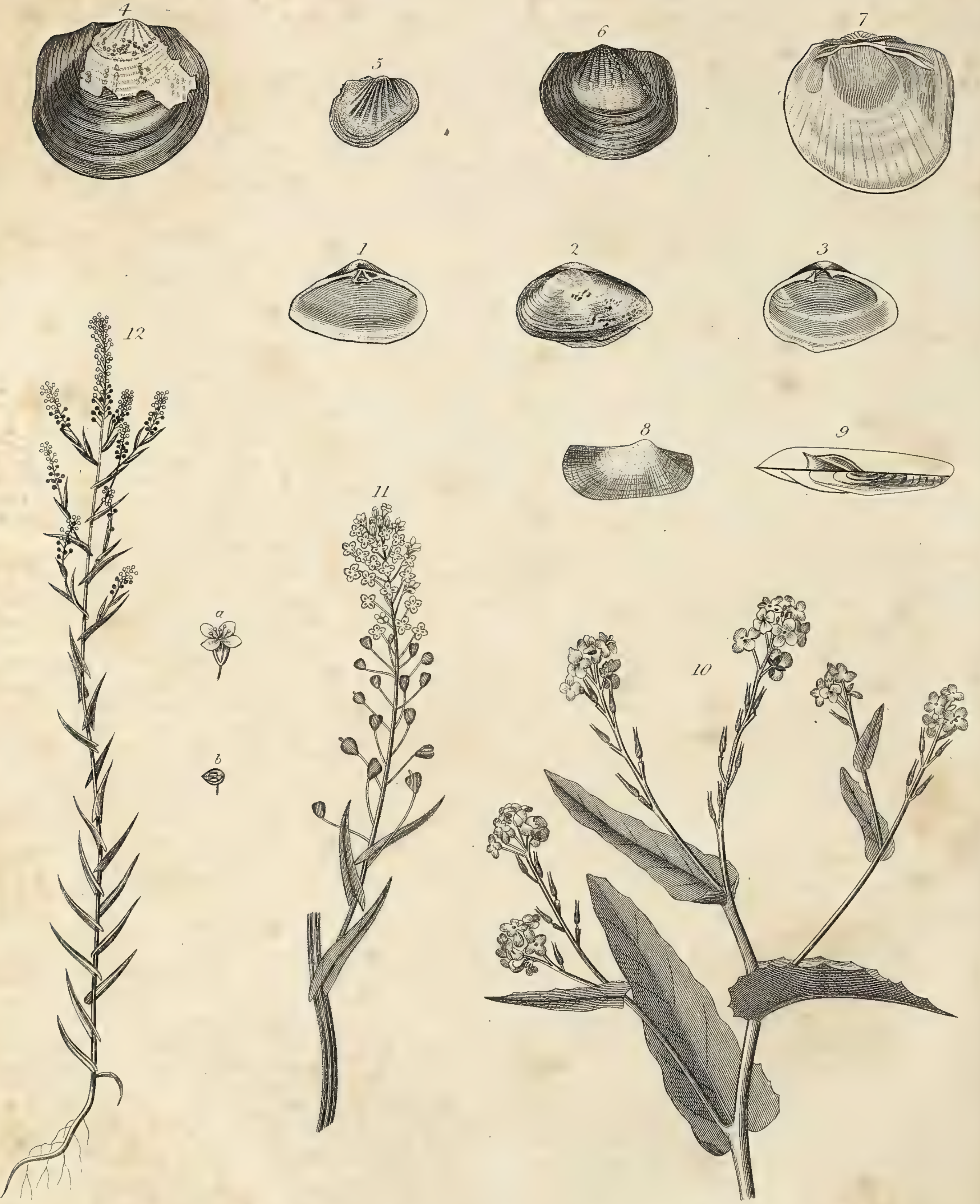
19. Mya Norwegica: ſhell oval, longitudinally and thickly ſtriate; one end rounded, the other truncate; the protuberant parts are decorticated.

20. Mya ſpuria: ſhell rhombic, green; the protuberant part glabrous. It is found in the rivers of Tranquebar, and reſembles the M. corrugata in every thing but its ſize, being twice as large.

21. Mya glycerneris: ſhell gaping at both ends, very thick, lamellous, oblong-oval, with tranſverſe wrinkled ſtriæ; primary tooth in the hinge very thick. Inhabits the European Oceans, particularly the Spaniſh and Mediterranean Seas. It is five inches long and ten broad; and reſembles a Solen.

22. Mya ſyrmatophora; ſhell ovate, depreſſed; margin

MYA AND MYAGRUM.



1 to 9. Species of the Mya, or Pearl-oyster. 10. Perfoliate Gold of Pleasure.
11.12. Panicled Gold of Pleasure; a, b, fructification.

of the hinge with a ſubulate projection near the primary tooth; that of the other valve dilated. It is found in the rivers of Guinea.

23. Mya nitida: ſhell oval, white, ſmooth; with an obtuſe tooth in each hinge. It inhabits Norway.

24. Mya membranacea: ſhell ovate, membranaceous, white, with a protracted reflected margin at the proboſcis.

25. Mya byſſifera: ſhell coarſe and thick; oblong, ſtriate, convex; hinge without a tooth. It is found in the fiſſures of rocks on the Greenland coaſt, and is generally found affixed by a byſſus, or maſs of filaments.

26. Mya dubia: ſhell with an oval and large hiatus oppoſite the hinge, and the rudiment of a tooth within one valve. It is found near Weymouth. The ſhell is brown and brittle; the length of a horſe-bean, and ſhaped like a piſtachia-nut.

New Species from the Linnæan Tranſactions.

Several varieties of the two following ſpecies, with other new ſpecies of teſtacea, which we ſhall hereafter have occaſion to notice, were referred to Dr. Maton, V.P.L.S. by ſir Joſeph Banks, bart. who received them from the æſtuary of the Rio de la Plata. Dr. M. in the introduction to his deſcription of them in the Linn. Tranſ. vol. x. obſerves; "It is ſingular that ſo many new ſpecies ſhould have been found collected together in one ſpot; and ſtill more ſo, that no one ſpecies before deſcribed ſhould have formed part of the aſſemblage. I am induced to think that they were brought down together by ſome of the tributary ſtreams of the Rio de la Plata, from interior parts of the South American continent not hitherto explored by conchologiſts; the *name* of one of theſe ſtreams proves that it abounds with natural productions of this tribe, for it is called *Rio di Conchas*; or River of Shells. Many of the bivalves were found enveloped in the gelatinous *matrix* (if it may be ſo denominated) in which they were firſt depoſited, and to which probably all teſtaceous creatures remain attached (unleſs removed by mechanical violence) until the calcareous covering which is to form their protection has acquired the requiſite degree of firmneſs. In the preſent inſtance, this matrix, in its dry ſtate, forms a tough, but thin, ſemitranſparent ſubſtance, not unlike bladder in texture, and ſoluble in nitrous acid. The young ſhells are attached to it by their *epidermis*, which, in fact, ſeems to be merely a membranous expanſion of the ſame ſubſtance, and to take its origin from it for the purpoſe of confining the animal during the formation of the ſhell. In ſome ſpecies, the attachment of the membrane is ſo looſe, that it is thrown off very ſoon after the animal is ſet at liberty; but in others it remains firmly adhering to the calcareous matter during life. Moſt *fluviatile* ſhells retain this covering more or leſs entire, and it is the caſe with all the ſpecies hereunder deſcribed, in all their ſtages of growth. The membrane by which the calcareous matter of the ſhell is ſecreted, or depoſited, is of a very different nature, and has a more immediate connexion with the contained animal."

27. Mya labiata: ſhell ſuboval, firm, tranſverſely ſtriated, green, of a pearly brightneſs within; valves cloſe, the margin of one of them projecting over the other like a lip; hence the name. Fig. 1, 2, 3, on the annexed Plate, are different ſpecimens of the ſame ſpecies: they are in general about an inch in length, and rather more than half an inch in width. "It is one of the moſt remarkable bivalves with which I am acquainted, part of the margin of one of the valves projecting over the correſponding part of the other, ſo as exactly to reſemble a lip. It is fortunate when ſo ſtriking a character preſents itſelf, for the ſpecies cannot, in ſuch circumſtances, be miſtaken."

28. Mya variabilis: ſhell ſubrhombic, gibbous, with rough prominences lengthwiſe; dark-green; valves with two teeth, diverging at top; the interior of a pearly brightneſs with a caſt of blue. Inhabits with the laſt: one inch long, and the ſame in breadth. The young ſhell is leſs gibbous, ſubrhomboidal, brittle, almoſt tranſparent, purpliſh within, with many rugoſities reaching nearly to the margin.

"This ſpecies varies extremely in its ſtructure and contour, according to its ſeveral ſtages of growth; and, if I had ſeen only the youngeſt and the oldeſt ſhells, without having had opportunities of comparing thoſe of intermediate ages with each, I ſhould moſt probably have given them ſeparate places in the genus. See fig. 4, 5, 6, 7. There can be no doubt that many other teſtacea (eſpecially in the genera of Mya and Mytilus), at preſent conſidered as diſtinct ſpecies, will, from the occurrence of ſimilar opportunities, be found to owe their difference of form ſolely to difference of age. The moſt ſtriking character in the younger ſpecimens of Mya variabilis is the radiating *rugæ*, or plaits, which proceed from the apex of the umbones, and cover nearly the whole of the ſhell. In fig. 6, it will be ſeen that the *rugæ*, though ſo ſtrong over the whole of the younger ſhell, fig. 5, are very indiſtinct as they paſs towards the margin; and in fig. 4, the oldeſt of the three ſpecimens, they are almoſt obſolete, except on the decorticated umbo. It will be remarked alſo, that the outline of the ſhell becomes totally different at its full growth, gradually verging from a ſubrhomboidal, or ſomewhat obliquely oval, to a ſubrhombic or almoſt orbicular form. As theſe differences are ſo marked, no perſon, I conceive, who duly conſiders the facts, which I have mentioned, will be liable to ſeparate Mya variabilis into ſeveral ſpecies." Linn. Tranſ. vol. x. p. 325–8.

29. Mya ſtriata: ſhell ſub-pellucid, white, of a delicate texture, finely ſtriated longitudinally; the ſhape is ſubparallelogrammic; the anterior end is truncated, and the valves reflect, forming a hiatus when the ſhell is cloſed; the poſterior end is rounded; the umbo is ſmall, and placed neareſt the poſterior end. The inſide is white, and ſlightly reflects a nacred hue; the hinge is ſimple, poſſeſſing one erect broad tooth in one valve, that locks into a correſponding cavity in the other. Length half an inch; breadth one inch. This new ſpecies, it appears, was firſt diſcovered by Mr. Lyons in Tenby-bay, on the ſouth coaſt of Wales; and ſeveral more have been ſince taken by the ſame gentleman after a ſtorm, which were all alive. The ſpecimen firſt ſent was communicated by Mr. Montague, author of Teſtacea Britannica, to the Linnæan Society, and deſcribed in their Tranſactions for the year 1815. This ſpecies is ſhown on the annexed Plate, at fig. 8. and the tooth at fig. 9. Mr. Montague, adds, "Round the anterior end of my ſpecimen there is a portion of agglutinated ſand, which induces an opinion that, like moſt others of the ſame genus, it reſides imbedded in the ſand at the bottom of the ſea." (Linn. Tranſ. vol. xi. p. 188.) And it is now a prevailing opinion, from certain obſervations on the growth of theſe ſhells, and the number of their annual laminæ or ſcales, that this fiſh will attain to a great age, and that fifty or ſixty years is but a very moderate computation. Linnæus has ſhown that the Mya will bear removing, and that, by a particular proceſs, it may be put into a ſtate of producing pearls at pleaſure in the reſervoirs to which it is transferred, the old pearls being removed to make way for the formation of new ones.

MY'A, in geography, an iſland in the Eaſt-Indian Sea, about ten miles long and four broad. Lat. 1. 14. N. lon. 127. 27. E.

MYAGROI'DES, *ſ.* in botany. See Draba.

MYA'GRO SIM'ILIS. See Eryſimum and Myagrum.

MYA'GRUM, *ſ.* [a word adopted from Dioſcorides, whoſe *μυαγρος* nevertheleſs is very obſcure, nor does that author ſay any thing which may lead to the meaning of the name; except indeed that he deſcribes the plant as making a rude ſort of candles: "The fat ſeeds, roaſted and bruiſed, are ſmeared over the twigs, which then," ſays he, "ſerve in the place of lamps." Such artificial lights are well known to attract flies to their deſtruction;

and therefore perhaps Tournefort's derivation of the word, from μυια, a fly, and αγρευω, to catch, or enſnare, may be true, rather than the received one, from μυς, a mouſe. But then the word ought to have been ſpelt *Myiagrum.* See Myiagrus.] Gold of Pleasure; in botany, a genus of the claſs tetradynamia, order ſiliculoſa, natural order of ſiliquoſæ, or cruciformes, (cruciferæ, *Juſſ.*) Generic characters—Calyx: perianthium four-leaved; leaflets ovate-oblong, concave, gaping, coloured, deciduous. Corolla: four-petalled, cruciform; petals flat, roundiſh, blunt with narrow claws. Stamina: filaments ſix, the length of the calyx; of which four oppoſite are a little longer; antheræ ſimple. Piſtillum: germen ovate; ſtyle filiform, the length of the calyx; ſtigma blunt. Pericarpium: ſilicle obcordate, compreſſed a little, entire, rigid, terminated at top by the rigid conic ſtyle, two-valved; ſome of the cells often empty. Seeds: roundiſh.—*Eſſential Character.* Silicle terminated by a conical ſtyle, with a cell commonly one-ſeeded. There are ten ſpecies.

1. Myagrum perenne, or perennial gold of pleaſure: ſilicles two-jointed, one-ſeeded; leaves outwardly ſinuate, toothletted. Miller, though he gives this plant Linnæus's epithet of *perenne*, deſcribes it as annual; the lower leaves large, jagged, and hairy; the ſtalks branching out from the bottom; the leaves about four inches long, and two broad, hairy, and unequally jagged; the ſtalks terminated by very long looſe ſpikes of yellow flowers, ſucceeded by ſhort pods with two joints, each including one roundiſh ſeed. But the M. perenne of Miller, Scopoli, Gerard, &c. is probably different from that of Linnæus. Miller ſays it is annual, and Gerard that it is biennial. Villars mentions a perennial ſort which he has ſeen cultivated, with an enormous root, of a lower ſtature, and a ſmaller ſmooth fruit. Native of Germany; cultivated in 1739 by Mr. Miller, if this be his plant.

2. Myagrum orientale, or oriental gold of pleaſure: ſilicles grooved, even; leaves oblong, tooth ſinuate This is an annual plant. Native of the Levant.

3. Myagrum rugoſum, or wrinkled gold of pleaſure: ſilicles grooved, hairy, wrinkled; leaves oblong, blunt, toothed. This alſo is an annual plant, the lower leaves of which are five or ſix inches long; they are hairy and ſucculent, their baſe is eared, and they end in acute points. The ſtalks are a foot and a half high, brittle and hairy, branching out toward the top, and terminated by ſhort looſe ſpikes of ſmall pale flowers; which are ſucceeded by ſmall rough roundiſh capſules, compreſſed at the top. Native of the South of Europe.

4. Myagrum Hiſpanicum, or Spaniſh gold of pleaſure: ſilicles even, ſomewhat ſwelling; leaves lyrate. Stem rugged, with ſcattered reflex hairs. Leaves lyrate, toothed, petioled, oblong. It is a biennial plant: native of Spain.

5. Myagrum Auſtriacum, or Auſtrian gold of pleaſure: ſilicles roundiſh, ſmooth; leaves oblong, embracing; root creeping. The whole plant is ſmooth; the ſtems ſubangular; herbaceous, erect, branchy, leafy, and about a foot or a cubit high. Flowers yellow, on corymboſe terminal racemes ſtretching gradually to two or three inches. This ſpecies grows in clayey ground, and flowers in June. Native of Auſtria.

6. Myagrum perfoliatum, or perfoliate gold of pleaſure: ſilicles obcordate, ſubſeſſile; leaves embracing. This has a ſmooth branching ſtalk upwards of two feet high. The lower leaves are five or ſix inches long, ſmooth, ſucculent, and a little indented; the upper leaves almoſt embrace the ſtalks with their baſe. The flowers are produced in long looſe ſpikes; are yellow and ſeſſile. Villars deſcribes the plant as about a foot in height, with ſtraight ſtems and very ſpreading branches; the leaves ſmooth, with a tinge of aſh-colour on them; the lower ones ſinuated or waved, the upper ones entire. The whole plant is ſmooth. The flowers ſmall. The ſilicle obcordate, three-celled; the two upper cells, which are lateral, are empty, and the lower one, which anſwers to the axis, is filled with a ſingle ſeed. It is difficult to account for the two empty cells, which form inflated round protuberances at the top of the pouch, and have no rudiments of ſeeds. As the pouch falls off entire, perhaps they ſerve to keep it upright in its deſcent, that the ſharp baſe may the better find its way into the ground. This ſpecies is repreſented on the Plate, at fig. 10. It is an annual plant, native of the ſouth of France and Swiſſerland: Mr. Miller adds Italy. Cultivated in 1658, in the botanic garden at Oxford. It flowers in June and July.

7. Myagrum ſativum, or cultivated gold of pleaſure: ſilicles obovate, peduncled, many-ſeeded. This is an annual plant, with an upright ſtalk about a foot and a half high, ſending out two or four ſide-branches towards the top, which grow erect; they are ſmooth and have a fungous pith. The lower leaves are from three to four inches long, of a pale or yellowiſh green, and eared at the baſe; thoſe upon the ſtalks diminiſh in ſize all the way up, are entire, and almoſt embrace the ſtalk with their baſe. The flowers grow in looſe ſpikes at the end of the branches, ſtanding upon footſtalks an inch long; petals ſmall, yellowiſh. Silicles oval, bordered, crowned with the ſtyle, two-celled; the cells filled with red ſeeds. Linnæus remarks, that the capſule or ſilicle bellies out on each ſide; but is uſually, in the wild plant, marked with a cavity preſſed inwards, which cavity diſappears in the cultivated plant. It is cultivated in Germany for the ſake of the expreſſed oil of the ſeeds, which is there uſed for medicinal, culinary, and economical, purpoſes. The ſeeds are a favourite food with geeſe: horſes, kine, ſheep, and goats eat it. Native of Germany and the ſouthern countries of Europe, in corn-fields: with us it has been found near Bridport and Lime in Devonſhire; and at Heydon in Norfolk.

Miller found it growing in the corn in Eaſthamſted-park, the ſeat of William Trumbull, eſq. Following Tournefort he makes two ſpecies of this, under the names of M. ſativum, and M. alyſſum. The latter, he ſays, differs from the former, in having a taller ſtalk; the leaves are much longer, narrower, and regularly indented on their edges, ending in obtuſe points. The flowers are larger, but of the ſame form and colour. The capſules are much larger, and ſhaped like a heart.

8. Myagrum paniculatum, or panicled gold of pleaſure: ſilicles lens-ſhaped, orbiculate, dotted-wrinkled. Root ſmall, annual, fuſiform, white within and without, four inches long. Stem erect, two feet high and more, ſomewhat angular and rugged, having one or two alternate branches at the upper part; both terminated by a looſe longiſh raceme, with the flowers on round peduncles, three or four lines in length. Leaves alternate, ſagittate or rather eared, embracing, hirſute on both ſides, the lower four inches long, and an inch wide. Corolla ſmall; yellow; petals wider at top and blunt, a little more than a line in length. Native of Europe; introduced in 1787; by Mr. Zier. It flowers in July and Auguſt. This is ſhown at fig. 11 and 12. the flower at *a*, the ſeed-veſſel at *b*.

9. Myagrum ſaxatile, or rock gold of pleaſure: ſilicles lens-ſhaped, obovate, ſmooth; leaves petioled, oblong, ſerrate, rugged; ſtem panicled. Root perennial, long, brown. Root-leaves many, ſpread out in a ring, oblanceolate, (orbiculate, or oblong,) gradually attenuated into the petiole, blunt, unequally, obſcurely, and thinly, toothed, thickiſh, ſlightly rough, leſs than an inch in length, deep green. Stem ſlender, ſmooth, half a foot or a ſpan in height, upright, round, hard, ſimple, having a few ſcattered ſublinear leaves on it, broadiſh at the tip. Flowers yellowiſh white.

There ſeem to be ſeveral varieties of this ſpecies. Linnæus mentions three plants which were ſent him, one by Allione, and two by Seguier, on which he does not poſitively determine whether they are diſtinct ſpecies, or only varieties of this. Villars mentions two varieties. One drawn by Plumier at the Grande Chartreuſe, with the lower leaves roundiſh and hirſute; they are more numerous, and it has ſeveral on the ſtems. Another, with the root-leaves ſeſſile, lanceolate, toothed, thick, grey from the quantity of hairs that cover it, and having ſome reſemblance to the Draba alpina of Linnæus. Native of of the mountains of France, Italy, Auſtria, and Swiſſerland. Introduced in 1775, by Drs. Pitcairn and Fothergill: it flowers in June and July.

10. Myagrum Ægyptium, or Egyptian gold of pleaſure: ſilicles angular; leaves three-parted. Stem divaricated, with rod-like racemes. Flowers yellow. It has the appearance of Bunias cakile. Found in Egypt by Haſſelquiſts.

Propagation and Culture. If the ſeeds of theſe plants are permitted to ſcatter in the autumn, the plants will riſe without any care, and only require to be thinned and kept clean. Theſe autumnal plants will always ripen their ſeeds, whereas thoſe which are ſown in the ſpring, ſometimes fail. See ANASTATICA, CRAMBE, ERYSIMUM, and SAPONARIA.

MYAPOU'R, a town of Bengal: ſixty-five miles north-weſt of Ramgur.

MY'AS, a town of Africa, in the country of Sennaar: eighty miles ſouth-ſouth-eaſt of Sennaar.

MYC'ALE, in ancient geography, a mountain of Ionia, on the ſea-coaſt, at a ſmall diſtance north of the mouth of the Meander. It formed a promontory over-againſt the Iſle of Samos. It was the higheſt mountain on the coaſt; covered with wood and abounding with fallow deer. Here was alſo a town of the ſame name; and near it was a temple appropriated, as it has been ſaid, to the furies.

MYCALES'SUS, a town in the eaſtern part of Bœotia, between Schemis to the weſt and Aulis to the eaſt. In the time of Pauſanius the ruins of this town remained; and on the coaſt of the ſea was a temple of Ceres Mycaleſſia.

MYCEMA'TIAS, *ſ.* [from the Gr. μυκημα, a bellowing.] A kind of earthquake with a hollow grumbling noiſe.

MYCE'NÆ, in ancient geography, a town of Greece, in the ancient kingdom of Argos, or Argolis, which, in proceſs of time, became the ſeat of the kingdom, and is celebrated by Homer for its riches, as its rival Argos was for its horſes. Some hiſtorians have aſcribed the ſeparation of the kingdom of Mycenæ from that of Argos to Acriſius, who was its firſt king, and who began his reign in the year 1344 B.C. whilſt others ſay, that his ſon Perſeus, who ſucceeded him in the year 1313 B.C. built the city of Mycenæ, and founded the kingdom. The fifth king of this ſeparate ſtate was Agamemnon, who began his reign in the year 1201 B.C. and reigned eighteen years. He was reckoned at that time the wealthieſt and moſt powerful potentate in all Greece. This king, after the deſtruction of Troy, having encountered ſeveral diſaſters, arrived at laſt at Mycenæ, where he was murdered by his couſin Ægiſthus and his wife Clytemneſtra. Ægiſthus ſeized upon the kingdom 1183 B.C. and, after a reign of ſeven years, was murdered by Oreſtes, Agamemnon's ſon, and ſucceeded by him 1176 B.C. Oreſtes was ſucceeded by Ægyptus, or rather Æpytus, who gained the kingdom in 1106 B.C. and by his liberality engaged the affections both of the nobles and the people; but this liberality proved ultimately fatal to the regal dignity; the ſubjects grew daily more and more encroaching, and the kings more tenacious of their prerogative, till the conteſt ended in the extinction of monarchy, and a total change of government.

The tomb, treaſury, or temple, of Agamemnon, which ſtill exiſts, probably in the ſtate in which it was left by the Argians after the deſtruction of the city in the 78th Olympiad, 460 years B.C. deſerves particular notice, as this edifice is perhaps the moſt ſingular in Greece, and on account of the ſtate of preſervation in which it ſtill exiſts, being entire as to the building, though deſpoiled of its internal decorations: Pauſanias ſays, that envy on the part of the Argians, becauſe the inhabitants of Mycenæ ſhared with the Lacedæmonians the glory of Thermopylæ, was the occaſion of its deſtruction. The nature and deſtination of the above-mentioned edifice is doubtful. Pauſanius ſays, that the tomb of Agamemnon, erected about 1200 years B.C. was among the ruins of Mycenæ; whereas this is at ſome diſtance from the walls. He alſo deſcribes the ſubterraneous treaſury of Atreus and his deſcendants as being in the ſame place; and hence it has been inferred, that this building, conſtructed of the ſame materials as the walls, and coeval with the time of their erection, was the treaſury of Atreus. It is a cone of fifty feet in diameter, and as many in height. It is compoſed of enormous maſſes of a very hard breccia, a ſort of puddingſtone; the black in particular, over the door-way, (which diminiſhes very much in breadth at the top, after the Egyptian manner,) is no leſs than thirty feet in length, fifteen in breadth, and five in thickneſs. This extraordinary edifice has obviouſly been raiſed by the projection of one ſtone over another, and they nearly meet at the top; the curved form and ſmoothneſs being previouſly given to each. The central ſtone at the top has been removed, along with two or three others; and yet the building remains as durable as ever, and will probably laſt till the end of time; which would ſcarcely appear likely, if this had been the key-ſtone and ſupport of the whole edifice. This, therefore, cannot be brought as a proof of the exiſtence of arches in remote ages. (Edinburgh Review, N° 14.) Dr. Sibthorp, who viſited this temple ſo lately as the year 1795, ſays that the ſtone which forms the portal, is the largeſt he ever ſaw employed in any edifice.

MYCERI'NUS, a ſon of Cheops, king of Egypt. After the death of his father he reigned with great juſtice and moderation. *Herodot.*

MY'CITHUS, a ſervant of Anaxilaus, tyrant of Rhegium. He was entruſted with the care of the kingdom, and of the children of the deceaſed prince; and he exerciſed his power with ſuch fidelity and moderation, that he acquired the eſteem of all the citizens, and at laſt reſtored the kingdom to his maſter's children when come to years of maturity, and retired to peace and ſolitude. He is called by ſome *Micalus.*

MYCO'NI, one of the Cyclades in the Grecian Archipelago, about twenty-one miles in circumference, ſituated between Icaria (or Nicaria) and Delos. This is the ancient *Myconus*, which, by fabulous relation, was the tomb of the Centaurs that were killed by Hercules. Some ancient writers have called the inhabitants of Myconus "bald-heads," aſſerting that this defect was natural, and that it was a kind of endemial diſeaſe, with which almoſt all of them came into the world; but no appearances of it now remain. They were alſo reckoned great paraſites; and men, who preſented themſelves at feaſts without being invited, were proverbially called "gueſts of Myconi."

In a harbour known by the name of *Tourlon*, is an anchorage frequented by ſhips ſailing through the Archipelago, in order to repair to Smyrna and the north of Turkey. The Greeks of Myconi are great navigators; traverſing the ſea that ſurrounds them in their boats, ſome of which are large. Addicted to maritime occupations, they neglect the culture of their lands, from which, though dry and mountainous, they might derive conſiderable advantage. All the productions which they yield, though in ſmall quantity for want of culture, are of a very good quality, ſuch as wheat, barley, raiſins, figs, olives, and cotton. Wine and fruits are here excellent. Game abounds; the moſt delicate birds arrive in numerous flights twice a-year, in ſpring and autumn; and, in ſhort, the iſland affords in profuſion, all the neceſſary or agreeable articles of life. But water is ſcarce; and, during the great heat of ſummer, every thing is dry in the fields, and bears the aſpect of aridity. This drought has, without doubt, reſtricted the operations of agriculture, and induced men to ſeek abroad means of exiſtence more certain and leſs laborious. The women are principally occupied in ſpinning cotton which grows in their iſland, and manufacturing it into ſtockings or cloths. An uninhabited ſhoal, to which the Myconites ſend flocks, affords a good anchorage a league eaſt of Myconi: it is called *Tragoniſi*, or He-goat Iſland, becauſe it formerly, in all probability, contained both he and ſhe goats; but none are now ſeen there. Lower, and a little farther from Myconi, are two points of arid rocks, which the Greeks call "Stapodia," and the navigators "The Two Brothers." Lat. 37. 27. N. lon. 25. 23. E.

MYCO'NI, a town or village on the weſt coaſt of the fore-mentioned iſland. Mr. Galt, who viſited it in 1810, ſays, "This is a neat place for its extent; and more like a Chriſtian town of the ſame ſize, than any that I have yet ſeen in the Levant. It is ſuppoſed to contain between four and five thouſand inhabitants, and upwards of eight hundred inhabited houſes. Since the better days of Venice, Myconi has been a place of conſiderable trade; being, in ſome degree, the parent of Specia, Idra, and Ipſera. The moſt conſiderable and the moſt celebrated production of Myconi is its red wine, of which about five hundred pipes are made annually. The quality reſembles that of claret; but the inhabitants have a way of making different kinds; and, as the clarety is the moſt expenſive to them, they will rather cheat you than give it genuine. When the grapes are culled and preſſed, while yet freſh from the vineyard, the claret-flavour of the wine is obtained in its greateſt perfection. By drying the grapes in the ſun, the other ſorts, and which ſtand the moſt watering, are produced. When the grapes are too much dried, the wine becomes ſweet, and, to my palate, very odious. By their original capitulation with the Turks, the inhabitants of Myconi enjoy the right of chooſing their own magiſtrates, and of otherwiſe regulating the internal economy of the iſland. Lat. 37. 26. N. lon. 25. 20. E.

MYC'TERES, *ſ.* in anatomy, the noſtrils. *Aſh.*

MYCTE'RIA, the JABIRU, *ſ.* in ornithology, a genus of birds belonging to the order of grallæ. Generic characters—Bill long, bending upwards, and ſharp; upper mandible triangular; the noſtrils ſmall and linear; there is no tongue, or a very ſmall one; and the feet have four toes. There are four ſpecies.

1. Mycteria Americana, the American jabiru: white, with the quill and tail feathers purpliſh black; head and neck naked and black; the occiput whitiſh; a red zone round the lower part of the neck; bill and legs black.

This bird in ſize yields only to the oſtrich, being not leſs than ſix feet high. The bill is thirteen inches long, ſtout, black, and not unlike that of a ſtork, and bends upwards; the whole plumage is white, except the head, and about two-thirds of the neck, which are bare of feathers, and of a blackiſh colour; the remainder is alſo bare, and of a fine red: on the hind-head are a few greyiſh feathers. The legs are ſtrong, of a great length, and covered with black ſcales: wings and tail even at the end. This bird is found in all the ſavannas of Cayenne, Guiana, and other parts of South America. It makes its neſt in great trees, which grow on the borders; lays two eggs, and brings up the young in the neſt till they can deſcend to the earth. The colour of the young birds is grey; the ſecond year it changes to roſe-colour, and the third to pure white: their food is fiſh; and they are ſaid to be very voracious, taking great quantities of fiſh to ſatisfy them. In their nature they are very wild. The fleſh of the young is good to eat.

M. Bajon thinks this bird is the American oſtrich of ſeveral authors; and Mr. Latham ſeems to be of the ſame opinion, for many reaſons; particularly from the very great ſimilarity of names in the birds quoted by authors, viz. *Nhandhuguacu*, for the oſtrich of America, by Marcgrave; *jabiru-guacu*, and *nhandhu-apoa*, for a greater jabiru; again, *jabiru*, for a ſmaller ſpecies. Theſe names ſeem to run much into one another; the laſt is alſo, according to Barrere, called *aouarou* by the inhabitants of Guiana. This author alſo likens the *nhandhuguacu*, or the ſuppoſed oſtrich of America, to a crane. It ſeems, however, to have gained univerſally the name of *oſtrich* by the Europeans, but unfortunately ſcarcely any two have given the ſame account: Marcgrave ſays, it has three toes furniſhed with claws forwards, and one without a claw behind; Fermin, that it has only two toes, joined by a membrane; but, Bajon aſſures us that it has four, all placed as in the heron-tribe; and this will appear to be the fact by inſpecting the annexed Plate, fig. 1.

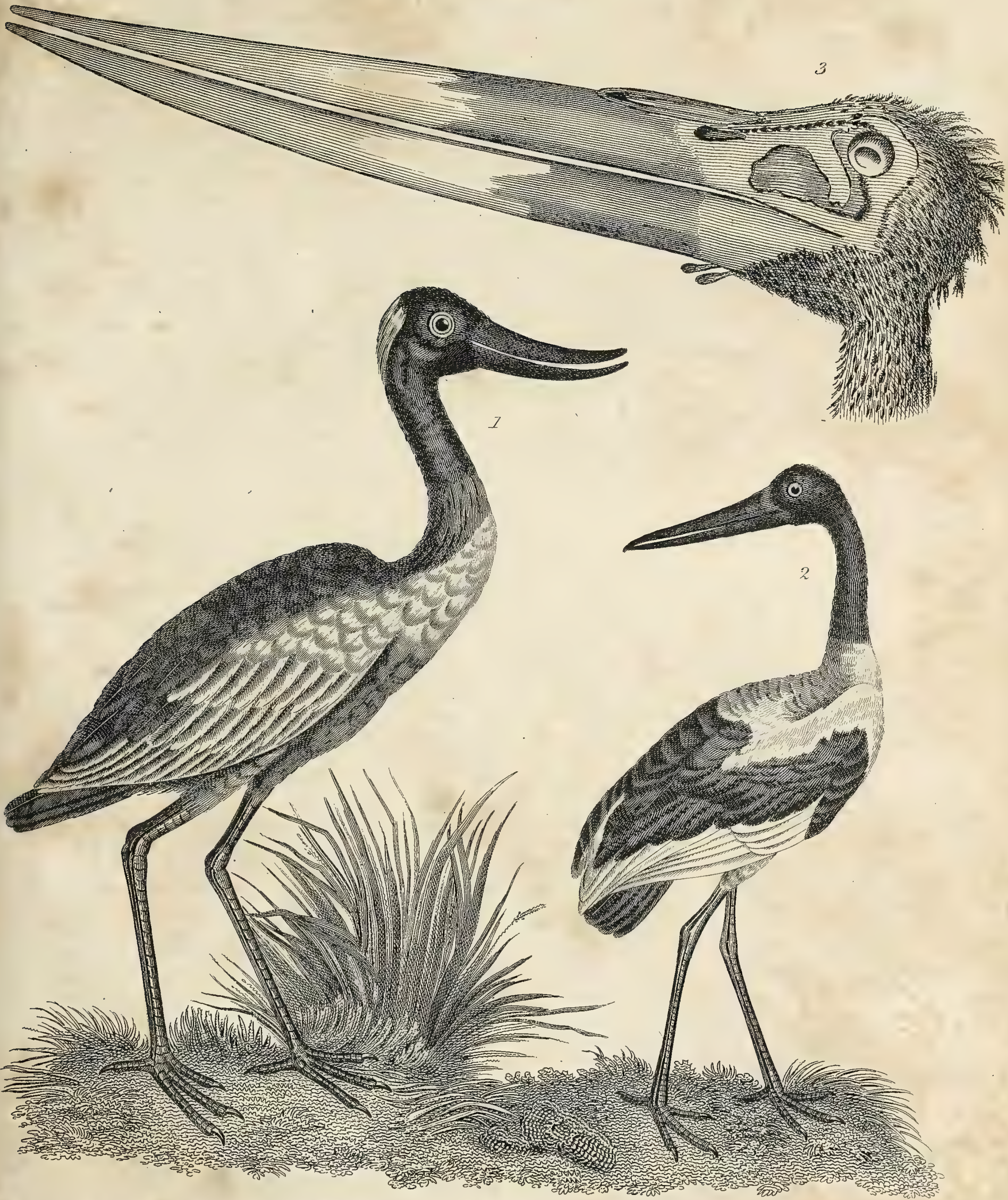
2. Mycteria Aſiatica, the Indian jabiru: white; band over the eyes, lower part of the back, quill and tail-feathers, black; bill blackiſh, upper mandible gibbous at the baſe, lower tumid beneath; legs fleſh-colour. Inhabits the Eaſt Indies: feeds on ſhell-fiſh.

3. Mycteria Novæ Hollandiæ, the New Holland jabiru: body above purpliſh-green; beneath, neck, and ſhoulders, white; head purpliſh, ſpotted with white; neck feathered; irids yellow; firſt quill-feathers white; tail black and white; bill black; legs red. Inhabits New Holland. Deſcribed by Dr. Turton, from a ſpecimen in the Leverian Muſeum, which, however, ſays Dr. Shaw, ſeems not to have attained to its full ſize, ſince it falls ſhort of the meaſurements marked in ſome drawings executed in New Holland from the recent bird. This ſpecies is ſhown at fig. 2.

4. Mycteria Senegalenſis, the Senegal jabiru: white; bill red towards the tip, whitiſh towards the baſe, with a black tranſverſe band and a tranſparent ſpot on each ſide. This is deſcribed, in the 5th vol. of the Linn. Tranſ. by the late Dr. Shaw, but only from a ſkin which was received from Mr. Bryer of Weymouth. It was ſaid to be a native of Senegal. The length, from the tip of the bill to the ends of the claws, was ſix feet two inches; the bill was thirteen inches in length, which is alſo the meaſure of that of the common or American jabiru; the neck fifteen inches; the body twelve inches; the naked part of the thigh eleven inches; the feathered or fleſhy part four inches; the knee-joint one inch; the leg thirteen inches and a half; the foot, to the tip of the middle toe, five inches and a half; the two outſide toes are about an inch ſhorter than the middle one; the back toe ſcarcely quite two inches. A very ſlight approach towards a ſemipalmated appearance takes place at the firſt joint: the claws are ſmall and blunt. The bill is pale or whitiſh at the baſe for near three inches from the ſetting-on of the upper mandible, and one inch and a half from the lower: then ſucceeds a broad black zone acroſs both mandibles, about three inches wide; well defined on the back part, but ſomewhat irregular in front. From this part the bill is pale, with a ſlight caſt of reddiſh for about two inches, and from thence grows intenſely red or of a vermilion colour to the tip; on each ſide the upper mandible is a large ſemi-oval and ſemi-tranſparent ſpace, which, at its back part, is continued upwards in a curved direction acroſs the fore part of the eye. A little way down the upper part of the bill runs a bare flattened part, ſomewhat in the manner of the cere in the Fulicæ and other birds of that tribe. The whole head and neck are black, and covered with feathers, which, on the head, ſeem to have been ſmall and ſemi-ſetoſe on the front, but ſomewhat longer and larger on the occiput. Thoſe on the neck are ovate-lanceolate, and of the uſual ſtructure, or as in the generality of birds. The plumage of the breaſt, back, thighs, &c. are alſo of the uſual ſtructure, but much more inclining to a rounded than lanceolate form. The wings were wanting: the ſhoulders alone remaining, for about the length of four inches; they were covered with white feathers; the ſcapulars, which were left on each ſide, were black, with whitiſh baſes; they were about fifteen inches in length. The whole remainder of the bird was white. The tail was entirely wanting. Beneath the baſe of the bill, on the ſkinny or gular part, were ſituated two very

ſmall

MYCTERIA.



1. The American Jabiru 2 The New Holland Jabiru.
3. Head of the Senegal Jabiru.

[illegible] for the [illegible]

ſmall pear-ſhaped pendant wattles, adhering by very ſmall necks: they were ſeated at about three quarters of an inch from each other, and in the dried ſpecimen were of a ſubſtance reſembling iſinglaſs. The legs are extremely long; and the thighs, to a diſtance nearly equal to that of the leg itſelf, are quite bare. The whole leg and thigh of a black colour, except that round the knee, as well as round each joint of the toes, is a pale band or zone. The whole length of the leg and thigh is coated with hexagonally-longitudinal ſcales or diviſions.

If this bird be collated with the deſcriptions of the Myĉteria Americana, or common jabiru, it will clearly appear to be a diſtinĉt ſpecies. It approaches much more nearly to Myĉteria Novæ Hollandiæ, or New-Holland jabiru; but in that bird there is not the ſlighteſt appearance of the membranaceous or ſemi-tranſparent part on each ſide of the upper mandible. The colours alſo both of the bill and legs are widely different from thoſe of the New-Holland jabiru; but it agrees with that ſpecies in having the head and neck covered with feathers. An exaĉt repreſentation of the head of this ſpecies, half the natural ſize, is given at fig. 3.

MYCTERIS'MUS, *ſ.* in rhetoric, a taunt; a cloſer kind of ſarcaſm.

MY'DA, a river of Auſtria, which runs into the Danube near Stockerau.

MY'DAN, a town of Candahar, capital of a diſtriĉt in Cabuliſtan: twenty-four miles ſouth-weſt of Cabul.

MYDE'SIS, *ſ.* [Greek.] A rottenneſs proceeding from too much moiſture.

MYDOR'GE (Claude), an able French mathematician, was the ſon of a wealthy counſellor to the parliament, and born at Paris in the year 1585. He was educated to the legal profeſſion, and became counſellor to the Chatelet, and afterwards treaſurer of France in the generality of Amiens. Theſe places, however, he held only for the ſake of rank, being more partial to mathematical ſtudies than the praĉtice of the courts, and maſter of an ample fortune, which permitted him to indulge his predominant inclination. The ſimilarity of their taſte led him to cultivate an acquaintance and friendſhip with Des Cartes; and, in 1627 and 1628, he furniſhed that philoſopher with the excellent glaſſes which he made uſe of in examining and explaining the nature of light, of viſion, and of refraĉtion. He defended Des Cartes in the diſpute which he had with M. Fermat, a celebrated mathematician at Toulouſe; and was afterwards one of the mediators of the peace which was made between thoſe learned men in 1638. On another occaſion he ſtood forward to repel an attack made upon his friend when he was abſent from France, and undertook to refute, either *vivâ voce* or in writing, any objeĉtions which might be preferred againſt the dioptrics and geometry of that able man. In 1638, he publiſhed a Latin treatiſe On Conic Seĉtions, in four books, which father Merſenne has inſerted in his Abridgment of Univerſal Geometry, &c. In 1642, he and Des Cartes received an invitation from ſir Charles Cavendiſh, brother to the earl of Newcaſtle, to ſettle in England, which the latter was inclined to accept, and would, moſt probably, have been accompanied by our author; but the breaking out of the civil wars in this country put an end to all negociation on this ſubjeĉt. About this time he ſucceſsfully defended the writings of Des Cartes againſt the attacks of the Jeſuits. He died at Paris in 1647, in the ſixty-third year of his age. With ſuch zeal was he inſpired for the intereſts of ſcience, that he ſpent above a hundred thouſand crowns on the fabrication of glaſſes for teleſcopes, burning mirrors, mathematical inſtruments, mechanical engines, and on experiments in natural philoſophy; which alone would have entitled him to reſpeĉtful notice, even if he had been entirely unknown as a ſcientific writer. *Gen. Biog.*

MY'DRECHT, a town of Holland, in the department of Utrecht: twelve miles weſt-ſouth-weſt of Utrecht.

MYDRIA'SIS, *ſ.* [from *μυδαω*, to abound with moiſture, becauſe it was ſuppoſed to proceed from a redundance of moiſture, or humours.] A preternatural dilatation of the pupil of the eye. It is an ordinary ſymptom of the gutta ſerena, apoplexy, compreſſion of the brain, &c.

MY'DRIM, a village in Carmarthenſhire, South Wales; with a fair on the 12th of March.

MYEDZYR'ZCE, a town of Poland, in Volhynia: forty-two miles north of Conſtantinow.

MYE'LOS, *ſ.* [Greek.] The marrow of the bones; the ſpinal marrow.

MY'ERS TOWN, a town of Pennſylvania: ſeventeen miles weſt of Reading.

MYGBA'OTH, *ſ.* in the Jewiſh antiquities, a kind of mitre worn by the prieſts. See MIZNEPHETH, vol. xv. p. 597.

MYGDO'NIA, in ancient geography, a diſtriĉt of Macedonia, to the north of the Sinus Thermaicus, and eaſt of the river Axius, which ſeparates it from Bottæis, and weſt of the river Strymon. *Pliny.*—Alſo, a diſtriĉt of Meſopotamia, which took its name from that of Macedonia, running along the Euphrates, from Zeugma down to Thapſacus, extending a great way eaſt, becauſe Niſibis was reckoned to it.

MYGDO'NIUS, a river of Meſopotamia, which was formed of many ſtreams, and diſcharged itſelf into the Chaboras.

MYGE'NES, the moſt weſterly and one of the ſmalleſt of the Faroer iſlands in the North Sea. Lat. 61. 53. N. lon. 10. 32. E.

MYGIN'DA, *ſ.* [ſo named by Jacquin, in honour of *Francis Mygind*, a German nobleman, well ſkilled in botany, and proteĉtor of the botanic garden at Vienna.] In botany, a genus of the claſs tetrandria, order tetragynia, natural order of rhamni, *Juſſ.* Generic Charaĉters—Calyx: perianthium four-parted, very ſmall, permanent. Corolla: petals four, roundiſh, flat, ſpreading very much. Stamina: filaments four, awl-ſhaped, ereĉt, ſhorter than the corolla; antheræ roundiſh. Piſtillum: germen roundiſh; ſtyles four, ereĉt, ſhort; ſtigmas acute. Pericarpium: drupe globular. Seed: nut ovate, acute.—*Eſſential Charaĉter.* Calyx four-parted; petal four; drupe globular. There are four ſpecies.

1. Myginda uragoga, or downy-leaved myginda: leaves ſubcordate, acuminate, ſubſerrate, pubeſcent. This is an upright ſhrub, divided into few branches; on ſandy ſhores three feet high, in woods eight feet. Root thick, knobbed, irregular; the bark brown without, orange within; the wood ſolid, whitiſh, very bitter. Leaves ovate or lanceolate, acute, very finely ſerrate, on very ſhort red petioles, oppoſite, but ſometimes alternate. Peduncles filiform, axillary, oppoſite, bifid; each diviſion trifid and three-flowered; the middle flower opening long before the ſide ones. Flowers ſmall, of a dark ſhining red. Fruit red, ſoft, the ſize of peaſe. The Spaniards call it *yerva de maravedi.* At Carthagena they uſe a decoĉtion or infuſion of the root as a powerful diuretic: the leaves have the ſame quality in a much ſmaller degree. It is abundant about Carthagena in New Spain, and in the Iſland of St. Martin, in places not far from the ſea.

2. Myginda rhacoma, or ſmooth-leaved myginda: leaves lanceolate-ovate, obtuſe, crenate; flowers monogynous; ſtyle four-cleft. This is an upright branching ſhrub, from two to three feet in height, with an aſh-coloured bark. Leaves ſmall, half an inch in length, oppoſite, ſtiffiſh, ſcarcely nerved, ſmooth, ſomewhat ſhining, on very ſhort petioles. Flowers in ſmall racemes, very minute, red. Native of Jamaica, on the weſtern ſandy coaſt; flowering in ſummer. In habit it reſembles the preceding, but has ſmaller ovate leaves, and an undivided ſtyle.

3. Myginda latifolia, or broad-leaved myginda: leaves elliptic, crenulate, ſubcoriaceous; ſtigmas two to four, ſeſſile. This is a branching ſhrub, three or four feet in height. Branches ſcattered, four-cornered, ſmooth. Leaves oppoſite, oblong, blunt, remotely notched, veined, very ſmooth, rigid, an inch long, on ſhort petioles.

Flowers very ſmall, whitiſh. Fruit obovate, ſmooth, nearly the ſize of pepper, hanging down. Native of the Weſt Indies.

4. Myginda pallens, or pale-leaved myginda: leaves elliptical, very obtuſe, crenate, ſmooth, nearly ſeſſile; ſtyles combined; petals wavy. Gathered in Antigua by Maſſon. This is the ſize of the laſt, with which it agrees in habit; but the leaves are of a lighter more yellowiſh-green, ſhorter ſtalks, and in ſome degree ſcattered; the adult ones paler beneath. The flower-ſtalks are twice forked; the central flower, as well as the reſt, elevated on a ſlender ſmooth partial ſtalk.

The firſt three ſpecies are ſaid to have been introduced, into the Engliſh gardens between the years 1790 and 1798. They are kept in the ſtove, and are evergreen, flowering at various times. Jacquin ſays the ſecond bloſſomed with him the year after the ſeed was committed to the ground, the plant not being above ſix inches high. We have never heard of the fourth being brought to Europe.

MYIA'GRUS, in the heathen mythology, a name given ſometimes to Jupiter, and ſometimes to Hercules, on occaſion of their being ſacrificed to, for the driving away the vaſt number of flies which infeſted the ſacrifices on certain public occaſions. The word is uſually ſpelt *Myagrus;* but this muſt be an error, as this word does not expreſs the "fly-deſtroyer," but "the mouſe-deſtroyer;" and we have it ſufficiently teſtified by the ancients, that flies were the only creatures againſt whom this deity was invoked. Pliny calls this deity alſo *Myiodes;* and tells us, that the flies which uſed to peſter the Olympic rites went away in whole clouds on the ſacrificing a bull to this god. We find in Athenæus alſo, that this ſacrificing to the god of flies at the Olympic games was a conſtant cuſtom. Some diſtinguiſh theſe two deities, and tell us that the latter, or *Myiodes,* uſed to viſit the nations in vengeance, with a vaſt multitude of flies; and that, on paying him the due honours of a ſacrifice, they all went away again; and this ſeems to agree with what Pliny tells us in ſome places.

At the time of the Olympic games, Jupiter was worſhipped under the name of *Apomyos,* or *Myiagrus Deus,* to ſupplicate the deſtruction of thoſe troubleſome creatures. This happened only once in many years, when the ſacrifices were performed there; but the Elians worſhipped him continually under this name, to deprecate the vengeance of heaven, which uſually ſent, as they expreſſed it, an army of flies and other inſects, toward the latter end of the ſummer, that infeſted the whole country with ſickneſs and peſtilence.

MYHI'E, a river of Hindooſtan, which riſes near Dhar, and runs into the Gulf of Cambay near the city of Cambay.

MY'LA, a river of Holſtein, which runs into the North Sea two miles weſt of Meldorp.

MY'LÆ, or Myles, now *Melazzo,* a town of Sicily, ſituated towards the weſt. This ſmall town has been recogniſed as the place near which the fleet of Auguſtus, under the command of Agrippa, obtained an advantage over that of the younger Pompey.—Alſo, a ſtrong town of Theſſaly, which however was taken, and abandoned to pillage.

MYLAN'TIA, a promontory of the Iſle of Rhodes, in which was the town of Camirus.

MYLA'ON, a ſmall river of Arcadia, weſt of Megalopolis, which ran from the ſouth-weſt to the north-eaſt, and emptied itſelf into the Alpheus.

MYLA'SA, or Mylas'sa, in ancient geography, a noble city of Caria in Aſia Minor, ſituated about three leagues from the Sinus Ceramicus. It was the capital of Hecatomnus king of Caria, and father of Mauſolus. Caria was taken by Mithridates, and afterwards by Labienus, whoſe father had been one of Cæſar's generals. Hybrias, whoſe eloquence and valour deſervedly entitled him to a diſtinguiſhed rank among his countrymen, in vain encouraged them to make a moſt obſtinate defence while it was beſieged by the latter. He himſelf was obliged to yield to neceſſity, and to take refuge at Rhodes; but ſcarcely had the conqueror quitted the city, when Hybrias returned, and reſtored liberty to his country. At length the Romans left to Mylaſa that liberty of which it rendered itſelf ſo worthy by the great efforts it made to preſerve it. Pliny calls it *Mylaſa libera.* Strabo informs us, that it was one of the moſt magnificent cities of antiquity, and one of thoſe, the temples, porticoes, and other public monuments, of which, were highly admired. A quarry of white marble in the neighbourhood furniſhed it with abundance of materials for erecting theſe edifices. The Mylaſians had two temples dedicated to Jupiter: one ſituated in the city, which was named *Oſogo;* and another built on a mountain, at the diſtance of ſixty leagues. The latter was dedicated to *Jupiter Stratius,* or the Warrior. His ſtatue, which was very ancient, inſpired great veneration; people came from all quarters to implore his protection; and, for the greater accommodation of his votaries, a paved way was conſtructed, which reached from Mylaſa to this venerable fabric.

This city is now called Melasso, which ſee. Of all the ancient temples which formerly ornamented it, one only eſcaped the power of time, the blind zeal of the early Chriſtians, and the barbarous ſuperſtition of the Mahometans: this monument was dedicated to Auguſtus and the divinity of Rome. When Pococke viſited Melaſſo, it was perfect and entire; but at preſent no traces of it remain, except a few fragments, which have been employed to conſtruct a Turkiſh moſque.

MY'LAU, or Muh'lau, a town of Saxony, in the Vogtland, on the Golſch: three miles ſouth-eaſt of Greitz, and eight north-eaſt of Plauen.

MY'LES, a town of the iſland of Samos: two miles weſt of Cora.

MYLI'Æ, or Mylias, in ancient geography, a country which originally made a part of Greater Phrygia, but, in proceſs of time, it was referred to Lycia.

MYLIT'TA, a ſurname of Venus among the Aſſyrians, in whoſe temples the women were obliged to proſtitute themſelves to ſtrangers. *Herodot.* c. 131, 199.

MYLNE (James), an obſcure dramatic writer, was born June 4, 1737, at Suttie Bains, in the neighbourhood of Haddington, Eaſt Lothian. He was educated at the univerſity of Edinburgh; but, inſtead of engaging in any of the learned profeſſions, he adopted the purſuit of agriculture, and rented the farm of Lochill, near Haddington, which was formerly in the poſſeſſion of his great-grandfather, and is now occupied by his ſon, who ſucceeded to the leaſe on his death in 1789. He was author of, 1. Britiſh Kings, a tragedy; 2. Darthula, a tragedy; which were publiſhed with his poems, in 8vo. 1790, by his ſon after his death, and dedicated to Mr. Dundas.

MY'LON, in ancient geography, a town of Egypt, mentioned by Athenæus and Styph. Byz. which gave name to the Mylopolite nome.

MY'LON, *ſ.* in ſurgery, is uſed for the largeſt tumours of the ſtaphylomatous kind in the corner and uvea of the eyes.

MYLO'THROS, *ſ.* in ancient muſic, the name of a Greek ſong, proper for millers and bakers. The ſame, perhaps, as the *Epiaulia.*

MYL'PHÆ, *ſ.* A diſeaſe which occaſions a defect of hair on the eyelids.

MYNA'MA, a town of Hindooſtan, in Bahar: ſeventeen miles ſouth-eaſt of Durbungah. Lat. 26. 1. N. lon. 86. 21. E.

MYNAR', a town of Hindooſtan, in Bahar: four miles north-eaſt of Bettiah.

MYNATNAGUR', a town of Bengal: twenty-five miles north-north-weſt of Boglipour.

MYNATPOU'R, a town of Hindooſtan, in Bahar: thirty-two miles north of Durbungah. Lat. 26. 38. N. lon. 86. 15. E.

MYN'CHEN, *ſ.* [Saxon.] A nun.

MYN'DER, a ſhoal in the ſtraits of Macaſſar, near the coaſt of the iſland of Celebes. Lat. 2. 12. S. lon. 118. 55. E.

MYN'DES. See Mendes, vol. xv. p. 89.

MY'NES, a prince of Lyrneſſus, who married Briſeis. He was killed by Achilles, and his wife became the property of the conqueror. *Homer*, Il. 3.

MYNHE'ER, *ſ.* [Dutch.] Sir, my lord or maſter, among the Dutch. Among us, it uſually means a Dutchman.—Our connoiſſeurs in their zeal all became *mynheers. Coventry.*

MYNOM'ANIES, Indians inhabiting near the Chipeways.

MYNO'W. See Monnow, vol. xv.

MYN'SICHT (Adrian von, M.D.), count palatine, conſulting phyſician to the duke of Mecklenburg and ſeveral other princes, was celebrated for his knowledge in chemiſtry, about the beginning of the ſeventeenth century. He was the author of a work upon this ſubject, which was in great vogue in its time, and paſſed through numerous editions. It was entitled "Theſaurus et Armamentarium Medico-chymicum, hoc eſt, ſelectiſſimorum, contra quoſvis morbos, pharmacorum conficiendorum ſecretiſſima ratio, cui in fine adjunctum eſt Teſtamentum Hadrianeum de aureo Philoſophorum Lapide;" Hamburgh, 1631, &c. There is a great deal of credulity, and not a little myſtery, in the deſcription of the various chemical, medicinal, and alchemiſtical, proceſſes, which this work contains, and of the potent virtues aſcribed to them in the treatment of diſeaſes. Several of his preparations, however, came into common uſe, and were long retained in the diſpenſatories. *Eloy. Dict. Hiſt.*

MY'O, a ſmall iſland in the Eaſtern Indian Sea, formerly inhabited; but the Dutch will not ſuffer any perſon to live there, leſt they ſhould ſmuggle ſpices. It is ſubject to the king of Ternate. Lat. 1. 23. N. lon. 122. 20. E.

MY'O, a town of Mexico, in the province of Culiacan: 110 miles north-weſt of Culiacan.

MYOCEPH'ALON, *ſ.* [from the Gr. *μυια*, a fly, and *κηφαλη*, the head.] In ſurgery, a tumour formed on the iris, and reſembling the head of a fly.

MYOG'RAPHY, *ſ.* [from the Gr. *μυς*, a muſcle, and *γϱαφω*, to write.] A deſcription of the muſcles.

MYOL'OGY, *ſ.* [from the Gr. *μυς*, a muſcle, and *λογος*, diſcourſe.] The deſcription and doctrine of the muſcles. See Anatomy.—To inſtance in all the particulars, were to write a whole ſyſtem of *myology. Cheyne.*

MYOM'ANCY, *ſ.* [from the Gr. *μυς*, a mouſe, and *μαντεια*, magic.] A kind of divination, or method of foretelling future events, by means of mice.

Some authors hold myomancy to be one of the moſt ancient kinds of divination; and think it is on this account that Iſaiah, lxvi. 17. reckons mice among the abominable things of the idolaters. But, beſides that it is not certain that the Hebrew word uſed by the prophet ſignifies a mouſe, it is evident that it is not the divination by that animal, be it what it will, that is ſpoken of, but the eating it.

MYO'NIA, in ancient geography, a town of Greece, belonging to the Locri Ozolii, ſituated on a very lofty mountain, which had a ſacred wood, and an altar dedicated to the meek or gentle gods, to whom ſacrifices were offered in the night. Poſidonium was a place near this town, dedicated to Neptune, where was a temple dedicated to this deity, but without ſtatues, according to Pauſanias.

MYONI'MA, *ſ.* [ſo called by Commerſon, from the Greek *μυς*, a mouſe, and *ονημι*, to be ſerviceable, in alluſion to the French name *bois de rat;* becauſe the fruit is a favourite food of that genus of animals.] Rat-seed; in botany, a genus of the claſs tetrandria, order monogynia, natural order rubiaceæ, *Juſſ.* Generic Characters—Calyx: perianthium ſuperior, very ſmall, nearly entire. Corolla: of one petal; tube ſhort, cylindrical; limb in four deep, equal, blunt, ſegments. Stamina: filaments four, inſerted into the tube of the corolla, alternate with the ſegments of the limb; antheræ oblong, projecting beyond the corolla. Piſtillum: germen globoſe, inferior, ſtyle ſhort, cylindrical; ſtigma capitate. Pericarpium: drupe dry, roundiſh, depreſſed, deſtitute of any crown or rim. Seed: nut of four cells, with four kernels, which are externally convex.—*Eſſential Character.* Calyx minute, nearly entire; corolla in four deep equal ſegments, with a ſhort tube; drupe inferior; nut of four cells. There are two ſpecies.

1. Myonima obovata, or broad-leaved rat-ſeed: leaves obovate, obtuſe, with a ſmall point; fruit obſcurely quadrangular. Gathered by Commerſon, as well as by Sonnerat, in the iſles of Bourbon and Mauritius. A ſmooth ſhrub, with numerous oppoſite branches, whoſe bark is cracked and greyiſh. Leaves on ſhort ſtalks, oppoſite; near two inches long, and one broad; obovate, entire, obtuſe, with more or leſs of a ſhort point; their upper ſurface ſhining as if varniſhed; the under opaque and paler; both beautifully reticulated with tranſverſe interbranching veins. Flower-ſtalks axillary, oppoſite from the uppermoſt leaves, moſtly two or three-flowered, ſcarcely ſo long as the leaves; calyx ſometimes obſcurely four-toothed; corolla hardly half an inch in diameter. Fruit reddiſh, the ſize of a ſmall grape. Bractes ſmall, acute, oppoſite at the diviſion of the flower-ſtalks.

2. Myonima lanceolata, or myrtle-leaved rat-ſeed: leaves elliptic-lanceolate, acute. Fruit ſpherical. Native of the iſland of Mauritius. The leaves are much ſmaller than in the foregoing, and of a narrower more-lanceolate ſhape, ſomewhat revolute, entire, their upper ſurface highly poliſhed. Fruit reddiſh, more exactly globular than in the former ſpecies.

MYONNE'SOS, in ancient geography, a town of Ionia, between Teios and Lebedus. *Steph. Byz.* Strabo makes it a peninſula, and Livy, a promontory: it was an iſland of the Teians, according to Thucydides. It appears to have been placed on the coaſt north-weſt of Lebedus, and that the land projected in form of a peninſula.—Alſo, an iſland of Theſſaly, over-againſt Lariſſa, according to Strabo.

MYOPA'RO, *ſ.* Among the Romans, a kind of ſhip, which partly reſembled a merchant-ſhip, and partly a ſhip of war: it was that which pirates moſtly uſed.

MY'OPE, *ſ.* [*myope*, Fr. *μυωψ*, Gr. from *μυω*, to cloſe or ſhut, and *ὤψ*, the eye.] A ſhort-ſighted perſon. It is ſometimes *myops* in the ſingular number; and *myope* is uncommon.—*Myops* are properly ſuch as ſee remote objects confuſedly and near ones diſtinctly. Thoſe who labour under the oppoſite defect, are called *preſbytæ. Chambers.*—*Myopes* may uſe teleſcopes without eye-glaſſes, an object-glaſs being as uſeful to them as a combination of glaſſes, and ſometimes more ſo. *Deſaguliers.*

The defect of myopes is not in the optic nerve, the pupil, or the like; but in the form of the cornea or cryſtalline, or the diſtance of the retina from the ſame. The cryſtalline or cornea being rounder or more prominent than ordinary, the rays will be rendered more convergent than ordinary, in paſſing through the ſame. By this means they will be brought to meet or concur at a leſs diſtance from the cryſtalline; ſo that, if the retina be at its uſual diſtance, they will concur before they reach it. It is the too great nearneſs, then, of the retina to the cryſtalline, that conſtitutes the myopia. Now, ſince the nearer an object is to the eye, the greater is its image, theſe people can ſee much ſmaller objects than others, as they ſee much nearer ones with the ſame diſtinctneſs; and *their ſight continues longer good than that of other people*, becauſe the cornea, as they grow old, becomes leſs protuberant, from the want of that redundancy of humours with which they were filled before. On the contrary, old men having the cornea of their eyes too flat, for want of a ſufficient quantity of the aqueous humour, if the rays diverge too much before they enter the eye, they cannot be brought to a focus when they reach the retina; on which account thoſe people cannot ſee diſtinctly unleſs the object be ſituated at a greater diſtance from the eye than is required for thoſe whoſe eyes are of a due form. The latter require the aſſiſtance of convex glaſſes to make them ſee objects diſtinctly; the former of concave ones.

Dr. Wells, in a paper on viſion, lately read before the Royal Society, maintains that the focal diſtance of the eye depends chiefly on the contractability of its muſcles, and that the latter is much greater in youth than in perſons of more advanced years. In youth, the eye is capable of accommodating itſelf to the light, and the diſtance of external objects; but, in old age, this contractile power of the muſcle ceaſes, and the focal diſtance of the eye becomes ſhorter and more fixed to a determinate point. The belladonna plant, applied to the eyes, increaſes the action of the ocular muſcles in the young, but not in the old ſubjects. Hence the doctor infers that, ſhort ſight is leſs owing to the prominence of figure of the pupil than to the flexibility of the muſcles which direct it. To this doctrine we cannot ſubſcribe, ſince it would argue that, as people advance in years, they muſt expect to be ſhorter-ſighted, which is contrary to every-day's experience.

In the Firſt Part of the Phil. Tranſ. for 1813, we find an intereſting paper, entitled "Obſervations relative to the Near and Diſtant Sight of different Perſons, by James Ware, Eſq." It contains many caſes of near-ſighted perſons, with ſome remarkable changes, produced in the ſight by different cauſes, authorizing the following concluſions:

1. That near-ſightedneſs is rarely obſerved in infants, or even in children under ten years of age. It affects the higher claſſes of ſociety more than the lower; and the inſtances are few, if any, in which, if the uſe of concave glaſſes has been adopted, increaſing years have either removed or leſſened this imperfection.

2. That, though the uſual effect of time on perfect eyes be that of inducing a neceſſity to make uſe of convex glaſſes, in order to ſee near objects diſtinctly; yet ſometimes, even after the age of fifty, and after convex glaſſes have been uſed many years for this purpoſe, the eyes have not only ceaſed to derive benefit from them, when looking at near objects, but they have required concave glaſſes to enable them to diſtinguiſh with preciſion objects at a diſtance.

3. That, though the cauſe of this change be not always known, yet ſometimes it has been induced by the uſe of evacuating remedies, particularly of leeches applied to the temples; and ſometimes by looking through a microſcope, for a continued length of time, for ſeveral ſucceſſive days.

4. That inſtances are not uncommon in which perſons far advanced in life, (viz. between eighty and ninety,) whoſe eyes have been accuſtomed for a long time to the uſe of deeply-convex glaſſes, have ceaſed to derive benefit from theſe glaſſes, and they have become able, without any aſſiſtance, to ſee both near and diſtant objects, almoſt as well as when they were young. Although it be not eaſy to aſcertain the cauſe of this amended viſion, it ſeems not improbable that it is occaſioned by an abſorption of part of the vitreous humour; in conſequence of which, the ſides of the eye collapſe, and its axis from the cornea to the retina is lengthened; by which alteration the length of this axis is brought into the ſame proportion to the flattened ſtate of the cornea, or cryſtalline, or both, which it had to theſe parts before the alteration took place.

5. There is reaſon to believe, that this diſeaſe is much promoted by the uſe of glaſſes; and, that if glaſſes are not employed, it ſoon wears off and diſappears. Hence it is much more common among the higher ranks than among the common people. In the regiments of life-guards, Mr. Ware did not find a ſingle perſon afflicted with the diſeaſe, and not above five or ſix recruits had been diſmiſſed on account of defective viſion; while in one of the colleges at Oxford, conſiſting of 125 ſtudents, no leſs than 37 were near-ſighted.

Rule for Concave Glaſſes to read and write, for a near-ſighted Perſon.—Multiply the greateſt diſtance at which the ſhort-ſighted ſees diſtinctly with his naked eye, by the diſtance at which it is required he ſhould ſee diſtinctly by a concave glaſs, and divide the product by the difference between the ſaid diſtances. If it be to ſee remote objects, the focus ſhould be the ſame as that required for the diſtance of diſtinct viſion. *Monthly Mag.* Apr. 1811.—We ſhall have occaſion to reſume this ſubject under the article OPTICS.

MYOP'ORUM, *ſ.* [a name contrived by Dr. Solander, to expreſs the minute pellucid ſpots for which the foliage is remarkable. The word is formed of the Gr. *μυω*, to ſhut up, and *πορος*, a pore; thoſe ſpots being, as it were, pores cloſed with ſome ſemitranſparent ſubſtance.] In botany, a genus of the claſs didynamia, order angioſpermia, natural order perſonatæ, *Linn.* (vitices, *Juſſ.* myoporinæ, *Brown.*) Generic Characters—Calyx: perianthium inferior, of one leaf, in five deep, ovate-lanceolate, acute, erect, permanent, ſegments. Corolla: of one petal, ſomewhat ſalver-ſhaped; tube ſhort, rather bell-ſhaped; leaf in five deep nearly-equal ſegments, generally hairy within. Stamina: filaments four, awl-ſhaped, ſhorter than the corolla, inſerted into its tube, two of them rather the ſhorteſt; antheræ vertical, arrow-ſhaped. Piſtillum: germen ſuperior, elliptic-oblong, compreſſed, ſtyle cylindrical, curved, the length of the ſtamens; ſtigma capitate. Pericarpium: drupe pulpy. Seed: nut ſolitary, of four or five cells, with ſolitary kernels; or of two cells, with two kernels in each.—*Eſſential Character.* Calyx in five deep ſegments, inferior, permanent; corolla bell-ſhaped; its limb in five deep nearly equal ſegments; ſtigma obtuſe; drupe pulpy; nut of from two to five cells, moſtly five.

Willdenow ſuppoſes this genus not diſtinct from Citharexylum; but the latter has a tubular calyx, with ſhort teeth, and two ſeparate nuts, of two cells each; nor is the ſhape of the corolla like that of the preſent genus. Thoſe who called ſome of the ſpecies Pogonia and Andreuſia, were by no means aware of the original name publiſhed, many years before, by Forſter. There are eighteen ſpecies, in three diviſions.

I. Leaves alternate entire. 1. Myoporum ellipticum, or elliptical myoporum: leaves elliptic-lanceolate, pointed, tapering at the baſe; branches ſmooth; ſegments of the calyx lanceolate, very ſharp; mouth of the corolla ſlightly hairy; limb ſmooth. Native of the tropical regions of New Holland, as well as of the country near Port Jackſon. It was raiſed from ſeed in 1790, by the late Mr. Robertſon, at Stockwell; is readily propagated by cuttings, and flowers freely in January or February, though rather more impatient of damp and cold than ſome other ſhrubs of New South Wales. The leaves are ſmooth, like the whole of the genus. Flowers axillary, moſtly ſolitary, on footſtalks, drooping, white, the ſize of lily of the valley, but not of the ſame hemiſpherical form, their corolla being rather contracted in the middle, its limb ſpreading ſuddenly. There are no bractes nor ſtipules in the whole genus.

2. Myoporum tenuifolium, or narrow-leaved myoporum: leaves lanceolate, with long taper points; branches ſmooth; ſegments of the calyx lanceolate, acute; corolla ſmooth. Native of the tropical part of New Holland. Gathered in the Sandwich Iſlands by Mr. Menzies. Differs from the former in having much narrower and more tapering leaves; ſeveral flowers, for the moſt part, together; whoſe corolla is not hairy, and the ſegments of whoſe calyx are ſhorter and more ovate.

3. Myoporum acuminatum, or pointed-leaved myoporum: leaves broadiſh-lanceolate, with a ſmall point; tapering at the baſe; branches ſmooth; ſegments of the calyx ovate-lanceolate; corolla bearded. Found near Port Jackſon, New South Wales. The dried leaves have a glaucous hue; and there are ſeveral drooping flowers together from the boſom of each.

4. Myoporum montanum, or mountain myoporum: leaves linear-lanceolate, very ſharp, tapering at the baſe; branches ſmooth; ſegments of the calyx linear, acute. Gathered in New South Wales by Mr. Brown.

5. Myoporum humile, or dwarf myoporum: leaves linear, ſomewhat ſpatulate, bluntiſh, without veins; ſtem procumbent. Found by Mr. Brown on the ſouth coaſt of New Holland.

6. Myoporum parvifolium, or ſmall-leaved myoporum: leaves linear, bluntiſh, tapering at the baſe; ſomewhat toothed at the extremity; glandular, as well as the branches; flower-ſtalks here and there deeply divided, above half the length of the leaves; ſtem diffuſe. Native of the ſame country, and ſuſpected by Mr. Brown to be perhaps but a variety of the laſt.

II. Leaves alternate, ſerrated; fruit ſwelling; nut of four cells. 7. Myoporum aſcendens, or aſcending myoporum: leaves obovate-oblong, bluntiſh, bluntly ſerrated from beyond the middle; branches ſmooth, aſcending; ſtem diffuſe. Native of New Holland.

8. Myoporum lætum, or ſhining-leaved myoporum: leaves oblong, ſmooth, naked and ſhining; ſlightly ſerrated at the extremity; corolla hairy. Native of New Zealand.

9. Myoporum pubeſcens, or downy-leaved myoporum: leaves oblong-elliptical, ſerrated, downy. Found by Forſter in the ſame country as the laſt. This appears to be the only ſpecies that has any pubeſcence, except in the flower.

10. Myoporum craſſifolium, or thick-leaved myoporum: leaves fleſhy, oblong, ſlightly ſerrated. Native of Botany-iſland.

11. Myoporum inſulare, or inſular myoporum: leaves lanceolate, tapering at the baſe, ſerrated at the end; branches ſmooth, glutinous when young; ſtem erect. Gathered by Mr. Brown in the ſouth part of New Holland.

12. Myoporum ſerratum, or ſerrated myoporum: leaves lanceolate, very ſharp, ſerrated; branches ſmooth. Gathered by Labillardiere in Lewin's Land, and by Mr. Menzies at King George's Sound: Mr. Brown alſo obſerved it in the neighbouring parts of New Holland. Flowers many together, erect.

13. Myoporum tuberculatum, or tubercular myoporum: leaves lanceolate, acute, ſerrated; branches covered with glandular tubercles. Gathered by Mr. Brown in the South of New Holland; and by Mr. Menzies in the Sandwich Iſlands.

14. Myoporum viſcoſum, or glutinous myoporum: leaves elliptical, acute, ſerrated, reflexed; branches viſcid and glandular. In the ſouth of New Holland.

III. Leaves alternate, toothed; fruit compreſſed; nut frequently with but two cells. 15. Myoporum platycarpum, or broad-fruited myoporum: leaves linear-lanceolate, toothed at the end; branches ſmooth; fruit compreſſed, of two cells, four times as long as the calyx; ſtem erect. From New Holland.

16. Myoporum debile, or ſlender-ſtemmed myoporum: leaves lanceolate, toothed at the end, entire at the baſe; fruit ſlightly compreſſed, ſhorter than the calyx; flower-ſtalks ſolitary; ſtem proſtrate. Native of the country near Port Jackſon, whence it was ſent to England in 1793, by colonel Paterſon. The ſtem is ſaid to be naturally proſtrate, but it may be trained to a conſiderable extent, againſt a ſtick or trellis. The branches are alternate, purpliſh, warty. Leaves ſmooth, toothed here and there, but many of them are quite entire. Flowers axillary, on ſhort ſtalks, blue, erect, for the moſt part ſolitary, very rarely two together: bloſſoms in the greenhouſe from April to September, and ripens ſeed, by which, as well as by cuttings, it is readily increaſed, if aſſiſted by heat.

17. Myoporum diffuſum, or ſpreading myoporum: leaves lanceolate, with ſomewhat recurved teeth at their baſe; toothed or entire at their extremity; ſtems diffuſe, glandular; flower-ſtalks ſolitary; fruit ſlightly compreſſed, ſhorter than the calyx. Gathered by Mr. Brown in the tropical part of New Holland. It ſeems very nearly akin to the 13th ſpecies.

IV. Leaves oppoſite. 18. Myoporum oppoſitifolium, or oppoſite-leaved myoporum: leaves ſeſſile, heart-ſhaped, ſerrated. Found by Mr. Brown on the ſouthern coaſt of New Holland. The ſtem in every known ſpecies is ſhrubby. Young branches, and tender leaves, often coloured and viſcid. There is ſcarcely any pubeſcence, except within the flower, whoſe ſtyle, as well as corolla, is often bearded or hairy.

MY'OPY, *ſ.* Shortneſs of ſight.

MY'ORY. See SCHOUTEN'S ISLAND.

MYOSHOR'MOS, in ancient geography, a ſea-port of Egypt, placed by Ptolemy and Pliny in the Red Sea. Arrian ſays, that it was one of the moſt celebrated ports of this ſea. It was alſo called the Port of Venus.

MYOSO'TIS, *ſ.* [this word, derived from μυς, a mouſe, and ωτιον, a little ear, the diminutive of ως, an ear, has been applied by the ancients, as well as by many modern botaniſts, to ſeveral plants, whoſe leaves, in their ſhape and ſoft hairineſs, anſwer to the above idea. Among them is the preſent genus, for which Dillenius and Linnæus have retained the name.] MOUSE-EAR SCORPION-GRASS; in botany, a genus of the claſs pentandria, order monogynia, natural order of aſperifoliæ, (borragineæ, *Juſſ.*) Generic Characters—Calyx: perianthium half-five-cleft, oblong, erect, acute, permanent. Corolla: one-petalled, ſalver-ſhaped; tube cylindric, ſhort; border half-five-cleft, flat; ſegments emarginate, blunt; opening cloſed with five convex, prominent, converging, ſcalelets. Stamina: filaments five in the neck of the tube, very ſhort; antheræ very ſmall, covered. Piſtillum: germens four; ſtyle filiform, the length of the tube of the corolla; ſtigma blunt. Pericarpium: none; calyx larger, erect, cheriſhing the ſeeds in its boſom. Seeds: four, ovate, acuminate, ſmooth. Some ſpecies have ſeeds with even ſurfaces; others, with hooked prickles.—*Eſſential Character.* Corolla ſalver-ſhaped, five-cleft, emarginate; the opening cloſed with arches. There are twelve ſpecies, beſides varieties.

1. Myoſotis ſcorpioides arvenſis, or hairy mouſe-ear ſcorpion-graſs: ſeeds ſmooth and even; tips of the leaves callous. Hairy mouſe-ear ſcorpion-graſs, has an annual fibrous root. Stems ſeveral, procumbent, aſcending, or erect, according to circumſtances, a long ſpan or a foot in height, or even ſomewhat more in moiſt ſituations or ſtrong land, angular, villoſe, branching towards the top for flowering: branches axillary, alternate. Leaves alternate, quite entire, bent back a little at the edge, having no apparent veins, but a very ſtrong rib along the back, which makes a ſhallow channel along the upper ſurface, of a light green colour, villoſe on both ſides and along the edge, and ſomewhat rugged: the lower leaves are elliptic or oblong, blunt, running down into the petiole, three inches long, and ſometimes more, meaſured from the ſtem; the middle and upper ones are lanceolate, ſharpiſh, ſeſſile or half embracing, from an inch and a half to two inches in length; both are half an inch or five lines in width. Flowers in racemes, whilſt young bending in at the top, whence the names of *ſcorpioides*, *ſcorpiurus*, and *ſcorpion-graſs*, from the ſimilitude to a ſcorpion's tail; as the flowering advances, lengthening out very conſiderably and divaricating; they are alternate, in a double row, and all grow one way, each on its proper pedicle. Calyx villoſe, deeply five-cleft, cloſing at top as the ſeeds ripen; corolla red before it opens, but when open of a fine blue, with a yellow eye; not more than a tenth or a twelfth of an inch in diameter. The above deſcription was made on the 2d of June, 1798, from plants growing wild in a garden, in hedges, and by a brook. But the plant varies much, according to the ſoil and ſituation in which it grows On barren paſtures, heaths, and walls, the plant and flowers are both much ſmaller; it has been ſeen ſcarcely more than an inch in height, bearing one minute flower only.

Merret mentions two varieties. One with wider leaves, very hairy, and larger flowers, appearing earlier than the common ſort; this grows in woods only, and owes its ſuperior ſize probably to its damp ſhaded ſituation. It was obſerved by Mr. James Sherard on the weſt of Charlton-wood, and between Redgwell and Batham-end (or Bathon-inn) in Eſſex by Mr. Dale, and is figured in Dillenius's edition of Ray's Synopſis. The other ſmall, rough-haired, with yellow flowers, appearing in April, and occurring in very dry ſandy paſtures; in ſuch a ſoil the blue border of the corolla is very ſmall, and ſometimes is ſcarcely expanded, ſo that it appears to be wholly yellow.

β. M. ſcorpioides paluſtris, or marſh mouſe-ear ſcorpion-graſs. Haller, who ſeparates this from the preceding, ſays that the root is larger, long, black, and perennial; the ſtem higher; the leaves larger; the flower much larger, and of a paler colour. He makes Merret's firſt variety to be a variety of this; and this is what Curtis ſeems to have figured for the *paluſtris*, for the plant in his figure is very hairy, which the true paluſtris is not. According to him, the root runs out to a great length through the water, and ſends down fibres from the joints. Stalk creeping at bottom, afterwards upright, from one to two feet high, round, ſolid, branched, ſmooth, but often hairy. Leaves alternate, lanceolate, ſeſſile, ſlightly decurrent, ſmooth or hirſute, the edge often rolled back. Racemes long, dichotomous, divaricating, the tops rolled in. Flowers peduncled and growing all one way: peduncles alternate, upright. They are much larger than thoſe of the other, are remarkable for their beauty and delicacy, ſomewhat reſemble blue enamel, and are a very pretty ornament for the edges of ponds.

Leers thus diſtinguiſhes them: *arvenſis* has a fibrous annual root; ſtem branched; leaves hirſute; calyx deeply five-cleft, cloſing as the ſeed ripens: ſheep do not eat the plant: *paluſtris* has a creeping perennial root; ſtem ſomewhat branched; leaves ſmooth; calyx a little open even when the ſeed is ripe: it is noxious, and even deadly, to ſheep. This notion of Myoſotis paluſtris being deadly to ſheep, is derived from Linnæus, and I very much ſuſpect (ſays Mr. Profeſſor Martyn) that it is erroneous: it has this bad character in common with many other aquatic plants, as Droſera, Pinguicula, Hydrocotyle, &c. which I believe ſheep never eat.

"It appears to me (continues Mr. M.) that M. arvenſis is villoſe or very hairy, with ſmaller flowers in all ſoils and ſituations; M. paluſtris is ſmooth, with larger paler flowers, moſt exquiſitely elegant. It ſeems to flower later; for, whilſt I am writing this article, at the beginning of June, M. arvenſis is in full flower, and ſome of it even going off; and I cannot find a ſingle ſpecimen of M. paluſtris in flower, to compare with it. I firſt diſcovered M. paluſtris in flower on the 11th of June. The root is truly repent; the whole plant is of a much paler green; the ſtem is ſomewhat hairy, but ſcarce viſibly ſo, except towards the top; the leaves are all lanceolate, none of them ſo broad at the baſe as in the arvenſis, and I cannot diſcover any hairs on them; the corolla is four times as large as the largeſt of arvenſis, being more than three eighths of an inch in diameter, of an elegant pale blue, like ſmalt, with a large deep yellow eye."

γ. Allione and Villars have another variety, which they have adopted as a ſpecies from Haller, and he from Scheuchzer and Seguier, and have named M. nana. It is a very low plant, not even three inches in height, with a very thick tuft of leaves. Leaves roundiſh, like thoſe of Thymus ſerpyllum, ſubhirſute. Spike ſmall, few-flowered, ſeldom many more than three; but a ſingle flower occupies the whole, being large, and of a very bright blue colour; calyx bearded with a long ſilky pile. It forms ſolid tufts on the higheſt precipices: it is perennial, and common on the Alps. Villars inſiſts that this is a diſtinct ſpecies; but ſituation changes this plant ſo much, that we ſuſpect it to be no more than a variety. Dr. Smith has made both this and the preceding diſtinct ſpecies.

2. Myoſotis fruticoſa, or ſhrubby ſcorpion-graſs: ſeeds ſmooth and even; ſtem ſhrubby, ſmooth, and even. Stem a foot high, woody, perennial, even. Branches many, flowering at the top. Leaves alternate, linear, almoſt even, with a few hairs preſſed cloſe. Spikes terminating, with the flowers pointing one way, not peduncled. Flowers and fruits minute. Native of the Cape of Good Hope.

3. Myoſotis Virginiana, or Virginian ſcorpion-graſs: ſeeds with hooked prickles; leaves ovate-oblong; branches divaricating. This is an annual plant. Leaves large. Seeds naked on the inſide, angular, erect, fixed at the baſe, as in the following ſpecies. Fruit nodding. Native of Virginia: cultivated by Mr. Miller in 1768.

4. Myoſotis lappula, or prickly-ſeeded ſcorpion-graſs: ſeeds with hooked prickles; leaves lanceolate, hairy. This alſo is annual. Stem from nine or ten inches to eighteen inches in height, erect, round, ſomewhat rugged. Branches alternate. Flowers very ſmall, not from the axils, but on the ſide oppoſite to the leaf, at the branches, on ſhort peduncles; corolla bright blue. Calyx open when the ſeed is ripe; ſeeds ſmall, coriaceous, ovate-acuminate, ſhagreened all over with bony pointed dots, on one ſide convex, and muricated at the ſides with a double row of hooked prickles, angular on the other. Gærtner calls theſe fruits *nuts*, the ſeed being covered with a ſhell. Villars obſerves, that this little plant has all the port or air of a Cynogloſſum. Native of many parts of Europe, as Sweden, Denmark, Germany, France, Swiſland, and Italy: it was cultivated in 1683 by Mr. James Suthierland, and flowers from April to Auguſt.

5. Myoſotis ſpinocarpos, or thorny-ſeeded ſcorpion-graſs: ſeeds muricate-ſpiny; racemes leafy, with the flowers remote; leaves linear, hairy. Stems woody at the baſe, diffuſed, dichotomouſly branched at top, cloſely hairy, aſh-coloured, as is the whole plant. Flowers ſmall, white.

6. Myoſotis apula, or ſmall ſcorpion-graſs: ſeeds naked; leaves hiſpid; racemes leafy. Root reddiſh, annual. Stems ſimple or branched, a ſpan high. Flowers in terminating racemes, recurved at the end; calyx whitiſh with pubeſcence, ſwelling at the baſe, deeply five-parted; ſegments converging, acute; corolla deep ſulphur-coloured, funnel-form. On account of the ſituation of the ſtamens, and the integrity of the petals, Cavanilles removes this ſpecies into the genus Anchuſa, where Lobel had placed it before: Willdenow and Dr. Smith remove it to Lithoſpermum. Native of the ſouth of Europe; as France, Spain, and Italy; alſo of Japan, where it flowers in April: about Madrid it flowers in March: with us in June and July. Cultivated by Mr. Miller in 1768.

7. Myoſotis ſpatulata, or ſpatule-leaved ſcorpion-graſs: ſeeds ſmooth and even; leaves ſpatulate, hiſpid; peduncles axillary, ſolitary, one-flowered. Native of New Zealand.

8. Myoſotis rupeſtris, or rock ſcorpion-graſs: ſeeds ſmooth; leaves linear, villous; cluſters alternate. A very common little plant in ſtony expoſed ſituations, on the hills of Dauria, where it produces a ſucceſſion of flowers from May through the ſummer. Root perennial, ſimple, thread-ſhaped. Stems three inches long, ſpreading and aſcending, rather hairy. Flowers of a deep azure colour, with a yellow throat.

9. Myoſotis ſquarroſa, or ſquarroſe ſcorpion-graſs: ſeeds angulated, with hooked briſtles; leaves lanceolate, hairy, callous at the tip. Found in Siberia, near the river Wolga. Root annual, branched. Stem (when cultivated) two feet high, roundiſh, hairy, denſely branched; lower branches ſhorter. Flowers in long looſe cluſters, alternate, ſmall, blue, with a yellow throat. Seeds beautifully beſet at the angles, with two rows of uncinated briſtles. The above deſcription is from Retzius, who ſeems to think that what Pallas mentions as a variety of M. lappula, growing near the Wolga, is the preſent ſpecies.

10. Myoſotis echinophora, or echinophorous ſcorpion-graſs: ſeeds covered with hooked prickles; flower-ſtalks

thickened at the top, axillary, ſolitary; leaves lanceolate, hairy. Very common on the banks of the Wolga, flowering in April and May. Stem three inches long, erect, dichotomous, ſlightly branched.

11. Myoſotis pectinata, or Kamtſchatka ſcorpion-graſs: ſeeds briſtly at the top; cluſters erect; leaves ovate-lanceolate, villous. Native of moſſy rocks in the coldeſt parts of Siberia, and in Kamtſchatka. It flowers at Kew in June and July. This ſpecies, in its mode of growth, is very like M. rupeſtris. Root perennial, looſely ſpreading. Stems ſlender, ſomewhat hairy. Leaves alternate, ſeſſile, ovate-lanceolate, covered with long ſoft hairs. Corolla ſmall, blue, with a pale throat. Seeds crowned with briſtles, ſomewhat like the ſeed-down of ſyngeneſious plants.

12. Myoſotis Auſtralis, or New-Holland ſcorpion-graſs: hiſpid; leaves oblong-lanceolate; calyx as long as the tube, clothed with ſpreading hooked briſtles. Gathered by Mr. Brown at Port Jackſon, and in Van Diemen's Land. This plant is eighteen inches or more in height, clothed with little rigid briſtles, of which thoſe on the ſtem are deflexed. Flowers numerous, ſmall, blue, in terminal aggregate cluſters, whoſe ſtalks are clothed with aſcending briſtles.

Mr. Brown eſteems this genus as differing from Anchuſa merely in the want of bractes. He would therefore refer to the latter M. ſpatulata of Forſter, and M. rupeſtris of Pallas. He conceives that the Linnæan ſpecies, which have an echinated fruit, ought to conſtitute a diſtinct genus, very near to Cynogloſſum, on account of the prickly cuts or ſeeds attached to the central column, compreſſed not depreſſed, and the cluſters furniſhed with bractes. The eſſential character of the genus Myoſotis is given by this ingenious author as follows: Calyx deeply five-cleft. Corolla ſalver-ſhaped; throat cloſed with concave valves; limb in five, deep, obtuſe, ſegments. Stamens included with peltate antheræ. Stigma capitate. Nuts four, diſtinct, umbilicated at the baſe. Cluſters ſimple, without bractes.

Propagation and Culture. Sow the ſeeds in autumn, upon an open bed or border of light earth. In the ſpring thin the plants where they are too cloſe, and keep them clean. Or if the ſeeds be permitted to ſcatter, the plants will riſe without farther trouble. See CERASTIUM and STELLARIA.

MYOSU'RUS, *ſ.* [from *μυος ουϱα*, the tail of a mouſe, a very excellent and expreſſive name beſtowed by Dillenius on this plant, from the circumſtance of its ſpiked receptacle, ſcaly with ſeeds, reſembling a mouſe's tail.] MOUSE-TAIL; in botany, a genus of the claſs pentandria, order polygynia, natural order of multiſiliquæ (ranunculaceæ, *Juſſ.*) Generic Characters—Calyx: perianthium five-leaved; leaflets half-lanceolate, obtuſe, reflex, annexed above the baſe, coloured, deciduous. Corolla: petals five, ſhorter than the calyx, very minute, tubular at the baſe, opening obliquely inwards; (with a nectariferous pore at the claws. *Gærtner.*) Stamina: filaments five, the length of the calyx; antheræ oblong, erect. Piſtillum: germens numerous, placed on the receptacle in a conic-oblong form; ſtyles none; ſtigmas ſimple. Pericarpium: none; receptacle very long, ſtyle-ſhaped, covered with the ſeeds diſpoſed imbricately. Seeds: very numerous, oblong, acuminate. The number of ſtamens in this genus is extremely variable. There is alſo a great affinity between it and Ranunculus, (in which genus it was arranged by Tournefort,) eſpecially between the nectariferous claw of the petals in that genus, and the tubular claw of Myoſurus. Linnæus and other authors have conſidered theſe parts of the flower as *nectaries;* but we are rather inclined to regard them as *petals,* as they were originally deſcribed.—*Eſſential Character.* Calyx of five leaves, each with a ſpur at the baſe; petals five, with a tubular honey-bearing claw; ſeeds numerous, naked.

Myoſurus minimus, the only ſpecies. Root annual, fibrous, ſmall. Leaves all radical, about twenty in a plant of a middling ſize, upright, of unequal lengths, linear, broadeſt at top, flattened, faintly channelled on each ſide, ſmooth, ſomewhat fleſhy, blunt, of a yellowiſh green colour, and reddiſh at the baſe; ſometimes hairy, according to Hudſon. Scapes or flowering-ſtems four, five, or more, each ſupporting one flower, upright, from two to four inches in height, longer than the leaves, round, ſmooth, a little thicker at the top; petals of a yellowiſh colour. Stamens varying in number from four or five to ten, twelve, or even twenty, according to different authors. Seeds compreſſed, wedge-ſhaped; the outer ſide ferruginous, linear-lanceolate, with a ridge along the middle; the other ſides half-ovate, flat, blackiſh, converging into a very acute angle.

Mr. Curtis remarks, that the ſtructure of the whole fructification, in this delicate little annual plant, is ſingular, and deſerving the attention of the young botaniſt, who ſhould be careful to diſtinguiſh the corolla from the ſtamens. It grows wild in moſt parts of Europe: Linnæus ſays on dry open hills; with us, by the ſides of corn-fields, eſpecially where water has ſtagnated in winter, and ſometimes coming up as a weed in a garden. Dr. Withering aſſigns it to corn-fields, meadows, and paſtures, in a gravelly ſoil. Mr. Miller ſays it grows wild upon moiſt ground: it occurred to his editor, Mr. Martyn, generally among clay. In Curtis's Engliſh Botany, it is ſaid to be a native of gravelly corn-fields. That elegant and intereſting work deſcribes the piſtil to be conical, longer than the ſtamens, compoſed of a conical receptacle, covered with a great number (even two or three hundred) of ovate-ſtriated germens, each furniſhed with its own minute ſeſſile ſtigma. This plant affords a rare inſtance of a very great diſproportion of males to females in the ſame flower, and yet the latter are generally all prolific. The ſeeds are juſtly deſcribed by Linnæus as naked; for the part which Juſſieu (and Gærtner) call a capſule, is nothing more than a thickened inſeparable coat, as in Ranunculus, to which Myoſurus has a great affinity in its nectariferous pore.

Profeſſor Martyn mentions a ſpecimen of this plant, which grew in a good ſoil, and had above fifty flower-ſtalks of different lengths, from three to ſeven inches, and leaves about three inches and a half in length, but there was no trace of hairineſs on them. This plant flowered in April and May, but had not ſhed its ſeeds towards the middle of June.

MYOT'OMY, *ſ.* [from the Gr. *μυο*, a muſcle, and *τομη*, a ſection.] A diſſection of the muſcles. This name has been given to ſome anatomical works on the muſcles: as, Cowper's Myotomia reformata.

MYOX'US, *ſ.* the DORMOUSE; in zoology, a genus of quadrupeds of the order glires. Generic Characters—Front-teeth two, the upper ones wedged, the lower ones compreſſed ſideways; whiſkers long; tail hairy, round, thick towards the tip; the feet nearly equal in length; the fore-feet have four toes. The animals of this genus all remain torpid during winter; they walk, or rather leap, on their hind-legs, bounding three or four feet at a time, in which they are aſſiſted by a long ſtiff tail; they feed only on vegetables, burrow under ground; ſleep by day, watch by night, carry food to the mouth by the fore-paws, and drink by dipping the fore-palms in water. There are ſix ſpecies.

1. Myoxus glis, the fat dormouſe: body hoary, beneath whitiſh. This ſpecies, the *glis* of Pliny and the old naturaliſts, is a native of France and the ſouth of Europe: it alſo occurs in Ruſſia, Auſtria, &c. reſiding on trees, and leaping from bough to bough in the manner of a ſquirrel, though with a leſs degree of agility. It feeds on nuts, acorns, fruits, &c. and during great part of the winter remains torpid in its neſt, which is prepared in the hollows of trees, with dried leaves, moſs, &c. During its ſtate of torpidity, it is ſaid to grow very fat, contrary to the nature of moſt of the hybernating or ſleeping animals; which are obſerved, on their firſt emerging from

that ſtate, to be far leaner than before its commencement. It is probable, however, that this animal awakens at intervals, and indulges in the uſe of its collected ſtores of proviſion; and the epigram of Martial muſt conſequently be received with a proper degree of allowance for the popular belief of the ancients on the ſubject:

Tota mihi dormitur hiems; et pinguior illo
Tempore ſum quo me nil niſi ſomnus alit. Lib. xiii. Ep. 59.

Nurs'd by a long hibernal ſleep,
I fatten by repoſe:
Nor food the nouriſhment can give
Which abſtinence beſtows.

It is but juſt to obſerve, that Buffon has very properly expoſed the abſurdity of the ancient notion; and has obſerved that the animal occaſionally wakes, and makes uſe of its ſtock of proviſion. The truth is, that it is at all times fat, and appears as much ſo in ſpring as in autumn. By the ancient Romans it was numbered among the articles of luxury, and was fattened in proper receptacles, called *gliraria.*

The ſize of this ſpecies is not very far ſhort of that of a ſquirrel, meaſuring from noſe to tail near ſix inches, and the tail four and a half. It is an animal of a much thicker form in proportion than a ſquirrel; and is of an elegant aſh-colour, white on the under parts and inſides of the limbs: the tail is very furry, and of a ſlightly ſpreading form, like that of a ſquirrel: the eyes are large and black; the ears thin, rounded, and very ſlightly haired. Sometimes the upper parts of the body have a ferruginous tinge. Its general manners reſemble thoſe of a ſquirrel; but it is not eaſily tamed. The young are produced about the middle of ſummer, and are four or five in number.

2. Myoxus nitela, the garden-dormouſe: body rufous above, greyiſh-white beneath, with a black mark about the eyes and behind the ears. The garden-dormouſe is a native of the temperate and warmer regions of Europe and Aſia, and is commonly found in gardens, feeding on various kinds of fruit, particularly peaches and apricots. It makes its neſt, like the reſt of this genus, in the hollows of trees, and ſometimes in thoſe of walls, or even in the ground about the roots of trees, &c. collecting, for this purpoſe, dried leaves, graſs, moſſes, &c. In autumn it collects a quantity of nuts, maſt, &c. and depoſits it in its hole; and during the greateſt part of the winter remains in a ſtate of torpidity, awakening only at diſtant intervals. Its general length is about four inches and a half, and the tail rather leſs. It is of an elegant rufous or ferruginous colour above, and yellowiſh white beneath: the eyes are imbedded in a large black patch or ſpot, which extends to ſome diſtance beyond each ear: the tail is ſomewhat wider towards the end, and ſharpens at the extremity, and is marked on that part by a longitudinal black ſtripe, having the edges white. Theſe animals produce their young about the middle of ſummer, which are about five or ſix in number, and are ſaid to be of very quick growth.

3. Myoxus dryas, the wood-dormouſe: greyiſh-rufous above, whitiſh beneath, with a ſtraight black ſtripe acroſs the eyes to the ears. This ſpecies is much allied to the preceding, but has a leſs ſharpened viſage, and a much ſhorter tail; and its general proportions bear a greater reſemblance to thoſe of the fat dormouſe. Its length to the tail is about four inches, and the tail, about three inches. Its colour on the upper parts and tail is greyiſh ferruginous, and of the under parts yellowiſh white: the patch or black mark on each ſide the head is much narrower than in the preceding ſpecies, and extends only to the ear: the tail is very furry, the hair ſpreading as in that of a ſquirrel. It is ſaid to be a native of Ruſſia, Georgia, &c. inhabiting woods.

4. Myoxus muſcardinus, the common dormouſe: body rufous, throat whitiſh; the thumbs of the hind-feet without claws. The ſize of this pretty animal is nearly equal to that of a mouſe; but it is of a more plump or rounded form, and the noſe is more obtuſe in proportion. The eyes are large, black, and prominent; the ears broad, thin, and ſemi-tranſparent. The fore-feet have four toes, and the hind-feet five, but the interior of theſe latter are deſtitute of nails: the tail is about two inches and a half long, and cloſely covered on all ſides with hair, which is rather longer towards the tip than on the other parts: the head, back, ſides, belly, and tail, are of a tawny-red colour; the throat white: the fur is remarkably ſoft, and the whole animal has a conſiderable degree of elegance in its appearance. See the annexed Plate, fig. 1. It ſometimes happens that the colour is rather brown than reddiſh.

Dormice, ſays Mr. Pennant, inhabit woods or very thick hedges; forming their neſts in the hollows of ſome low tree, or near the bottom of a cloſe ſhrub. As they want much of the ſprightlineſs of the ſquirrel, they never aſpire to the tops of trees, or attempt to bound from ſpray to ſpray. Like the ſquirrel, they form little magazines of nuts, &c. for their winter-proviſion, and take their food in the ſame upright poſture. The conſumption of their hoard during the rigour of winter is but ſmall; for they ſleep moſt part of the time, retiring into their holes on the approach of winter, and, rolling themſelves up, lie torpid during the greateſt part of the gloomy ſeaſon. Sometimes they experience a ſhort revival in a warm ſunny day; when they take a little food, and then relapſe into their former ſtate.

Theſe animals ſeldom appear far from their retreats, or in any expoſed ſituation; for which reaſon, they ſeem leſs common in this country than they really are. They make their neſt of graſs, moſs, and dead leaves. According to Buffon, it conſiſts of interwoven herbs, and is ſix inches in diameter, open only above, and is ſituated between the branches of hazel and bruſhwood. The number of young is generally three or four.

5. Myoxus chryſurus, the gilt-tailed dormouſe: general colour purpliſh brown; the hind part of the tail and a longitudinal ſtripe on the head, gold yellow. This ſingular ſpecies, though conſidered by its firſt deſcriber, Mr. Allamand, as well as by Mr. Pennant in his Hiſtory of Quadrupeds, as a ſpecies of dormouſe, is allied in perhaps an equal degree to the porcupines, among which it is placed by Schreber. It is ſuppoſed to be a native of Surinam, and is remarkable for the beauty of its colours; being of a fine purpliſh brown above, rather paler beneath; the tail is brown at its baſe, black for half its length, and the remainder of a bright gold-yellow, and on the top of the head is a longitudinal ſtripe of that colour. The head is large in proportion to the body; the eyes ſmall; the ears moderately large, ſhort, and rounded; the upper lip divided; the front teeth white and ſhort; thoſe of the lower jaw being the largeſt: on each ſide the noſe are long whiſkers. The legs are ſhort; the feet divided into four toes, with weak crooked claws; and in place of the thumb a ſmall tubercle. On the hind part of the head, and along the back, are ſcattered ſeveral hairs much longer than the reſt, and of a very different form and ſubſtance, being flat, ſtiff, and rough to the touch: they ſeem to ariſe from ſmall tranſparent ſheaths, and their conformation is highly ſingular, each hair, or rather quill, being cylindric and very ſmall near the body, growing flat towards the middle part, where it is half a line broad; and hence gradually diminiſhing to a very fine point: along the middle runs a channel or gutter, which if examined with a glaſs, appears yellow, while the ſides, which are elevated, are of a brown colour; and thus a ſort of double reflexion of light takes place, cauſing the purpliſh tinge above mentioned: theſe ſingular hairs, or quills, become gradually ſmaller as they approach the ſides of the body, and quite diſappear towards the abdomen. It ſeems to be an animal formed for climbing trees; and, from the deſcription given above, it will appear that Mr. Schreber's opinion is juſt, and that it ſhould

in reality be conſidered, notwithſtanding its diminutive ſize, as a ſpecies of Hyſtrix. Its length, from noſe to tail, is five inches, and of the tail ſix inches and nine lines. See the Plate, fig. 2.

6. Myoxus guerlingus, the guerlinguet: body above ferruginous, yellowiſh-rufous beneath; with long ſubdepreſſed tapering tail. This animal is deſcribed in the 7th ſupplemental volume of Buffon's Natural Hiſtory, and is ſaid to be of the ſize of a ſquirrel, but of a longer form. It is a native of Guiana, and reſides on palm-trees in the manner of a ſquirrel, feeding on fruits, &c. Its teeth reſemble thoſe of ſquirrels, and it has the ſame method of elevating its tail, which is longer than the body, and obſcurely-annulated with numerous alternate brown and yellowiſh bands, the tip itſelf being black. This animal meaſures between ſeven and eight inches to the tail, which is of equal length.

β. M. guerlingus minor, the ſmall guerlinguet. This, which is ſuppoſed to be a variety of the preceding, reſembles it in almoſt every particular except ſize, meaſuring only four inches and three lines from noſe to tail, which is but three inches and three lines in length. The colour of this kind is alſo leſs brown than the former, and has a caſt of cinereous olive-colour on the upper parts. The guerlinguets are ſaid to be eaſily tamed, and to produce two young at a birth, which they bring forth in the hollows of trees.

MY'RA, a town of Aſiatic Turkey, in Natolia, on a river of the ſame name, which runs into the Mediterranean: fifty-four miles ſouth-ſouth-weſt of Satalia, and thirty-ſix miles eaſt of Ekſenide.

MYRCI'NUS, in ancient geography, a town of Thrace, placed by Herodotus and Thucydides on the banks of the Strymon; Appian places it near Philippi; and Tzetzer ſays, that it was anciently called *Hedonus.*

MY'RE, a town of Aſia Minor, in Lycia.

MYREP'SUS (Nicholas), a phyſician, and one of the laſt who wrote in Greek, was a native of Alexandria. He appears to have flouriſhed in the thirteenth century, as his writings are quoted by other authors early in the fourteenth. The impurities of his ſtyle abundantly prove the decaying ſtate of the Greek as a living language. A diſpenſatory, which he compoſed, became very early the rule of pharmacy throughout Europe. In Paris, in 1332, all apothecaries were ordered by parliament to have a copy of his *Antidotarium* in their poſſeſſion. The Greek copies are numerous, in MS. in different libraries; but the work has been printed only in Latin tranſlations; the beſt of which is that of the learned Leonart-Fuchs, entitled "Opus medicamentorum in ſectiones quadragintaocto digeſtum," firſt printed at Baſle, in 1549, folio, and ſeveral times reprinted. This work of Myrepſus is a vaſt farrago of the compoſitions of the Greeks and Arabians, intermixed with much ſuperſtition, and full of obſcurities. *Eloy Dict. Hiſt.*

MYR'IAD, *ſ.* [μυριας, Gr.] The number of ten thouſand. Thou ſeeſt, brother, how many thouſands, or rather how many *myriads,* that is, ten thouſands, of the Jews there are which believe. *Pearſon on the Creed.*—Proverbially any great number.—Are there legions of devils who are continually deſigning and working our ruins? there are alſo *myriads* of good angels who are more cheerful and officious to do us good. *Tillotſon.*

Safe ſits the goddeſs in her dark retreat;
Around her, *myriads* of ideas wait,
And endleſs ſhapes. *Prior.*

MYRIAN'DRI, in ancient geography, a people of Syria, upon the banks of the river Amanus, according to Pomponius Mela.

MYRIAN'DRICUS SIN'US, the ſame with the *Sinus Iſſicus.*

MYRIAN'DRUS, a commercial town of Syria, erected and inhabited by Phœnicians, ſituated in the ſouth-eaſt part of the gulf called Iſſicus.

MYRIAN'THUS, *ſ.* [from the Gr. μυριος, innumerable, and ανθος, a flower; alluding to the great number of male flowers.] In botany, a genus of the claſs monoecia, order monadelphia, natural order cucurbitaceæ.—*Eſſential Character.* Male. Calyx in four deep concave ſegments; corolla none; filaments cylindrical, in three terminal ſegments; antheræ three. Female. Berry inferior, pulpy, of twelve or fourteen cells; ſeeds numerous, winged.

Myrianthus arboreus, the only ſpecies, is a native of the kingdom of Benin, in the tropical part of Africa. A tree as large as an apple-tree; with a white bark. Leaves alternate, ſtalked, fringed, reſembling thoſe of the horſe-cheſnut; the leaflets ſix, oblong, toothed. Flowers in a corymboſe panicle; the males very minute, white, in very cloſe ſpikes, at the top of the diviſions of the panicle. Fruit the ſize of a large apple. *Willdenow.*

MYR'IARCH, *ſ.* [from *myriad.*] The captain or commander of ten thouſand men. *James.*

MYRI'CA, *ſ.* [of Pliny; μυρικη of Theophraſtus and Dioſcorides. Derivation merely conjectural, απο του μυρεσθαι, either becauſe it grows near ſtreams, or becauſe it is fabled that the daughter of Cinyras was changed into this plant; this verb ſignifying both to flow and to weep. It was put as a wreath round the heads of criminals, and the wood was accounted unfortunate. The ancient μυρικη, however, appears, by the imperfect deſcription in Dioſcorides, and eſpecially by what he ſays in the following chapter (of ερεικη being like it, but much ſmaller), to be the tamariſk, Tamarix gallica. This Pliny confirms, and all modern writers have ſo underſtood it; nor do we find, in the writings of Linnæus, any reaſon for his having firſt applied this name to the genus before us, except that he preferred it to the Dutch word GALE, adopted by Tournefort.] In botany, a genus of the claſs dioecia, order tetrandria, natural order of amentaceæ. The Engliſh name is CANDLEBERRY MYRTLE. Generic Characters—I. Male. Calyx: amentaceæ ovate-oblong, imbricate on all ſides, looſe, compoſed of one-flowered, creſcent-ſhaped, bluntly-acuminate, concave ſcales; perianthium proper, none. Corolla: none. Stamina: filaments four (ſeldom ſix), filiform, ſhort, erect; antheræ large, twin, with bifid lobes. II. Female. Calyx: as in the male. Corolla: none. Piſtillum: germen ſubovate; ſtyles two, filiform, longer than the calyx; ſtigmas ſimple. Pericarpium: berry one-celled. Seed: ſingle.—*Eſſential Character.* Amentaceæ with a creſcent-ſhaped ſcale; corolla none. Female ſtyles two; berry one-ſeeded. There are nine ſpecies.

1. Myrica gale, ſweet gale, ſweet willow, or candleberry myrtle: leaves lanceolate, ſubſerrate; ſtem ſuffruticoſe. This riſes with many ſhrubby ſtalks from two to near four feet high, dividing into ſeveral ſlender branches, and covered with a duſky or ruſt-coloured bark, ſprinkled with white dots. The buds are compoſed of nine leafy ſhining ſcales; the firſt nearly oppoſite, very ſhort, rectangularly pointed; the reſt ovate, blunt. Leaves alternate, ſtiff, an inch and a half long, and half an inch broad in the middle, light or yellowiſh green, ſmooth, a little ſerrate towards their points, and emitting a fragrant odour when bruiſed: this is occaſioned by the reſinous points with which they were ſprinkled: they are convoluted and petioled. The flowers appear before the leaves; and the flower-buds are above the leaf-buds, at the ends of the branches; whence, as ſoon as the fructification is completed, the end of the branch dies, the leaf-buds which are on the ſides ſhoot out, and the ſtems become compound. The aments, or catkins, are of a ſhort ovate figure, of a yellowiſh-brown colour, and frequently ſprinkled with ſhining reſinous golden particles. The fruit is a coriaceous berry. The male and female aments are ſometimes on diſtinct plants, and ſometimes on the ſame individual. Dr. Withering affirms, that he has found a few female florets upon the male catkins. Mr. John Templeton, of Orange Grove, near Belfaſt, ſays, that the monœcous plants may be diſtinguiſhed by the form of the leaves being exactly lanceolate, the broadeſt

part lying in the middle; whereas, in the diœcous plants the broadeſt part is near the apex, and the leaves in general are much ſmaller. See the Plate, fig. 3, 4.

The leaves have a bitter taſte, and an agreeable odour, like thoſe of myrtle. Their eſſential oil riſes in diſtillation. The northern nations formerly uſed this plant inſtead of hops; and it is ſtill in uſe for that purpoſe in ſome of the Weſtern Iſles, and a few places of the Highlands of Scotland. Unleſs it be boiled a long time, it is reported to occaſion head-ache. The catkins or cones, boiled in water, throw up a ſcum reſembling bees-wax, which gathered in ſufficient quantity would make candles. From the next ſpecies, candles are prepared in America. It is uſed to tan calf-ſkins. Gathered in the autumn, it dies wool yellow, and is uſed for that purpoſe both in Sweden and Wales. The Swedes ſometimes uſe a ſtrong decoction of it to kill bugs and lice, and to cure the itch. The Welſh lay branches of it upon and under their beds, to keep off fleas and moths, and give it as a vermifuge in powder and infuſion, applying it alſo externally to the abdomen. In moſt of the Hebrides, as well as in the Highlands of Scotland, an infuſion of the leaves is frequently given to children to deſtroy worms. In Iſla and Jura, the inhabitants garniſh their diſhes with it, and lay it between their linen and other garments, to give them a fine ſcent, and to drive away moths. When it grows within reach of a port, the ſailors make beſoms of it for ſweeping their ſhips. In the Iſle of Ely they make faggots with it to heat their ovens. Linnæus was induced to ſuſpect, from the ſmell of this ſhrub, that camphor might poſſibly be prepared from it. Horſes and goats eat it; ſheep and cows refuſe it. It is a native of the northern parts of Europe, and of North of America in bogs; flowering with us in May. Not unfrequent in many parts of England, Wales, Scotland, and Ireland, particularly in the northern and weſtern counties; alſo in Windſor Park, and near Tunbridge Wells; in the fens of the Iſle of Ely; about Wareham in Dorſetſhire, between Shap and Anna Well in Weſtmoreland: Gerard ſays, it grows by Colebrooke, and in ſundry other places; Darſingham Moor, in Norfolk: frequent in the Highlands of Scotland. In England it has the names of ſweet gale, goule, gaule, ſweet willow, wild myrtle, and Dutch myrtle. The Scotch call it gaul; and the Iriſh moſs-gaul. Our *gaul* is from the German and Dutch *gagel*. In thoſe languages, as well as in the Daniſh and Swediſh, it is alſo called *pors*, or *poſt*. In French it is, *gale odorant, piment royal, myrthe bâtard*, or *du Brabant*, and *piment des marais*. So little was the tea-ſhrub known formerly, that Simon Paulli aſſerted it to be the ſame with our ſweet gale.

2. Myrica cerifera, or American candleberry myrtle: of which there are two varieties; α. *anguſtifolia*, the common, or narrow-leaved; and β. *latifolia*, the broad-leaved. Specific character: leaves lanceolate ſubſerrate; ſtem arboreſcent. American candleberry myrtle is a ſhrub, or a tree acquiring a height of thirty feet: the bark is warted; the branches unequal and ſtraight. Leaves evergreen, ſomewhat cluſtered, blunt at the end, membranaceous-rigid, wrinkled, ſmooth, covered underneath with very minute, ſhining, orange-coloured, glandular pores. Flowers in aments, on different individuals. Gærtner, finding the ripe fruit to be farinaceous, as Miller and Kalm had deſcribed it, calls it a drupe; which is juiceleſs, ſuperior, ſmall, ovate-globular, defended at the baſe by the four calycine leaflets, acuminate above, covered all over with a white farinaceous ſubſtance mixed with many hard duſky granules, making the whole of the rind in the ripe fruit: ſhell ovate-acuminate, bony, thickiſh, one-celled, valveleſs. Seed filling the cavity of the ſhell, pale yellow, with duſky veins, and a white ſcar at the baſe. Willich remarks, that he finds ſometimes four, and ſometimes ſix, ſtamens.

Mr. Miller makes two ſpecies of this. The common or narrow-leaved ſort, according to him, riſes with many ſtrong ſhrubby ſtalks eight or ten feet high, ſending out many branches. Leaves ſtiff, near three inches long, and one inch broad in the middle; ſmooth, entire, of a yellowiſh lucid green on their upper ſide, but paler on their under. Male and female flowers on different plants. Male catkins about an inch long, erect. The female flowers come out on the ſide of the branches in longiſh bunches; and are ſucceeded by ſmall roundiſh berries, covered with a ſort of meal.

The broad-leaved American candleberry myrtle, Myrica Caroliníenſis as he names it, does not riſe ſo high as the former; the branches are not ſo ſtrong, and they have a greyiſh bark. The leaves are ſhorter, broader, and ſerrate. In other reſpects it is like the preceding, and the berries are collected for the ſame purpoſe.

They are natives of North America; and of Jamaica, in the higheſt mountains. The common ſort was cultivated in 1699, by the ducheſs of Beaufort. They flower in May and June. Candles are made from the berries in North America, whence it is called there the *tallow-ſhrub*, or *candleberry-tree;* ſome alſo name it the *bayberry-buſh*. It grows abundantly on a wet ſoil, and ſeems to thrive particularly well in the neighbourhood of the ſea, nor does it ſeem ever to be found high up in the country. The berries intended for making candles are gathered late in autumn, and are thrown in a pot of boiling water; their fat melts out, floats at the top of the water, and may be ſkimmed off. The fat when congealed looks like tallow or wax, but has a dirty green colour: it is therefore melted again and refined, by which means it acquires a fine and pretty-tranſparent green colour. It is dearer than common tallow, but cheaper than wax. They uſually mix ſome tallow with it. Candles of this kind do not eaſily bend or melt in ſummer, as common candles do; they burn better and ſlower, nor do they cauſe any ſmoke, but rather yield an agreeable ſmell, when they are extinguiſhed. At preſent, not many candles of this kind are uſed; animal tallow being readily come at, and it being very troubleſome to gather the berries. They are chiefly uſed by poor people, who live near where the buſhes grow, and have not cattle enough to ſupply them. A ſoap is made from the fat, which has an agreeable ſcent, and is excellent for ſhaving; and it is uſed by ſurgeons for plaſters. In Carolina they likewiſe make ſealing-wax from theſe berries. The root is accounted a ſpecific in the tooth-ache.

3. Myrica faya, or Azorian candleberry myrtle: leaves elliptic-lanceolate, ſubſerrate; male aments compound; drupe with a four-celled nucleus. Native of Madeira and the Azores, where it was found by Mr. Francis Maſſon: introduced in 1777. It flowers in June and July.

4. Myrica Æthiopica, or African candleberry myrtle: leaves lanceolate, or elliptic, toothed; the loweſt entire. This is an obſcure ſhrub, approaching to M. gale and cerifera. Native of the Cape of Good Hope.

5. Myrica montana, or mountain candleberry myrtle: leaves lanceolate, ſerrate, not dotted underneath; aments globular. This is a ſhrub, with round, ſmooth, branches. Leaves an inch long; narrow-lanceolate, attenuated to both ends, ſmooth, having five or ſix minute ſharp approximating ſerratures towards the tip. It has the habit and fruit of Myrica, but differs from it in having a four-leaved calyx, in the ſame manner as the next ſpecies, which Gærtner has diſtinguiſhed under the name of Nageia.

6. Myrica nagi, or Japoneſe candleberry myrtle: leaves lanceolate, entire, veinleſs. Native of Japan.

7. Myrica quercifolia, or oak-leaved candleberry myrtle: leaves oblong, oppoſitely-ſinuate. Stalks ſlender, ſhrubby, about four feet high, dividing into ſmaller branches. Leaves about an inch and a half long, and almoſt an inch broad, ſome of them having two, others three, deep oppoſite indentures on their ſides; they ſit cloſe to the branches, and end in obtuſe indented points: between the leaves come out ſome oval catkins, which drop off. This ſpecies retains its leaves all the year.

Mr. Miller makes two ſpecies of this, M. quercifolia and M. hirſuta. The firſt having ſmooth ſhining ſtalks and leaves; both of which are hairy in the ſecond, and the leaves of a darker green. He received them from Holland as different ſpecies; but he ſuſpected them to be, what they certainly are, mere varieties. Native of the Cape of Good Hope. Cultivated in 1752 by Mr. Miller. It flowers in June and July.

8. Myrica cordifolia, or heart-leaved candleberry myrtle: leaves cordate, ſerrate, ſeſſile. This has a weak ſhrubby ſtalk, five or ſix feet high, ſending out many long ſlender branches, cloſely garniſhed their whole length with ſmall heart-ſhaped leaves, ſitting cloſe to the branches, ſlightly indented and waved on their edges; they continue all the year green. Native of the Cape of Good Hope. Cultivated by Mr. Miller in 1759.

9. Myrica trifoliata, or three-leaved candleberry myrtle: leaves ternate, toothed. Native of the Cape of Good Hope.

10. Myrica aſplenifolia. See Comptonia.

Propagation and Culture. The firſt ſort, growing naturally in bogs, cannot be cultivated in a garden without bog-earth in a moiſt ſituation. American candleberry-myrtle is propagated by ſeeds ſown in autumn; for, if they are kept out of the ground till the ſpring, they ſeldom grow till the year after. The plants require water in dry weather, and ſhould be ſcreened from froſt whilſt young. When they have obtained ſtrength, they will reſiſt the cold of this country very well. This ſhrub delights in a moiſt ſoft ſoil, and would thrive well in England; and, as candles made from this ſpecies have been uſed at Hull, where they are ſold on moderate terms, we know not why the experiment ſhould not be tried. We know that the wax of the firſt ſpecies, M. gale, has been uſed in Scotland, where it grows in abundance, for the ſame purpoſe; and it has been tried more recently in Devonſhire, and, as we are informed, with very good ſucceſs, the light being brilliant, and the ſaving conſiderable. There is alſo another wax-bearing tree, growing in the Braſils, of which a ſpecimen has been ſent to this country, and has been analyſed by Mr. Brande, and deſcribed in the Phil. Tranſ. for 1812. Though the tree does not belong to the preſent genus, we take this opportunity of noticing it, in the hope, that thoſe who have the means will endeavour to cultivate it in this country, or at leaſt that the ſubſtance itſelf may not be over-looked as a new article of commerce between the Braſils and this country.

The other ſpecies of Myrica do not produce ſeeds here, but are propagated by layers; they do not, however, take root very freely, ſo that the plants are not common in England; nor have the Dutch gardeners had better ſucceſs, ſo that the plants are as ſcarce there as with us. See Cliffortia, Liquidambar, and Tamarix.

MYRI'NA, in ancient geography, a town on the northern part of the iſland of Lemnos, weſt-north-weſt of Hephæſtia.—A town of the Troade, probably the ſame with that referred by ſome geographers to the Æolide.—A town of the iſland of Crete.—A town of Thrace.

MY'RINX, *ſ.* A word uſed by ſome to expreſs the membrane of the tympanum in the ear.

MYRIOPHYL'LUM, *ſ.* [from the Gr. *μυριος*, innumerable, and *φυλλον*, leaf. This Linnæan genus appears to be the very plant ſo called by Pliny, and other ancient writers; and, from the deſcription in Dioſcorides, we have no doubt of its being the identical plant of that author.] Water Milfoil; in botany, a genus of the claſs monoecia, order polyandria, natural order of inundatæ, (naiades, *Juſſ.*) Generic Characters—I. Male flowers. Calyx: perianthium four-leaved; leaflets oblong, erect; outmoſt larger, inmoſt leſs. Corolla: none. Stamina: filaments eight, capillary, longer than the calyx, flaccid; antheræ oblong. II. Female flowers below the males. Calyx: perianthium as in the male. Corolla: none. Piſtillum: germens four, oblong; ſtyles none; ſtigmas pubeſcent. Pericarpium: none. Seeds: four, oblong, naked. M. verticillatum has often, M. ſpicatum more ſeldom, hermaphrodite flowers.—*Eſſential Character.* Calyx four-leaved; corolla none, (or two-petalled, *Gærtner.*) Male. Stamina eight. Female. Piſtillum four; ſtyle none; ſeeds four, naked; (ſtigmas two or four, ſeſſile; nuts two or four, corticated, *Gærtner.*) There are five ſpecies.

1. Myriophyllum ſpicatum, or ſpiked water-milfoil: ſpike interrupted, leafleſs. Stem branched. Leaves in whorls under water, pinnate; pinnas capillary, deep green. Flowering ſpike riſing above the water, bearing ſix or eight whorls of ſeſſile flowers; the upper male, ſomewhat crowded, the lower female, more diſtant. Calycine leaflets oval, concave, purpliſh on the outſide, ſoon deciduous; antheræ yellowiſh green; calyx of the female flowers ſmaller; ſtigmas ſpreading, cruciform. Gmelin obſerves, that there are always four leaves in a whorl; Pollich that there are four, ſix, and even more; that four ſeſſile flowers make a whorl; that there are eight, nine, or ten, whorls in a ſpike, the four uppermoſt of which have male flowers. Withering remarks, that the ſtems are reddiſh, divided within into about ſixteen cells, and that ſome of the males contain the rudiments of four germens. Profeſſor John Martyn, in a manuſcript note in the margin of Ray's Hiſtory, deſcribes the flowers as having four petals, with a ſmall four-parted calyx, both ſitting on the germen; the petals very fugacious, falling as ſoon as they open, and diſcovering the antheræ on very ſlender filaments in the male flowers; ſoon after the calyx alſo falls off, and diſcovers the four-cleft ſtyle in the female flowers. Gærtner names the ſeeds *nuts;* ſometimes there are two of theſe, but more frequently four; they are ſmall, ſubglobular, before they are ripe united by means of the rind, but afterwards ſeparable: rind thin, membranaceous: ſhells hard, ſomewhat bony, thick, whitiſh, one-celled. Seeds ſolitary, ſubcylindric, pale. Native of moſt parts of Europe, in ſtill water, as ditches, ponds, and lakes. It flowers from May to July.

β. More branched; ſpikes ſmall; broadiſh entire leaves at the baſe of the whorls. Found by Bobart near Lodden Bridge, not far from Reading; alſo in the river on Hounſlow-heath.

2. Myriophyllum verticillatum, or whorled water-milfoil: flowers in leafy whorls. In muddy ditches with little water, the ſtems ſimple, ſix or eight inches high. Leaves not more than an inch long, with pinnas one and a half or two lines in length. In ponds, the ſtems branch, and are two feet or more in length; the leaves under water, one and a half or two inches long, with ſlender capillary pinnas. Flowers in the axils of the leaves ſimilar to thoſe of the preceding: the flowers of the upper whorls are uſually male, thoſe of the lower female; ſometimes the upper are male, the middle hermaphrodite, and the lower female. Linnæus ſays that he has ſeen plants with male and female flowers diſtinct, and that he has alſo ſeen it with hermaphrodite flowers, but not ſo frequently. According to Turra, the flowers are hermaphrodite, and the leaves in fours. Villars obſerves, that the leaves of this are leſs fine and diſtinct than thoſe of the firſt ſort; that the flowers come out among them, inſtead of being ſeparate; and that the ſtems do not ſtand ſo high out of the water. This alſo is an inhabitant of ditches and ſtagnant waters, but not found ſo extenſively as the other, and leſs common in Great Britain. With us it has been obſerved in two or three places near Cambridge; by the bridge on the Botley-road, near the lane going to Medley, in Oxfordſhire; near Bungay, in Suffolk; near Yarmouth and at Hedenham, in Norfork; and in the river near Peterborough. It flowers in June and July.

3. Myriophyllum Indicum, or Indian water-milfoil: lower leaves pinnated, capillary; upper lanceolate, wedge-ſhaped, ſomewhat cut at the top; flowers axillary, whorled. Native of Ceylon and Coromandel. Stem two feet high, round, about as thick as a pigeon's quill. In habit very ſimilar the laſt. Willdenow adopted the preſent ſpecies

on the authority of his friend Klein, who obſerved that its flowers were hermaphrodite, and deſcribed it as follows: "Calyx in four ovate-lanceolate minute ſegments; corolla of four ovate deciduous petals; filaments eight, thread-ſhaped, the length of the corolla; antheræ linear, as long as the filaments; germens four, forming an arch; ſtyles none; capſules four, ſingle-ſeeded."

4. Myriophyllum ſcabratum, or rough water-milfoil: leaves pinnatifid; flowers all whorled and axillary; the males with four ſtamens; fruit with eight ribs, diſpoſed in pairs. This is a native of Carolina and Georgia; and is ſuſpected by Michaux to be the Potamogeton pinnatum of Walter's Flora Caroliniana.

5. Myriophyllum heterophyllum, or various-leaved water-milfoil: lower leaves pinnate, capillary; the upper floral ones oval, ſharply ſerrated; male flowers with ſix ſtamens. From the ſame country. Suppoſed to be Potamogeton verticillatum of Walter. *Michaux*, vol. ii. p. 190, 1. See Hottonia.

MYRIOTHE'CA, *ſ.* in botany. See Marattia, vol. xiv.

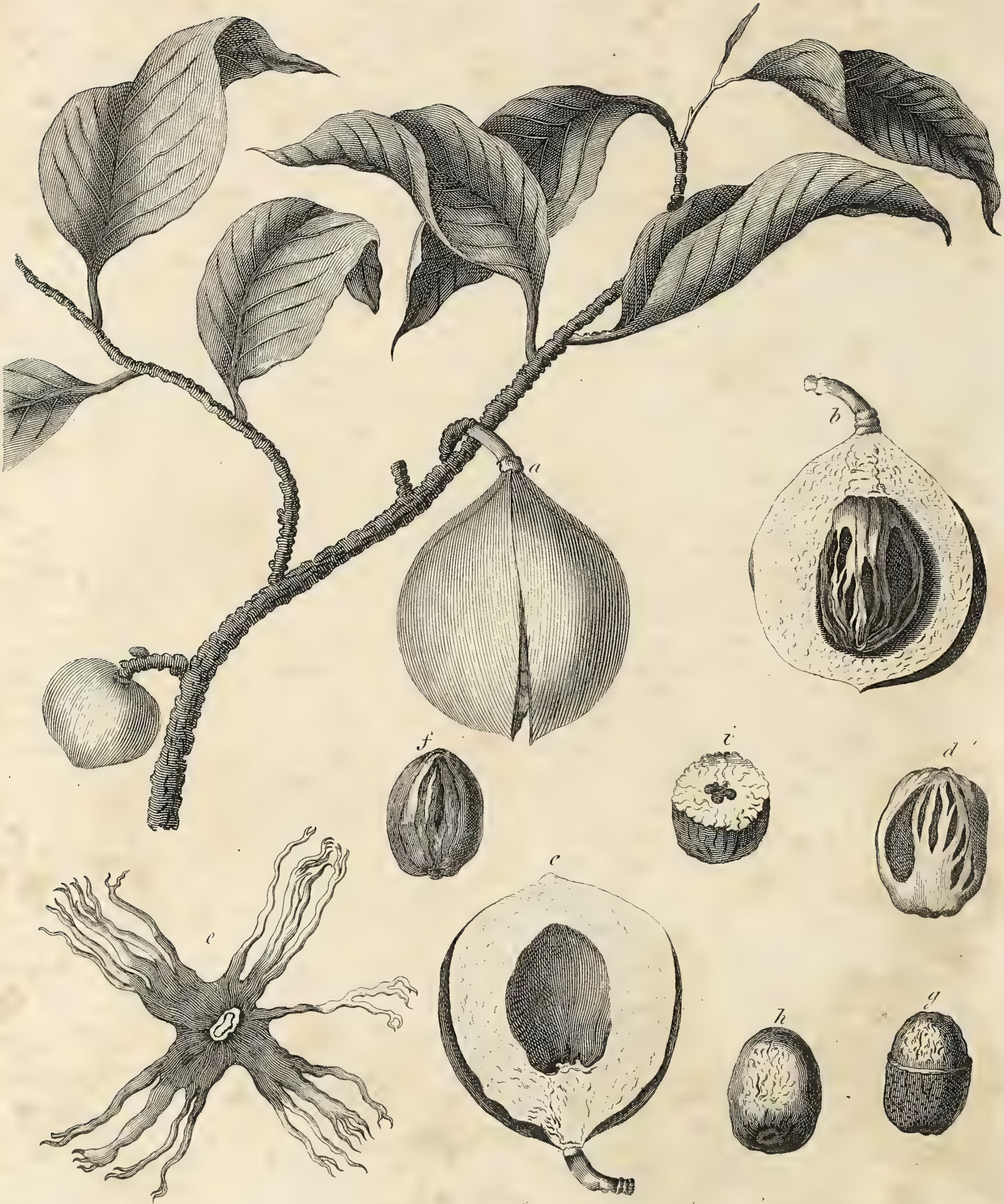
MYRIS'TICA, *ſ.* [*μυριστικος*, Gr. balſamic.] Nutmeg-tree; in botany, a genus of the claſs dioecia, order monadelphia, natural order of lauri, *Juſſ.* (myriſticeæ, *Brown.*) Generic Characters—I. Male. Calyx: perianthium one-leafed, coriaceous, trifid; ſegments ovate, acute. Corolla: none. Stamina: filament one, columnar, cylindric, erect, ſhorter than the calyx; antheræ three to ten, (twelve or thirteen, *Bot. Mag.*) linear, connate, growing round the upper part of the filament. II. Female, on a diſtinct tree; (on the ſame trunk, *G. T.*—on different trees, *Lamarck* and *Juſſieu.*) Calyx: perianthium as in the male, deciduous. Corolla: none. Piſtillum: germen ſuperior ovate; ſtyle very ſhort; ſtigma bifid; ſegments ovate, ſpreading. Pericarpium: capſule drupaceous, fleſhy, roundiſh, one-celled, at length two-valved, burſting earlier on one ſide; aril between the pericarpium and the nut, ſomewhat fleſhy, oily, ſubdivided into longitudinal ſegments. Seed: nut roundiſh, one-celled, valveleſs, with a thin ſhell; nucleus roundiſh, variegated with flexuoſe curvatures.—*Eſſential Character.* Calyx trifid; corolla none. Male. Filaments columnar; antheræ terminating, uniting. Female. Capſule ſuperior, drupaceous, two-valved; nut involved in an aril, called the *mace.* There are eight ſpecies.

1. Myriſtca aromatica, aromatic or true nutmeg-tree: calyxes ovate, trifid at the top; leaves elliptic, pubeſcent underneath; fruits even. The nutmeg-tree attains the height of thirty feet, producing numerous branches which riſe together in ſtories, and covered with bark, which of the trunk is a reddiſh brown, but that of the young branches is of a bright green colour; the inner bark is red: the leaves are nearly elliptical, pointed, undulated, obliquely nerved, on the upper ſide of a bright green, on the under whitiſh, and ſtand alternately upon footſtalks; the flowers are ſmall, and hang upon ſlender peduncles, proceeding from the axillæ of the leaves.

The nutmeg has been ſuppoſed to be the *comacum* of Theophraſtus, but there ſeems little foundation for this opinion; nor can it with more probability be thought to be the *chryſobalanus* of Galen. Our firſt knowledge of it was evidently derived from the Arabians: by Avicenna it was called *jiauſiban*, or *jauſiband*, which ſignifies "nut of bands." Rumphius both figured and deſcribed this tree; but the figure given by him is ſo imperfect, and the deſcription ſo confuſed, that Linnæus, who gave it the generic name *Myriſtica*, was unable to aſſign its proper characters. Sonnerat's account of the *muſcadier* is ſtill more erroneous; and the younger Linnæus was unfortunately miſled by this author, placing the Myriſtica in the claſs polyandria, and deſcribing the corolla as conſiſting of five petals. The fructification was firſt accurately deſcribed by Thunberg in the Stockholm Acts for 1782; and afterwards by Swartz, from ſpecimens preſerved in ſpirits in the collection of ſir Joſeph Banks, which came from Banda and the Iſle of France. Gærtner has deſcribed the fructification thus: Flowers of diſtinct ſexes on the ſame trunk. Calyx trifid; in the female inferior. Corolla none. Stamen one, thick; antheræ ſeſſile at top. Style one. Fruit a ſuperior berry, elliptic-ſpheroidal, with a ſhallow longitudinal groove on one ſide, fleſhy, very ſmooth, one-celled: fleſh thick, rather ſolid, finally drying up into a coriaceous cruſt, opening on the ſide. Seed one, ovate-globular, nucamentaceous, arilled, by help of this aril fixed to the bottom of the cell. The aril, or cover, which is commonly called *mace*, is fleſhy-coriaceous, reddiſh ſaffron-coloured, or yellow, one-leafed at bottom, multifid at top; the ſegments linear, flexuoſe, branched, widening upwards, and ſometimes gaſhed at the top. Integument double: the *outer*, a thin brittle ſhell, pale cheſnut-coloured, ſhining, reticulated by the impreſſions of the aril; the *inner*, membranaceous-cruſtaceous, ſubrufeſcent, very cloſely cleaving to the kernel, and deeply immerſed in its ſubſtance by its internal proceſſes. Albumen of the ſame form with the ſeed, fleſhy-farinaceous, as it were chewed, variegated whitiſh and bay, having a cavity at bottom for the embryo, and ſometimes a void ſpace in the middle, fragrant and gratefully aromatic. Embryo ſmall, erect, hollowed out like a diſh, milk-white: cotyledons fleſhy-foliaceous, waved, from upright ſpreading into a two-parted almoſt hemiſpherical cup, joined. Radicle inferior, in form of a very ſmall tubercle, under the cotyledons. The fruit would be a drupe, were it not for the aril.

The nutmeg-tree is a native of the Eaſt Indies, and eſpecially of the Iſland of Banda, in lat. 4. 30. S. lon. 128. 10. E. It has in a manner been extirpated in all the iſlands except Banda, which might eaſily ſupply every nation upon earth; it is however certain that there are a few trees of this ſpice upon the coaſt of New Guinea. There may perhaps be both cloves and nutmegs upon other iſlands to the eaſtward; for thoſe, neither the Dutch nor any other Europeans ſeem to think it worth while to examine. The wood-pigeon of the Moluccas is unintentionally a great planter of theſe trees; and diſſeminates them in places where a nation, powerful by its commerce, thinks it for its intereſt that they ſhould be rooted out and deſtroyed. The Dutch, whoſe unwearied patience can ſurmount the greateſt obſtacles, long appropriated to themſelves the crop of nutmegs, as well as that of cloves and cinnamon, growing in the iſlands of Ternate, Ceylon, &c. either by right of conqueſt or by paying ſubſidies to the iſlanders, who find theſe much more profitable than the former produce of their trees. It is nevertheleſs true, that they prevailed upon or compelled the inhabitants of the Moluccas to cut down and root out all the clove-trees, which they preſerve only in the iſlands of Amboyna and Ternate, which are in a great meaſure ſubject to them. We know for certain, that the Dutch paid 18,000 rix-dollars yearly to the king of Ternate, by way of tribute or gift, in order to recompenſe him for the loſs of his clove-trees in the other Molucca-iſlands; and that they were moreover bound by treaty to take, at threepence three-farthings a pound, all the cloves brought by the natives of Amboyna to their magazines. They likewiſe ſucceeded in deſtroying the cinnamon every-where except in the Iſland of Ceylon. The ſame was the caſe with white pepper, &c. ſo that the trade of the whole of Europe, and of great part of Aſia, in this ſpecies of commodity, long paſſed through their hands. The Dutch had immenſe and very rich magazines of theſe precious aromatics, both in India and Europe. They had actually by them the produce of ſixteen years, and never ſupplied their neighbours with the laſt, but always with the oldeſt crop: in 1760 they ſold what was laid up in 1744. It is commonly ſaid, that, when the Dutch have too great a quantity of cloves, nutmegs, &c. in their magazines, they throw them into the ſea; but the fact is, that they get rid of their ſuperfluous aromatics by burning them. On the 10th of June, 1760, M. Bomare ſaw at Amſterdam,

MYRISTICA.



The Nutmeg-Tree and its fructification.

[illegible]

dam, near the admiralty, a fire, the fuel of which was valued at 8,000,000 of livres; and as much was to be burned the day following. The feet of the ſpectators were bathed in the eſſential oil of theſe ſubſtances; but no perſon was allowed to gather any of it, much leſs to take any of the ſpices which were in the fire. Some years before, upon a ſimilar occaſion, and at the ſame place, a poor man who had taken up ſome nutmegs which had rolled out of the fire, was, as M. Bomare was informed, ſeized and condemned to immediate execution. But, notwithſtanding the jealouſy of the Dutch, and the pains they take to preſerve the ſale of cloves wholly to themſelves, they have never been able to prevent their own officers, in ſeveral parts of India, from embezzling and ſelling conſiderable quantities of them. M. de Jaucourt informs us, that, in order to defraud the company, they ſell a part to the veſſels of other nations which they meet at ſea, and moiſten the remainder with water, that they may ſtill have the number of quintals of which their cargo conſiſted. The quantity ſold may amount to ten quintals in one hundred, before it can be perceived by the clerks of the magazines at Batavia, where they are received.

Monſ. Poivre, governor of the Iſle of France, ſent perſons, in June 1770, to the leaſt frequented part of the Moluccas, in ſearch of what the avarice of the Dutch had hitherto withheld from the reſt of the world; and to him the French colonies in the Iſles of France and Bourbon are indebted for the nutmeg, clove, and cinnamon. By an account ſent to Monſ. de Sartines in 1779, by the king of France's gardener at the Iſland of Bourbon, it appears that the royal garden there poſſeſſed at that time thirty-eight male aromatic nutmeg-trees, and eight females, the produce of two importations. The firſt female, produced by the nuts of the firſt importation, bore ſix nutmegs the preceding year. Theſe were all of the long form, M. tomentoſa, our N° 4. and ſurrounded by the mace on all ſides. Since that time a ſecond and third female tree, produced by the nuts of the laſt exportation, have yielded nuts of the ſame long ſhape; a fourth tree ſhowed nuts which were very large, and likely to be of the long ſort; a fifth yielded nuts one-third ſmaller; the mace went only half round them, leaving them at liberty to break from it: they were round, and had a longitudinal ſtripe on one ſide. The gardener relates, that he had twenty-nine nutmeg-trees in his orchard, of which two only were females: the caſe is the ſame in other plantations, and all theſe males came from long nuts planted in 1772.

It being probable that the woods in the Molucca-iſlands produce more of the trees which bear long nuts than of thoſe which bear round ones, the natives probably gave the former, and the merchants took them without ſuſpecting any fraud. It might therefore have happened, that not a ſingle fruiting-tree of the true ſort had been imported; and in fact there was not one fruiting-tree of the firſt importation any-where but in the king's garden, and that produced *long nuts*. So that, had not Monſ. Poivre ſent a ſecond time to the Moluccas, the French colonies might never have had a ſecond female tree.

The gardener diſtinguiſhes the tree into three ſorts: the male or barren nutmeg; the royal nutmeg, or female producing the long nuts; and the queen-nutmeg, yielding the precious round nuts, intended to reproduce the females, but which gives ſeparately, the one long nuts intended to give males, the other round nuts intended to produce the two ſorts of females; namely, that producing the long, and that producing the round, nut. The only difference between the royal and queen nutmeg is in the fruit. That of the royal is thicker, longer, and more pointed; the green ſhell is thicker, and it is longer in ripening: the green ſhell, after opening, preſerves its freſhneſs eight or nine days; the mace is more ſubſtantial, and three or four times as long as that of the queen-nutmeg; and its ſtripes or thongs, of which there are from fifteen to ſeventeen principal ones, are of a livelier red; they are alſo broader, longer, and thicker, and not only embrace the nut throughout its whole length, but paſs it and croſs under it, as if to hinder it from falling. The royal nutmeg is generally from fifteen to ſixteen lines long, thick in proportion, and has no longitudinal ſtripe. It remains on the tree a long time after the opening of the green ſhell, and gives birth to inſects in the ſhell that feed upon it. The queen-nutmeg produces much ſmaller nuts, only nine or ten lines long, not ſo thick by a third, and well marked by a longitudinal groove on one ſide; they are round, and reſemble a ſmall peach: the green ſhell is not thick: the mace, which is compoſed of nine or ten principal ſtripes, grows only half down the nut, leaving it at liberty to eſcape and plant itſelf. By thus detaching itſelf, the nut prevents the inſects from deſtroying it: the green ſhell alſo, changing at the end of two or three days, ſoon falls, and ſeparates from the nut. This green ſhell, when preſerved, has the fine taſte of the nut itſelf. A ſmall eſtabliſhment for theſe ſpices has alſo been formed by the French ſince 1769, on the Iſle of Secheyles, in lat. 4. 38. S.

The nutmeg-tree has been introduced into the Britiſh territories in the Eaſt Indies. Captain W. C. Lennon, of the Mary, acquaints Dr. Anderſon, at Madras, on the 20th of Auguſt, 1796, that he had brought ſafe from Amboyna and Banda, ſome clove and nutmeg plants of the beſt kinds, and that it was chiefly owing to Capt. Oſborne, of the Centurion, that he was enabled to bring them in ſafety to Pulo Penang. He had on-board ſeven nutmeg and four clove trees, of which two of the former were planted at Madras; the reſt were ſent to Marmalon, excepting two of the nutmeg-trees, which had been forwarded by captain Pakenham for Mr. Andrew Roſs.

A premium has been offered by the Society of Arts, Manufactures, and Commerce, of London, ever ſince the year 1783, for the greateſt quantity of merchantable nutmegs, not leſs than five pounds weight, the growth of our iſlands in the Weſt Indies; but hitherto without ſucceſs.

Sir George Staunton relates, that a perſon belonging to the embaſſy to China had a preſent, from the medical garden at Batavia, of a young growing nutmeg-plant, and of a nut ſuppoſed capable of germination; that he committed them to the care of a gentleman bound for England, in order to be put in his majeſty's botanic garden at Kew; but that the nutmeg-plant ſuffered in the paſſage, and was left at St. Helena. Sir George ſays that the nutmeg-tree, with a ſmooth brown bark, riſes perfectly ſtraight. Its ſtrong and numerous branches, proceed regularly in an oblique direction upwards. They bear large oval leaves pendulous from them, ſome a foot in length; the upper ſurface ſmooth, and of a deep agreeable green; the under ſurface marked with a ſtrong nerve along the middle, from which others proceed obliquely; it is of a uniform bright brown colour, as if ſtrewed all over with a fine brown powder; and the whole leaf is very fragrant.

The genuine nutmeg-tree with *round fruit*, (Nux moſchata fructu rotundo, of Bauhin and Plukenet,) is the ſubject of the annexed Plate; wherein *a* repreſents a ſprig with the fructification; the fruit of the natural ſize, and burſting open; *b*, the full-grown fruit cut lengthways; *c*, another ſection of the ſame; *d*, the nutmeg enveloped with its covering, the mace; *e*, the fatty membrane, or mace, ſpread out; *f*, the nutmeg of its natural ſize; *g*, the ſame with its external tegument removed at one end; *h*, the ſame with its outer tegument entirely removed; *i*, a tranſverſe ſection of the nutmeg. The ſeed or kernels, called *nutmegs*, are well known, as they have been long uſed both for culinary and medical purpoſes. Diſtilled with water, they yield a large quantity of eſſential oil, reſembling in flavour the ſpice itſelf; after the diſtillation, an inſipid ſebaceous matter is found ſwimming on the water; the decoction, inſpiſſated, gives an extract of an unctuous very-lightly-bitteriſh taſte, and with little or no aſtringency. Rectified ſpirit extracts the whole virtue of nutmegs by infuſion, and elevates very little of it in diſtillation; hence the ſpirituous extract poſſeſſes the flavour of the ſpice in an eminent degree. Nutmegs, when heated, yield to the preſs a conſiderable quantity of limpid yellow oil, which on cooling concretes into a ſebaceous conſiſtence. In the ſhops we meet with three ſorts of unctuous ſubſtances called *oil of mace*, though really expreſſed from the nutmeg. The beſt is brought from the Eaſt-Indies in ſtone jars; this is of a thick conſiſtence, of the colour of mace, and has an agreeable fragrant ſmell; the ſecond ſort, which is paler coloured, and much inferior in quality, comes from Holland in ſolid maſſes, generally flat, and of a ſquare figure: the third, which is the worſt of all, and uſually called *common oil of mace*, is an artificial compoſition of ſevum, palm-oil, and the like, flavoured with a little genuine oil of nutmeg.

2. Myriſtica ſebifera, or fatty nutmeg: leaves cordate, oblong, tomentoſe, underneath; fruits tomentoſe. A tree of forty or ſixty feet high; branching at the top; the branches long, tortuous, upright, and declining; ſcattered here and there; the leafy and flowering branchlets downy and ferruginous: the leaves cordate-oblong, ſharp, green above, and ſmooth; below downy, and reddiſh: they are perfectly entire, and have ſhort footſtalks. The flowers are borne in cluſters of five or ſix, ſeſſile. The fruit varies in ſize and form on different trees; being twice as large in ſome: it is oblong, the valves being produced into an obtuſe cylinder. From the kernel is extracted a ſpecies of yellowiſh ſuet or fat, which ſerves for various medical and economical purpoſes; and is made into candles. From the wounded bark flows a red acrid juice. Native of marſhy woods and hills in Guiana.

3. Myriſtica fatua, or wild nutmeg: leaves oblong-lanceolate, pubeſcent underneath; calyxes and fruits villoſe. This grows in Tobago, and riſes to the height of an apple-tree. It has downy leaves, and hairy fruit; the nutmeg of which is aromatic; but, when given inwardly, is narcotic, and occaſions drunkenneſs, delirium, and madneſs, for a time.

4. Myriſtica tomentoſa, or long nutmeg: leaves oblong, with numerous ſimple parallel veins; flower-ſtalks aggregate, ſcarcely the length of the calyx, downy, like the calyx and fruit. Grows in Banda, Amboyna, and New Guinea; flowering in May. Mr. C. Smith ſent it, under the name of New-Guinea nutmeg, or long nutmeg, from Banda, in 1797. The branches and footſtalks are much thicker than in the true nutmeg; the leaves four times as large, often a foot in length, and three or four inches broad, oblong, or ſomewhat obovate; ſoft, and ſcarcely viſibly downy beneath; their veins much more copious, ſtraight and parallel. The ſeeds are of a much longer form and proportion than the firſt ſpecies, and are ſometimes ſold in the ſhops by the name of *long nutmegs*, though generally reckoned inferior in quality to the former.

5. Myriſtica dactyloides, or Malabar nutmeg: leaves oblong, with numerous ſimple parallel veins; flower-ſtalks aggregate, longer than the calyx; fruit oblong, downy. Rheede deſcribes this as common in the woods of Malabar, bearing fruit twice a-year, in June and December. Lamarck well obſerves, that it ſeems very near our fourth ſpecies, but, if the details in the Hortus Malabaricus be faithful, muſt be diſtinct. The fruit and ſeed appear much like the preceding, but the latter has ſcarcely any taſte or ſmell, though the mace is not without ſome flavour. Rheede ſays "the Turkiſh and Jewiſh merchants mix theſe nutmegs with the true long ones, and the mace with good mace, ſelling them together. They alſo extract from theſe inferior articles, an oil, with which they adulterate that of a more genuine quality."

6. Myriſtica irya: ſhell of the nut globular, depreſſed a little, cruſtaceous, thin, brittle, dirty white; marked with ſuperficial capillary veſſels, regular, not wrinkled. Seed globular, wrinkled, with tubercles brown bay. Albumen void of ſcent, of a white ſuety ſubſtance, that may be grated, appearing as if it had been chewed by the reddiſh-bay proceſſes of the integument, and having a very void ſpace in the middle. Embryo at the bottom of this cavity, ſmall, greeniſh: cotyledons ovate, fleſhy-foliaceous, flattiſh, from horizontal ſpreading, radicle conical, inferior. Native of Ceylon.

7. Myriſtica iriaghedhi: ſhell ovate-oblong, very like the preceding in its whole ſtructure. Seed of the ſame ſhape with the ſhell, deeply ſtriated and wrinkled; brick-coloured, and, when moiſtened, of a bright vermilion. Native of Ceylon. This and the preceding are from Gærtner.

8. Myriſtica cimicifera, or bug-nutmeg: leaves ovate-oblong, obtuſe at the baſe, ſmooth beneath when full-grown; flowers nearly ſeſſile, in axillary tufts; antheræ ſix. Gathered by ſir Joſeph Banks, in the tropical part of New-Holland. *Brown.*

Propagation and Culture. The nutmeg-tree not having been yet introduced among us, we cannot give any particular directions for the ſtove-culture of it. In its native ſoil, it grows in woods, and ſeems to be propagated by birds. We have no inſtruction for the culture of it in the Eaſt or Weſt Indies, where it has been introduced, farther than what we are told by the French gardener in the Iſle of Bourbon; that what he calls the royal and queen nutmegs are the only trees that always bear, and conſequently the only ones to be planted; and that their produce is as ſure as if they were hermaphrodite trees. The kernel of the firſt will produce only a male or barren tree; but the nut of the latter will always produce a fruitful one: ſo that, if planters have a hundred queen-nutmegs, and one royal one, they will be ſure of having a hundred fruiting-trees, and one male tree to fecundate them. Without attending to this, they might have had a great quantity of male trees to a ſmall quantity of females; and they would not have diſcovered the miſtake till after five or ſix years, when the trees came to flower. We ſhall add a few particulars as to the method of gathering, preparing, and preſerving, nutmegs, in the countries where they grow; and, of the uſes to which they are applied.

When the fruit is ripe, the natives aſcend the trees, and gather it by pulling the branches to them with long hooks. Some are employed in opening them immediately, and in taking off the green ſhell or firſt rind, which is laid together in a heap in the woods, where in time it putrefies. As ſoon as the putrefaction has taken place, there ſprings up a kind of muſhrooms, called *boleti moſchatyni*, of a blackiſh colour, and much valued by the natives, who conſider them as delicate eating. When the nuts are ſtripped of their firſt rind, they are carried home, and the mace is carefully taken off with a ſmall knife. The mace, which is of a beautiful red, but afterwards aſſumes a darkiſh or reddiſh colour, is laid to dry in the ſun for the ſpace of a day, and then removed to a place leſs expoſed to his rays, where it remains for eight days, that it may ſoften a little. They afterwards moiſten it with ſea-water, to prevent it from drying too much, or from loſing its oil. They are careful, however, not to employ too much water, leſt it ſhould become putrid, and be devoured by worms. It is laſt of all put into ſmall bags, and ſqueezed very cloſe.

The nuts, which are ſtill covered with their ligneous ſhell, are for three days expoſed to the ſun, and afterwards dried before a fire till they emit a ſound when they are ſhaken; they then beat them with ſmall ſticks in order to remove their ſhell, which flies off in pieces. Theſe nuts are diſtributed into three parcels: the firſt of which contains the largeſt and moſt beautiful, which are deſtined to be brought to Europe; the ſecond contains ſuch as are reſerved for the uſe of the inhabitants; and the third contains the ſmalleſt, which are damaged or unripe. Theſe are burnt, and part of the reſt is employed for procuring oil by preſſure. A pound of them commonly gives three ounces of oil, which has the conſiſtence of tallow, and preſerves entirely the taſte of nutmeg. Both the nut and mace, when diſtilled, afford an eſſential, tranſparent, and volatile, oil, of an excellent flavour. The nutmegs which have been thus ſelected would ſoon corrupt if they were not watered, or rather pickled with lime-water made from calcined ſhell-fiſh, which they dilute with ſalt-water till it attain the conſiſtence of fluid pap. Into this mixture they plunge the nutmegs, contained in ſmall baſkets, two or three times, till they are completely covered over with the liquor. They are afterwards laid in a heap, where they heat, and loſe their ſuperfluous moiſture by evaporation. When they have ſweated ſufficiently, they are then properly prepared, and fit for a ſea-voyage.

In the iſland of Banda, the fruit of the nutmeg-tree is preſerved entire in the following manner. When it is almoſt ripe, but previous to its opening, it is boiled in water and pierced with a needle. They next lay it in water to ſoak for ten days, till it has loſt its ſour and ſharp taſte. They then boil it gently in a ſyrup of ſugar, to which, if they wiſh it to be hard, a little lime is added. This operation is repeated for eight days, and each time the ſyrup is renewed. The fruit when thus preſerved is put for the laſt time into a pretty thick ſyrup, and is kept in earthen pots cloſely ſhut. Theſe nuts are likewiſe pickled with brine or with vinegar; and, when they intend to eat them, they firſt ſteep them in freſh water, and afterwards boil them in ſyrup of ſugar, &c.

Nutmegs preſerved entire are preſented in the eaſt as deſerts, and the inhabitants of India ſometimes eat them when they drink tea. Some of them uſe nothing but the pulp; others likewiſe chew the mace; but they generally throw away the kernel, which is really the nutmeg. Many, who perform ſea-voyages to the north, chew this fruit every morning. The medicinal qualities of nutmeg are ſuppoſed to be aromatic, anodyne, ſtomachic, and reſtringent; and, with a view to the laſt-mentioned effects, it has been much uſed in diarrhœas and dyſenteries. To many people the aromatic flavour of nutmeg is very agreeable; they, however, ſhould be cautious not to uſe it in large quantities, as it is apt to affect the head, and even to manifeſt an hypnotic power in ſuch a degree as to prove extremely dangerous. Bontius ſpeaks of this as a frequent occurrence in India; and Dr. Cullen relates a remarkable inſtance of the ſoporific effect of the nutmeg, which fell under his own obſervation, and hence concludes, that in apoplectic and paralytic caſes this ſpice may be very improper. He obſerves, that a perſon by miſtake took two drams or little more of powdered nutmeg: he felt it warm in his ſtomach, without any uneaſineſs; but in about an hour after he had taken it he was ſeized with a drowſineſs, which gradually increaſed to a complete ſtupor and inſenſibility; and not long after he was found fallen from his chair, lying on the floor of his chamber in the ſtate mentioned. Being put to bed, he fell aſleep; but, awakening a little from time to time, he was quite delirious; and he thus continued alternately ſleeping and delirious for ſeveral hours. By degrees, however, both theſe ſymptoms diminiſhed; ſo that in about ſix hours from the time of taking the nutmeg he was pretty well recovered from both. Although he ſtill complained of head-ache, and ſome drowſineſs, he ſlept naturally and quietly the following night, and next day was quite in his ordinary health. The officinal preparations of nutmeg are a ſpirit and eſſential oil, and the nutmeg in ſubſtance roaſted, to render it more aſtringent. Both the ſpice itſelf and its eſſential oil enter ſeveral compoſitions, as the confectio aromatica, ſpiritus amoniæ com. &c. Mace poſſeſſes qualities ſimilar to thoſe of the nutmeg, but is leſs aſtringent, and its oil is ſuppoſed to be more volatile and acrid.

MYRME'CIA, ſ. [from μυρμηξ, Gr. an ant.] In ſurgery, the denomination of a ſpecies of *verruca*, or wart, which is ſeſſile upon a broad baſe, prominent, callous, and of a blackiſh colour, and is affected with ſtinging pains, when cut, like the bitings of ants.

MYRME'CIA, ſ. [Gr. an ant's neſt.] In botany, a genus of the claſs tetrandria, order monogynia, natural order of gentianæ, *Juſſ.* Generic Characters—Calyx: perianthium one-leafed, tubular, long, five-toothed; toothlets erect, acute. Corolla: one-petalled; tube long; opening inflated; border five-cleft; ſegments ovate, acute, revolute; nectary five ſmall glands ſurrounding the baſe of the germen. Stamina: filaments four, filiform, inſerted at bottom into the tube, and longer than it; antheræ linear, erect. Piſtillum: germen oblong, ſuperior; ſtyle filiform, longer than the ſtamens; ſtigma bilamellate. Pericarpium: capſule long, two-celled, two-valved, covered by the permanent calyx. Seeds: numerous, very ſmall, viſcid, adhering to the partition.—*Eſſential Character.* Calyx tubular, five-toothed; corolla one-petalled, with an inflated mouth, and five-cleft border; germen with five glands at the baſe; ſtigma bilamellate; capſule two-celled, two-valved, many-ſeeded. There is only one ſpecies.

Myrmecia tachia. This is a ſhrub with a trunk of five or ſix feet in height; thick at the baſe, and gradually diminiſhing as it aſcends: it throws out here and there long, rough, four-cornered branches, which are oppoſite and tubular: at each knot of theſe branches grow two oppoſite leaves diſpoſed croſſways: they are ovate, ſharp, perfectly entire, ſmooth, ſubſeſſile, and embrace the ſtem. From the boſom of one or other of theſe leaves proceeds a ſeſſile flower, of a yellow colour; and it generally happens, that, at the boſoms of thoſe leaves which do not produce flowers, a tear of yellow reſin makes its appearance. It is a native of Guiana in woods and on the banks of rivers, where it flowers and bears fruit in October. We are informed by Aublet, that the hollow trunk and branches of this ſhrub are commonly the retreat of a great many ants, for which reaſon it is called by the Caribbees *tachi*, which is ſaid to ſignify an ant's neſt; and hence Schreber took occaſion to apply a claſſical name to this genus.

MYRMEC'IDES, an artiſt of Miletus, mentioned as making chariots ſo ſmall that they could be covered by the wing of a fly. He alſo inſcribed an elegiac diſtich on a grain of Indian ſeſamum. *Ælian.*

MYRME'CION, in ancient geography, a town of the Tauric Cherſoneſus, which ſtood on the banks of the Cimmerian Boſphorus, according to Strabo, Pliny, Mela, &c. No veſtiges of it now remain.

MYRMECOPHA'GA, ſ. [from the Gr. μυρμηξ, an ant, and φαγω, to eat.] The ANT-EATER; a genus of quadrupeds of the order bruta. Generic Characters—Teeth none; tongue cylindric, extenſile; mouth lengthened into a ſomewhat tubular form; body covered with hair.

The animals of this genus live entirely on inſects, more particularly on the various kinds of ants: in order to obtain which, they extend their tongue, which is of a very great length, and of a roundiſh or worm-like form, into the neſts of theſe inſects; and when, by means of the viſcid moiſture with which it is covered, a ſufficient number are ſecured, they retract it ſuddenly into the mouth, and ſwallow them. A part of the generic character of the myrmecophaga is the total want of teeth, in which particularity it reſembles no other animals, except thoſe of the genus Manis, in which the ſame circumſtance takes place. There are, however, in the ant-eaters, according to the obſervations of Brouſſonet, certain bones or proceſſes, not unlike teeth, ſituated deep at the entrance of the gullet or œſophagus, or rather, according to Camper, at the lower end of the jaws. The ſpecies of ant-eaters are ſeven in number.

1. Myrmecophaga jubata, the great ant-eater: four toes on the fore-feet, and on the hind five; the tail is buſhy. There is a variety with a ſhorter face and ſhorter legs. This, as its name imports, is by much the largeſt of the genus, being ſeven feet in length from the tip of the noſe to the end of the tail; but, if meaſured to the origin of the tail, it is no more than about five feet and a half. It is an animal of an uncouth appearance: the head is ſmall; the ſnout very long; the eyes ſmall; the ears ſhort and round; the ſhoulders thick and muſcular,

from whence the body tapers towards the tail; but the thighs are thick and ſtout. The colour of the animal is deep grey, with a very broad band of black running from the neck downwards, on each ſide of the body, growing gradually narrower as it paſſes down. This black band is accompanied on the upper part by a ſtreak of white; the fore-legs are of a lighter caſt than the hinder, and have a patch or ſpot of black in front, not much above the foot; the tail is black, extremely long, and buſhy; the hair on the whole body, but eſpecially on the tail, is very harſh and coarſe; the two middle claws of the fore-feet are extremely large and ſtrong, which render this creature, though deſtitute of teeth, a very formidable adverſary; ſince it has been known to deſtroy animals of much greater apparent ſtrength than itſelf, fixing its claws upon them, and exerting ſuch powerful ſtrength as to kill them by continued laceration and preſſure. It is a native of Braſil and Guiana. It is chiefly a nocturnal animal, and is ſaid to ſleep during the greateſt part of the day in retired places. Its pace is ſomewhat ſlow, and its manners dull and heavy. It is ſaid to ſwim with eaſe, at which time it flings its tail over its back. A living ſpecimen was brought from Buenos Ayres into Spain, in the year 1776, and kept in the royal menagerie at Madrid. In this ſtate of confinement, it would readily eat raw meat cut ſmall, and was ſaid to ſwallow four or five pounds in a day. Its length was ſix feet from the noſe to the end of the tail, and its height was two feet. But the ſpecimen in the Leverian Muſeum (now, alas! no longer exiſting), from which fig. 1. on the annexed Engraving was copied, was ſuperior in ſize to any we have before heard of.

	Feet.	Inches.
Its whole length was	7	4
The tail	2	9
From tip of the noſe to the ears	1	0
Length of the hairs of the mane	1	0
———— of the tail	1	2
Height to the top of the ſhoulders	2	0

2. Myrmecophaga tetradactyla, the middle ant-eater: four toes on the fore-feet, five on the hind, and half-naked prehenſile tail. This ſpecies, which is far inferior in ſize to the former, has a long ſlender noſe, bending down a little: the mouth is black: the eyes ſmall: the ears ſmall and upright. The general colour of the animal is a paliſh yellow-brown; the hair ſomewhat ſhining, and of a hard nature: on each ſide of the neck is an oblique black or duſky band, croſſing the ſhoulders, and paſſing towards the lower part of the back: the tail, which is covered with longer hair than the back, is thickiſh at the baſe, but tapers towards the end, where it is nearly bare, having the ſame prehenſile power as in ſome of the monkeys. On each of the fore-feet are four toes, armed with ſtrong claws, the middle ones extremely ſo. On the hind feet are five claws, ſmall in compariſon with the former. The length of the animal from noſe to tail is one foot ſeven inches: of the tail ten inches. It inhabits the ſame parts of South America with the great ant-eater, and its manners are ſimilar. It alſo climbs trees, and occaſionally clings by its tail to the branches. This is repreſented at fig. 2.

3. Myrmecophaga tridactyla, the three-toed ant-eater: three toes on the fore-feet, four on the hind; tail villoſe. This, which muſt be conſidered as an obſcure ſpecies, ſeems to have been firſt mentioned by Seba, and from him adopted by Linnæus and Briſſon. The figures, however, which Seba gives, repreſent equally well the four-toed ant-eater, or Myrmecophaga tetradactyla of Linnæus, from which they only appear to differ in having pendulous ears, and three toes inſtead of four on the fore-feet. It therefore ſeems highly probable, that this ſuppoſed ſpecies may be rather a variety of the M. tetradactyla than truly diſtinct. Linnæus, in his ſlight deſcription, mentions a lateral black band, and adds, that the tail is broad and villoſe, and that the animal carries it over its back and covers itſelf with it: he alſo ſays that the back has a longitudinal mane. It is a native, according to Linnæus, of India.

The three-toed ant-eater of Seba may, therefore, be a mere variety of the four-toed, or tetradactyla; and perhaps neither the black lateral band nor the pendulous ears ought to be conſidered as conſtituting a permanent or ſpecific character. It is remarkable that Mr. Pennant, in his Hiſtory of Quadrupeds, makes no mention of M. tridactyla. On the other hand, we ought not to omit an obſervation of Mr. Voſmaer, who received from the Cape of Good Hope a ſpecimen preſerved in ſpirits of wine, and which he ſuppoſed to be a new-born animal, though as large as a young pig. He affirms that Seba's figures are very good; that they repreſent a perfectly-diſtinct ſpecies, viz. that of which he received the young; but that the fore-feet are furniſhed with four claws. Thus, in reality, the Seban animal, though erroneouſly mentioned as having only three toes on the fore-feet, may ſtill be, in all other reſpects, a very exact repreſentation of a ſpecies not yet perfectly deſcribed; while the Linnæan tridactyla muſt continue unknown, unleſs he really meant the animal of Seba.

4. Myrmecophaga didactyla, the little ant-eater: two toes on the fore-feet, four on the hind, and a buſhy tail. This is an animal of great elegance. It is not ſuperior in ſize to a ſquirrel; meaſuring little more than ſeven inches from the noſe to the tail, which is longer than the body and head. The head is ſmall; the ſnout ſharpened, and ſlightly bent downwards; the legs are ſhort; the fore-feet have only two claws on each, the exterior one much larger and ſtronger than the interior; on each of the hind-feet are four claws of moderate ſize; the ears are ſmall, and hidden in the fur; the eyes are alſo ſmall. The whole animal is covered with a beautiful, ſoft, and ſomewhat criſped or curled, fur, of a pale yellow colour, or rather yellow-brown; the tail, which is very thick at the beginning or baſe, gradually tapers to the tip; and the lower ſurface, for about the ſpace of four inches from the tip, is bare; the tail in this ſpecies being prehenſile, and the animal commonly reſiding on trees, and preying on ants, by means of its long tongue, in the manner of other ſpecies. It is a native of Guiana; walks ſlowly on its heels; feeds only in the night, and emits no cry. See fig. 3.

5. Myrmecophaga pentadactyla, the ſtriped ant-eater: five toes on the fore-feet; the upper jaw longer than the lower. This is from the 3d vol. of the Supplement to Buffon's Quadrupeds. The noſe is taper; the upper mandible extending very far beyond the lower: the eyes extremely ſmall: the ears round and ſhort: the tail covered with long hairs, ſo as to have a buſhy appearance. The body and tail are of a yellowiſh-brown or tawny-colour; with the under parts white: the body is marked with broad, diſtant, blackiſh, tranſverſe, ſtripes, and the tail is annulated with ſimilar ones. The length of the ſpecimen, from noſe to tail, was thirteen French inches; of the tail ſeven inches and a half. It is a native of Guiana. See fig. 4.

6. Myrmecophaga Capenſis, the Cape ant-eater: four toes on the fore-feet; ſnout long; ears large and pendant; tail ſhorter than the body, and attenuated towards the tip. This is a large animal, meaſuring about three feet and a half from the tip of the noſe to the beginning of the tail; and the tail meaſures one foot nine inches. The general colour of the animal is grey, tinged with reddiſh on the ſides and belly: the legs are blackiſh. The head is of a conic ſhape; the noſe long, and ſomewhat abruptly blunt at the end like that of a hog: the tongue is very long, flat, and ſlender: the ears about ſix inches long, and extremely thin; they are alſo thinly ſcattered over with fine hairs. The hair on the head and upper parts is ſhort, and lies cloſe or ſmooth as if glued to the ſkin; it is longeſt and looſeſt on the ſides and legs: the tail is thick at the baſe, and gradually tapers to a

point. The fore-feet have four toes; the hind ones, five; and the claws on all the feet are very ſtrong. This ſpecies inhabits the neighbourhood of the Cape of Good Hope, where it lives under ground, and is called by the name of the *ground-hog*. It feeds principally on ants. It is ſaid to be often hunted out of its retreats by the Hottentots, who conſider it as a good food. It is ſaid by Kolbe to be of the weight of an hundred pounds, and to have a long head and tongue. If it faſtens its fore-feet into the ground, the ſtrongeſt man cannot pull it away: it has four claws on the fore-feet; feeds on ants, and burrows under ground, coming out chiefly by night to feed.

Buffon, having formerly aſſerted that none of the South-American animals were found in the continent of Africa, and that none of the African ones were to be found in South America, thinks proper, in his ſupplemental volume, to maintain his former dogma, and is not willing to conſider this ſpecies as a genuine ant-eater, though it poſſeſſes the uſual character, viz. mouth without teeth; of a long form; and a long retractile tongue. Some, however, have been inclined to form a diſtinct genus from this ſpecies, under the title of Orycteropus; "but this (ſays Dr. Shaw) ſeems perfectly unneceſſary, it being a genuine Myrmecophaga." It is poſſible that the diſputed figures in Seba, mentioned under the M. tridactyla, may belong to this ſpecies.

7. Myrmecophaga aculeata, the aculeated or porcupine ant-eater: body covered with long ſharp ſpines; tail ſhort. The aculeated ant-eater is one of thoſe curious animals which have been lately diſcovered in the vaſt iſland, or rather continent, of Auſtralaſia or New Holland; and is a ſtriking inſtance of that beautiful gradation, ſo frequently obſerved in the animal kingdom, by which creatures of one tribe or genus approach to thoſe of a very different one. It forms a connecting link between the very diſtant Linnæan genera of Hyſtrix (porcupine) and Myrmecophaga (ant-eater), having the external coating and general appearance of the one, with the mouth and peculiar generic characters of the other. This animal, ſo far as may be judged from the ſpecimens hitherto imported, is about a foot in length. The whole upper parts of the body and tail are thickly coated with ſtrong and very ſharp ſpines, of a conſiderable length, and perfectly reſembling thoſe of a porcupine, except that they are thicker in proportion to their length; and that, inſtead of being encircled or annulated with ſeveral alternate rings of black and white, as in that animal, they are moſtly of a yellowiſh-white with black tips; the colour running down to ſome little diſtance on the quill, and being ſeparated from the white part by a circle of dull orange: others have but a very ſlight appearance of black towards the tips. The head, legs, and whole under parts of the body, are of a deep brown, or ſable, and are thickly coated with ſtrong cloſe-ſet briſtly hair. The tail is extremely ſhort, ſlightly flattened at the tip, and coated on the upper part of the baſe with ſpines, at leaſt equal in length to thoſe of the back, and pointing perpendicularly upwards. The ſnout is long and tubular, and perfectly reſembles in ſtructure that of the M. jubata, or great ant-eater; having only a very ſmall opening at the tip, from whence is protruded a long lumbriciform tongue, as in other ant-eaters. The noſtrils are ſmall, and ſeated at the extremity of the ſnout. The eyes are very ſmall and black, with a pale blue iris. The legs are very ſhort and thick; and are each furniſhed with five rounded broad toes: on the fore-feet are five very-ſtrong, long, and blunt, claws, of a black colour: on the hind-feet are only four claws; the thumb, which is broader than the reſt of the toes, being deſtitute of a claw: the firſt claw on the hind-feet is extremely long, ſomewhat curved, and ſharp-pointed; the next rather ſhorter, but of ſimilar appearance; the two remaining ones far ſhorter, very ſlightly curved, and not ſharp-pointed. In its mode of life this animal reſembles the reſt of the ant-eaters, being generally found in the midſt of ſome large ant-hill: it burrows with great ſtrength and celerity under ground, when diſturbed; its feet and legs being moſt exceſſively ſtrong, and ſhort, and wonderfully adapted to this purpoſe. It will even burrow under a pretty ſtrong pavement, removing the ſtones with its claws; or under the bottom of a wall. During theſe exertions its body is ſtretched or lengthened to an uncommon degree, and appears very different from the ſhort or plump aſpect which it bears in its undiſturbed ſtate.

The anatomy of this curious animal is given by Mr. Everard Home, in the Phil. Tranſ. for 1802, under the name of Ornithorhynchus hyſtrix, from its reſemblance, in ſome particulars, to a ſingular animal then lately imported from New Holland, and called O. paradoxus, but now Platypus anatinus, (which ſee.) This creature is by no means, as the generic character requires, without teeth; for Mr. Home obſerves, that "on the poſterior part of the tongue, which is thicker and broader than the reſt, there is a ſpace, one inch in length and three quarters broad, covered with a ſtrong cuticle, and having about twenty ſmall teeth, blunt at their ends, projecting about one-tenth of an inch; there are alſo ſeveral others, leſs prominent: and on that part of the palate immediately oppoſite, there are ſeven tranſverſe rows of very ſlender horny teeth, with their points directed backwards; each row looks ſomewhat like a ſmall-toothed comb, laid flat upon the palate." Mr. Home found ſome fine white ſand in the inteſtines; whence he ſuppoſes that a quantity of that ſubſtance is always ſwallowed with the food, and that the ſtomach is therefore ſufficiently large to contain both the food and the extraneous matter accompanying it. Dr. Shaw, in his Naturaliſt's Miſcellany and General Zoology, referred it to this genus, and gave a repreſentation of it, which is copied at fig. 5.

MYRME'LEON, *ſ.* the Lion-Ant; in entomology, a genus of inſects of the order neuroptera. Generic Characters—Mouth furniſhed with jaws; teeth two; feelers four or ſix, elongated; ſtemmata none; antennæ clavated, length of thorax; wings deflected; tail of the male furniſhed with a forceps conſiſting of two ſtraightiſh filaments.

Of the lion-ant, concerning which ſo much has been ſaid by naturaliſts, there are ſixteen ſpecies, all diſtinguiſhed by an uncommon voracity, and cunning in ſecuring their prey. Their habits of rapacity ſeem born with them; and during their whole lives they are ſupported by the game which they catch. At firſt ſight, theſe animals ſeem but ill fitted for their manner of life: the moſt unwieldly inſect can eaſily eſcape from them; for they cannot advance upon it a ſingle ſtep, though they have ſix legs; all its progreſs in walking being backwards; by ſtratagem, however, this lion maſters inſects far ſuperior to it in ſtrength. In the looſe ſand it digs a hollow reſembling a funnel, where it takes its ſtation at the bottom, every part being concealed except the forceps with which the head is armed. This inſtrument, which it can open or ſhut at pleaſure, is happily conſtructed for ſeizing and penetrating the hardeſt inſect; and unhappy is the animal, who, in purſuing its journey, ſtumbles into this cavern. In vain it endeavours to ſcramble up by the edges, which are continually giving way under its feet; it tumbles to the bottom, where it is pierced by the forceps of the lion-ant lurking below. If the inſect be ſmall, and the grains of ſand, notwithſtanding the declivity of the funnel, do not give way under its feet, the myrmeleon has another invention by which he renders himſelf maſter of his prey: with his head, which is flattened, he throws up repeated ſhowers of ſand from the bottom of the funnel, which falling upon the ſides, force down the inſect till it comes within reach. The fatal inſtruments with which this animal ſeizes its prey, are each a ſort of mouth or trunk, by which it ſucks out the whole entrails before it is drawn out of the body.

When the lion-ant has attained its full ſize, it conſtructs for itſelf an edifice, the external parts of which are particles of ſand or earth combined together by ſilken threads: the interior cavity is lined with pure ſilk, white and gloſſy like ſatin. Within this ball the myrmeleon is changed into a chryſalis, of a curved or ſemicircular ſhape, diſplaying all the parts of the perfect inſect that is ſoon to iſſue from it. After the chryſalis burſts, the winged inſect which makes its eſcape is of a grey colour, with a long ſlender body, reſembling the Libellula. In this country, the myrmeleon is very ſcarce; a few, however, are found to breed among the looſe earth at the bottom of walls which have a ſouth expoſure. In that dry, pulverized, and ſandy, earth, their eggs are protected from rain, till they are hatched by the ſun. Valliſnieri and Poupart firſt gave the hiſtory of the lion-ant; that of the former is in the form of a dialogue between Malphigi and Pliny, in which the modern informs the ancient naturaliſt of the ſingular manœuvres and metamorphoſis of theſe animals. The ſpecies are placed in two diviſions.

I. With the hind-feelers longeſt; jaw one-toothed; lip membranaceous, ſquare, truncate, emarginate.

1. Myrmeleon libelluloides: wings grey, ſpotted with brown; body ſpotted with black and yellow. This, as its name imports, reſembles the Libellula, or dragon-fly; the extreme width, in its expanded ſtate, as repreſented on the preceding Plate, at fig. 6. being about four inches and three quarters. The head is of a dark yellow, divided by a black line, that runs along it from the thorax; the antennæ are black and clubbed, ſmall at their roots, and gradually increaſing to their extremities; the thorax is browniſh yellow; having a black line running along its upper part, and two ſmall black ſpots at the ligatures of the ſuperior wings, being covered with greyiſh hairs; the abdomen is about an inch and a quarter long, yellow, with a black line on the top, and one on each ſide; the male having two ſmall horny tails iſſuing from the extremities. All the wings are membranaceous and pellucid, (the inferior ones being as long as the ſuperior,) and elegantly adorned with a great number of dark ſpots, of various ſhapes and ſizes. Mr. Drury received it from Smyrna. There is a ſpecies (he ſays) found near the Cape of Good Hope very much like this, but diſtinctly different. This, however, is generally conſidered to be the Cape ſpecies.

2. Myrmeleon pardalis: wings white, with ſcattered black dots; thighs yellow. It inhabits Coramandel.

3. Myrmeleon pantherinus: wings white, ſpotted with black; body yellow; abdomen variegated with black. This ſpecies is found in Auſtria, and other parts of Germany.

4. Myrmeleon lynceus: wings hyaline, with a black marginal ſpot at the tip, in the middle of which is a ſnowy one. It inhabits Sierra Leona.

5. Myrmeleon formicaleo: wings clouded with brown, with a white marginal ſpot. This ſpecies is better underſtood than any other of the genus. It is of a predacious nature, flying chiefly by night, and purſuing the ſmaller inſects in the manner of a Libellula. It depoſits its eggs in dry ſandy ſituations; and the young larvæ, when hatched, begin to exerciſe their talent of preparing, by turning themſelves rapidly round a very ſmall conical cavity in the ſand. Under the centre of the cavity the little animal conceals itſelf, ſuddenly ruſhing forth at intervals, to ſeize any ſmall inſect which, by approaching the edge of the cavity, has been ſo unfortunate as to fall in; and, after ſucking out its juices, throws it, by a ſudden exertion, to ſome diſtance from the cavity. As the creature increaſes in ſize, it enlarges the cavity, which at length becomes about two inches, or more, in diameter. The larva, when full grown, is more than half an inch long, and is of a flattened figure, broad towards the upper part, and gradually tapering to an obtuſe point at the extremity. It is brown, and beſet with numerous tufts of duſky hair, which are particularly conſpicuous on each ſide the annuli of the abdomen; the legs are ſlender; the head and thorax rather ſmall; the tubular jaws long, curved, ſerrated internally, and very ſharp pointed. The whole animal is of an unpleaſing aſpect, and, on a curſory view, bears a general reſemblance to a flat-bodied ſpider. When magnified, its appearance is highly uncouth.

Reaumur and Roëſel have given accurate deſcriptions of this larva, and its extraordinary hiſtory. It is one of thoſe whoſe term of life, like that of the Libellulæ and Ephemeræ, is protracted to a conſiderable ſpace, ſince it ſurvives the firſt winter in its larva ſtate, taking no nouriſhment during that time, and in the ſpring reſumes its uſual manner of preying. In preparing its pit, it begins by tracing an exterior circle of the intended diameter of the cavity, continuing its motion in a ſpiral line, till it gets to the centre; thus marking, as it were, ſeveral volutes in the ſand, reſembling the impreſſion of a large ſnail-ſhell; and after having ſufficiently deepened the cavity, it ſmooths the ſides into a regular ſhape, by throwing out the ſuperfluous ſand lying on the ridges: this it does by cloſing its forceps in ſuch a manner, that, together with the head, they form a convenient ſhovel, with which it throws the ſand with ſo ſtrong a motion out of the cavity, that the grains often fall to the diſtance of near a foot beyond the brink. The depth of the pit is generally equal to the diameter. When full grown, and ready to change into a chryſalis, the animal envelopes itſelf in a round ball of ſand, agglutinated and connected by very fine ſilk, which it draws from a tubular proceſs at the extremity of the body: with this ſilk it alſo lines the internal ſurface of the ball, which, if opened, appears coated by a fine pearl-coloured ſilken tiſſue. It continues in the ſtate of chryſalis about four weeks, and then gives birth to the complete inſect, as ſhown at fig. 7.

6. Myrmeleon catta: wings hyaline, with faint brown ſpots; the nerves are ſpotted with black. Found in Madeira. See fig. 8.

7. Myrmeleon punctatus: wings hyaline; the nerves with alternate black and white dots. It inhabits India.

8. Myrmeleon formicalynx: wings immaculate; body brown. It inhabits Africa and America.

9. Myrmeleon tigrinus: wings hyaline, immaculate; body brown; margin of the thorax and legs yellow. It inhabits New Holland.

10. Myrmeleon caninus: wings hyaline, immaculate; body brown; head and thorax ſpotted with yellow. It is found in Guiana.

II. Feelers nearly equal; jaw ciliate; lip horny, rounded, entire

11. Myrmeleon barbarus: wings reticulate, yellowiſh-hyaline, with two brown ſpots. It inhabits Europe and Africa.

12. Myrmeleon longicornis: upper wings hyaline, with a double yellow ſpot at the baſe; lower ones yellow, black at the baſe. It inhabits Italy.

13. Myrmeleon Capenſis: wings white, reticulate with black; the tail is forked. It inhabits the Cape of Good Hope.

14. Myrmeleon appendiculatus: wings white, immaculate, one-toothed at the baſe. Its country is not known. There is a ſpecimen in the Britiſh Muſeum.

15. Myrmelion auſtralis: wings white, with a black marginal ſpot; the body is variegated. It inhabits the ſouthern parts of Europe.

16. Myrmeleon Cayennenſis: wings white, with a ſnowy marginal ſpot. It inhabits Cayenne.

MYRME'NA, in ancient geography, a town ſuppoſed to have been in Ethiopia, inhabited by anthropophagi, or eaters of human fleſh; whoſe prince, according to Nicephorus, was converted by St. Matthew to the Chriſtian faith.

MYR'MEX, an iſland of Africa, on the coaſt of Cyrenaica. *Ptolemy.*

MYR'MIDONS, or MYRMID'ONES, a people on the ſouthern borders of Theſſaly, who accompanied Achilles to the Trojan war. They received their name from Myrmidon, a ſon of Jupiter and Eurymeduſa, who married one of the daughters of Æolus, ſon of Helen. His ſon Actor married Ægina, the daughter of the Aſopus. He gave his name to his ſubjects, who dwelt near the river Peneus in Theſſaly. According to ſome, the Myrmidons received their name from their having been originally ants, μυρμηκες. According to Strabo, they received it from their induſtry, becauſe they imitated the diligence of the ants, and like them were indefatigable, and were continually employed in cultivating the earth.

The word is now uſed for any rude ruffian; or for a conſtable, or any low officer of the police.—The maſs of the people will not endure to be governed by Clodius and Curio, at the head of their *myrmidons*, though theſe be ever ſo numerous, and compoſed of their own repreſentives. *Swift.*

MYRMIL'LO, *ſ.* Among the Romans, a kind of Gallic armour uſed in theatrical ſhows: but ſome will have it to be the ſame that Achilles's myrmidons wore; whence it had this name.

MYRMILLO'NES, *ſ.* A kind of gladiators in ancient Rome, who fought againſt the Retiarii. Their arms were a ſword, head-piece, and ſhield. On the top of the head-piece they wore a fiſh emboſſed, called Μορμυρος, whence their name is by ſome ſuppoſed to be derived. The Retiarii, in their engagements, made uſe of a net, in which they endeavoured to entangle their adverſaries; and ſung during the fight, *Non te peto, piſcem peto; quid me fugis Galle?* "I aim not at thee, but I aim at thy fiſh; why doſt thou ſhun me, O Gaul?" The Myrmillones were called Galli, becauſe they wore Gallic armour. They were alſo named *Secutores.* This kind of gladiators was ſuppreſſed by Caligula.

MYROB'ALANS, *ſ.* [*myrobalanus*, Lat.] See PHYLLANTHUS and SPONDIAS.—The *myrobalans* are a dried fruit, of which we have five kinds: they are fleſhy, generally with a ſtone and kernel, having the pulpy part more or leſs of an auſtere acrid taſte: they are the production of five different trees growing in the Eaſt Indies, where they are eaten preſerved. *Hill.*—The *myrobalan* hath parts of contrary natures; for it is ſweet, and yet aſtringent. *Bacon's Nat. Hiſt.*

MYROBATIN'DUM, *ſ.* in botany. See LANTANA.

MYRODEN'DRUM, *ſ.* [from the Gr. μυρον, ointment, and δενδρον, a tree.] In botany, a genus of the claſs polyandria, order monogynia. Generic Characters—Calyx: perianthium one-leafed, five-toothed, acute. Corolla: petals five, oblong, acute, ſpreading, much larger than the calyx. Stamina: filaments twenty, capillary, inſerted into the receptacle; antheræ roundiſh. Piſtillum: germen roundiſh, ſmall, ſuperior; ſtyle long, curved inwards, villoſe; ſtigma capitate, five-lobed. Pericarpium: five-celled. Seeds: ſolitary.—*Eſſential Character.* Corolla five-petalled, ſpreading, much larger than the five-toothed calyx; ſtigma capitate, five-lobed. Pericarpium five-celled, with one ſeed in each cell.

Myrodendrum balſamiferum, a ſingle ſpecies. It is a tree of fifty or ſixty feet high, and two feet in diameter; the bark thick, reddiſh, and rough: the wood hard and brown: it throws out from the top ſeveral large branches, which divide into branchlets beſet with alternate, entire, ſmooth, green, firm, long leaves, terminating in a point. Theſe leaves are largeſt at their baſe, where they partly embrace the branchlets: the young leaves are reddiſh: thoſe of the young trees are ſix inches long, and two broad. The flowers are borne in heads or cluſters from the boſoms of the leaves at the extremities of the branchlets, and are of a white colour. The bark of this tree affords a red balſamic fluid reſembling ſtyrax in ſcent: this liquor, after it has exuded from the bark, becomes hard, brittle, and tranſparent; and, when burnt, affords a very agreeable odour. The negroes and the natives of Guiana uſe the bark to make flambeaux: the natives alſo uſe the wood in building their houſes. The tree is called *red-wood* by the Creoles; and by others is called *houmiri*, and *touri*. It grows in the foreſts of Guiana. The reſin, according to Aublet, might be uſed medicinally in the ſame manner as the balſam of Peru.

MYRO'DIA, *ſ.* [ſo named by Swartz, at the ſuggeſtion of the late Mr. Dryander, from μυρον, balſam, and οζω, to ſmell; alluding to the powerful and luſcious ſcent of the whole plant, even after it has long been dried, which reſembles that of melilot-ointment.] In botany, a genus of the claſs monadelphia, order polyandria, natural order malvaceæ, or rather perhaps meliæ, *Juſſ.* Generic Characters—Calyx: perianthium inferior, of one leaf, tubular, coriaceous, tearing irregularly at the margin, without any uniform teeth, permanent. Corolla: petals five, inſerted into the receptacle, oblong, oblique, obtuſe, recurved and ſpreading, tapering at the baſe, longer than the calyx. Stamina: filaments united into a long ſlender tube, ſheathing the ſtyle, dilated and plaited at the ſummit, with five teeth; antheræ numerous, kidney-ſhaped, ſeſſile, crowded about the top of the tube. Piſtillum: germen ſuperior, ovate; ſtyle thread-ſhaped, furrowed, ſwelling at the top, rather longer than the ſtamens; ſtigma large, capitate, ſomewhat peltate. Pericarpium: drupe nearly globoſe, dry and fibrous, abrupt and crowned with the baſe of the ſtyle, of two or three cells. Seeds: ſolitary, angular at one ſide, convex at the other.—*Eſſential Character.* Calyx ſimple, tubular, ſplitting irregularly. Petals five; ſtyle thread-ſhaped; drupe dry, of two or three cells; ſeeds ſolitary.

1. Myrodia turbinata: leaves elliptical; calyx turbinate, half the length of the ſtamens. Native of the Caribbée iſlands, Montſerrat, St. Chriſtopher's, and St. Lucia, on the banks of rivers and torrents. The French call it *Bois Anglois*, or Engliſh tree. The height of this tree is from thirty to fifty feet. Branches round, with a brown ſmooth bark. Leaves alternate, on ſhort thick ſtalks, elliptical, pointed, entire, from four inches to a foot long, and nearly half as broad, pliable, bright green, ſmooth, with one rib, and ſeveral tranſverſe curved veins, whoſe innumerable branches are finely reticulated. Flower-ſtalks, axillary, ſolitary, ſcarcely ſo long as the footſtalks, ſimple, ſingle-flowered, bearing numerous imbricated awl-ſhaped bractes on their lower part; calyx about half an inch long, green, beſprinkled externally with very minute, reddiſh, glandular, reſinous dots, and ſilky within; its mouth covered, before it expands, with an orbicular deciduous lid; petals whitiſh, about twice as long as the calyx, finely down at the back. Stamens about the length of the petals; their tube ſlightly curved; the antheræ about twenty, all crowded together into a globular head at the top, each oval, with a longitudinal furrow. Fruit the ſize of a large cherry, of a dry fibrous texture, and ſcarcely perfecting more than one ſeed. The melilot-ſcent is very powerful in a ſpecimen which has been dried above thirty years.

2. Myrodia longiflora: leaves oblong; calyx cylindrical, one-third the length of the ſtamens. Gathered by Aublet on the banks of freſh-water rivers in Guiana, bearing flowers and fruit in May. That botaniſt deſcribes it as a ſhrub, only eight or ten feet high; its trunk three or four inches, at moſt, in diameter; wood white and ſoft; the bark grey and cracked, filamentous, and capable of ſerving for cordage. This laſt circumſtance perhaps induced Juſſieu the more readily to range the genus under Malvaceæ. The branches are long, flexible, ſtraight, and ſubdivided. Leaves alternate, ſmooth, green, pliable, elliptic-oblong, pointed, entire; the largeſt nine inches long, and three broad. Flowers axillary; their ſtalks ſometimes inſerted into that of the leaf, two, three, four, or five, together, roughiſh or glandular; calyx rough, cylindrical, without any lid (as far as we can perceive), an inch and a half long, opening with three, four, or five, teeth, or ſometimes ſplitting down at one ſide; petals white, wavy, recurved, above

twice the length of the calyx; tube of the ſtamens thrice as long as the calyx, curved, white, ſlender; antheræ about nine, yellow, accompanied by four or five green glandular bodies, many more of which are diſperſed a little way down the tube. Stigma prominent, divided. Fruit dry, green, coriaceous, an inch and half long, with two ſeeds. Aublet ſays nothing of the ſcent, which Swartz deſcribes, and is known to exiſt in this as well as the former. The want of a lid to the calyx, if conſtant, is a remarkable difference between this ſpecies and the other.

MY'RON, a celebrated ſtatuary of Greece, peculiarly happy in imitating nature. He made a cow ſo much reſembling life, that even bulls were deceived and approached her as if alive, as is frequently mentioned by many epigrams in the Anthologia. He flouriſhed about 442 years before Chriſt.

MYROP'OLIS, in ancient geography, a town of Greece, near the Straits of Thermopylæ, over-againſt Heraclea.

MYROP'OLIST, *ſ.* [from the Gr. *μυρον*, ointment, and *πωλεω*, to ſell.] One who ſells unguents.

MYROS'MA, *ſ.* [from the Gr. *μυρον*, balſam, and *οσμη*, a ſcent, alluding to a property of the plant, rather ſuppoſed perhaps from its natural affinities, than perceptible in the dried ſpecimen, or diſcoverable in any thing we can find of its hiſtory. Linnæus at firſt wrote it *Myriſma*, i. e. anointed with balſam.] In botany, a genus of the claſs monandria, order monogynia, natural order ſcitamineæ, *Linn.* (cannæ, *Juſſ.*) Generic Characters—Calyx: perianthium ſuperior double; outer three-leaved; leaflets equal, membranaceous, oblong, channelled, quite entire: inner three-parted; ſegments equal, ſpreading, oblong, quite entire, with a duſky ſpot at the top. Corolla: one-petalled, unequal: tube very ſhort; border five-parted; the two upper ſegments ſhorter, oblong, unequally emarginate; the three lower longer, trifid at the top and gaſhed; the middle one ſhorter. Stamina: filament one, free or growing to the margin of the middle diviſion of the lower ſegment of the corolla, membranaceous at the baſe, awl-ſhaped; antheræ ovate, compreſſed. Piſtillum: germen three-ſided, inferior; ſtyle thick, bent down, ſhort, three-cornered, cloven longitudinally, hirſute before; ſtigma open, with the lip dilated. Pericarpium: capſule three-celled, three-valved, three-cornered. Seeds: ſeveral, angular.—*Eſſential Character.* Calyx double; outer three-leaved, inner three-parted; corolla five-parted, irregular; capſule three-cornered, three-celled, many-ſeeded.

Myroſma cannæformis, a ſolitary ſpecies. It is a ſhrub growing like the Canna, or Indian reed. Root horizontal, aſcending obliquely at top, fleſhy, ovate, ſhort, ſlightly compreſſed as in Amomum; girt with rings, covered with alternate, embracing, ovate, appreſſed, broad, fibrous ſheaths. Leaves oval, ſmooth, veined; the lower one with elongated dilated radicate petioles, forming the ſtem; the upper ones with petioles out of the ſtem. The petioles thus elongated become ſlender, compreſſed, channelled longitudinally, but towards the inſertion of the leaf they are elevated into a cylindrical ring, hairy in front, curving the leaf inwards a little. Stems or ſcapes round, ſomewhat hairy, ending in a joint, whence ſprings a leaf very like the ſtem-leaves, and a peduncle involved in the ſheath of the petiole. Peduncle ſolitary, ſcarcely longer than the petiole, round. Raceme like the ament of a hop, imbricate with the alternate ſcales of the bractes. Bractes two-leaved, two-flowered: outer leaf wider, ovate, membranaceous, embracing; inner ſhorter, narrower, oblong. This genus is allied to Pontederia ovata, but it differs in the fruit. Gathered by Dahlberg in Surinam; and was one of the plants which made a part of the Surinam Collection, preſerved in ſpirits, preſented to Linnæus by king Guſtavus III. Nothing is recorded of the properties or uſes of the Myroſma.

MYROSPER'MUM (of Jacquin). See MYROXYLUM.

MYROX'YLON (of Forſter). See XYLOSOMA.

MYROX'YLUM, *ſ.* [from the Gr. *μυρον*, balſam, and *ξυλον*, wood.] BALSAM OF PERU; in botany, a genus of the claſs decandria, order monogynia, natural order of lomentaceæ, (leguminoſæ, *Juſſ.*) Generic Characters—Calyx: perianthium one-leafed, bell-ſhaped, five-toothed, permanent, with very ſmall obſolete teeth. Corolla: petals five, unequal, inſerted into the receptacle; the uppermoſt wide, ovate, obcordate, reflex; the reſt narrow-lanceolate, ſtraight, ſcarcely ſpreading: claws narrow, linear, the length of the calyx. Stamina: filaments ten, filiform, ſmooth, preſſed to the germ, the length of the calyx; antheræ erect, lanceolate, grooved, terminating in a ſhort point. Piſtillum: germen ſuperior, longer than the flower, hanging down from it, ſabre-ſhaped, compreſſed; ſtyle aſcending, ſhort, filiform; ſtigma blunt, ſimple. Pericarpium: legume ſword-ſhaped, narrowed at the baſe, widening towards the top, ancipital, not opening. Seed: ſingle, round, compreſſed, in the top of the legume.—*Eſſential Character.* Calyx bell-ſhaped; petals five, the uppermoſt larger; germen longer than the corolla; legume one-ſeeded. There are three ſpecies.

1. Myroxylum Peruiferum, or balſam-tree of Peru: leaflets pointed, emarginate. Claw of the larger petal twice the length of the calyx. Native of the warmeſt parts of Mexico and Peru, in mountainous ſituations. Hernandez ſays the Mexican kings cultivated it in their gardens; and that, if the trunk or bark be wounded, at any time of the year, but eſpecially at the end of the rainy ſeaſon, the celebrated and valuable balſam of Peru diſtils from the wound: "This is of a dark or blackiſh orange colour, of an acrid and ſomewhat bitter taſte, with a moſt-powerful but highly-agreeable ſmell." Linnæus was always, as his ſon records, peculiarly anxious to aſcertain the plant which yields this precious balſam; but he never had the ſatisfaction of knowing it. After his death, Mutis ſent ſpecimens of the leaf, flowers, and fruit, to the younger Linnæus, and from which the deſcription in the Supplementum was made. The tree is ſaid by Hernandez to be the ſize of a lemon-tree. Leaves alternately pinnate, with a terminal leaflet; the leaflets are near an inch and a half long, ovate-oblong, with a broadiſh elongated obtuſe emarginate point; their margin entire, though ſomewhat crumpled or wavy; both ſides ſmooth and rather ſhining, bright green, with one rib, and many fine reticulated veins. When held againſt the light, they appear full of ſingularly-elegant pellucid ſpots, moſt of them ſmall and roundiſh, but ſome linear, larger than the reſt. Flowers numerous, in a long downy ſimple cluſter, or ſlender ſcattered ſtalks, ſcarcely an inch long, with a minute concave bracte at the baſe of each; calyx hoary with fine ſoft down; petals and ſtamens whitiſh; germen ſmooth, green, hanging out of the flower in a remarkable manner; legume a foot long, and about an inch broad, thick-edged, with a ſhort oblique point. Mutis ſays in his letter, that the fructification of this plant is nearly the ſame as that which yields the balſam of Tolu.

2. Myroxylum pedicellatum, or long-ſtalked balſam-tree: leaflets elliptical, abrupt, emarginate; claw of the larger petal the length of the calyx; ſtalk of the legume longer. Gathered by Joſeph de Juſſieu in Peru. Lamarcks's figure and deſcription were made from the drawing and ſpecimens the former brought from thence, nor have we any other materials than what Lamarck's works afford; but theſe abundantly ſuffice to diſtinguiſh the ſpecies. This is a large tree, called in its native country *quina-quina*, like the Peruvian bark, and vulgarly *jaumerio.* The trunk is ſaid to be two feet thick, with an aſh-coloured bark; the wood very hard, uſed for building, as well as for conſtructing ſugar-mills; whitiſh, with a red or blackiſh heart. Leaves alternate, of from ſeven to fifteen alternate ſtalked leaflets, with an odd one, all of equal ſize, elliptical, obtuſe, emarginate, entire, near an inch and half long, full of pellucid dots or lines. Infloreſcence much like the former. Flowers ſimilar,

except that the claw of the larger petal is not repreſented longer than the calyx. The legume however appears to be of a much ſhorter proportion than in M. Peruiferum, and abrupt, not tapering, at the baſe; its ſtalk is ſlender, longer than the calyx, whoſe rim only ſeems to be deciduous. Seed ſolitary, oblong, curved. Nothing is ſaid reſpecting any balſamic quality or exudation in this ſpecies.

3. Myroxylum fruteſcens, or fœtid balſam-tree: leaflets elliptical, abrupt, emarginate; ſtalk of the legume ſhorter than the calyx. Gathered by Jacquin, in dry buſhy places, at the foot of a mountain near Carthagena, South America. Stem ſhrubby, eight or ten feet high, not much branched. Leaves deciduous, alternately pinnate, with an odd leaflet; the leaflets all uniform, elliptical, ſtrongly emarginate, ſmooth, about the ſize and ſhape of the laſt. Cluſters lax, nearly terminal, erect; flowers pale roſe-coloured, without ſcent. Legume about three inches long, as in the laſt, with ſcarcely ever more than one ſeed, which, like the legume itſelf, diſcharges a balſam of a ſtrong and fœtid odour. The fruit remains long on the tree, after the leaves are fallen. Lamarck confounds this ſpecies with the firſt.

MYRRH, *ſ.* [*μυῤῥα*, Gr. of *μυρω*, to run or trickle.] A kind of gum-reſin, iſſuing by inciſion, and ſometimes ſpontaneouſly, from the trunk and larger branches of a tree growing in Arabia, Egypt, and eſpecially in Abyſſinia.

Authors are not agreed about the tree which produces this gum: it is true they all make it ſmall and thorny; but they diſagree about the form of its leaves. In ſeveral reſpects it reſembles the Acacia vera, which is the Mimoſa nilotica; and this agrees with the deſcription of the tree given by Dioſcorides. The trees producing myrrh grow on the eaſtern coaſt of Arabia Felix, and in that part of Abyſſinia which is ſituated near the Red Sea. It is imported to us in cheſts, each of which contains from one to two hundred weight. The Abyſſinian myrrh comes to us through the Eaſt Indies; and that produced in Arabia is brought by the way of Turkey.

The ancients, and particularly Dioſcorides, ſpoke of myrrh in ſuch a manner as to make us ſuppoſe, either that they have deſcribed a drug which they had never ſeen; or that the drug ſeen and deſcribed by them is abſolutely unknown to modern naturaliſts and phyſicians. The Arabs, however, who form the link of the chain between the Greek phyſicians and ours, in whoſe country the myrrh was produced, and whoſe language gave it its name, have left us undeniable evidence, that what we know by the name of *myrrh* is in nothing different from the myrrh of the ancients, growing in the ſame countries from which it was brought formerly to Greece; that is, from the eaſt coaſt of Arabia Felix, bordering on the Indian Ocean, and that low land in Abyſſinia on the ſouth-eaſt of the Red Sea, included nearly between the 12th and 13th degree of north latitude, and limited on the weſt by a meridian paſſing through the iſland Maſſowa, and on the eaſt by another paſſing through Cape Guardafu, without the Straits of Babelmandel. This country the Greeks knew by the name of the Troglodytia; not to be confounded with another nation of Troglodytes, very different in all reſpects, living in the foreſts between Abyſſinia and Nubia. The myrrh of the Troglodytes was always, as now, preferred to that of Arabia. That part of Abyſſinia being half overrun and ſettled, half waſted and abandoned, by a barbarous nation from the ſouthward, very little correſpondence or commerce has been ſince carried on between the Arabians and that coaſt; unleſs by ſome deſperate adventures of Mahometan merchants, made under accidental circumſtances, which have ſometimes ſucceeded, and very often likewiſe have miſcarried. The moſt frequent way by which this Troglodyte myrrh is exported, is from Maſſowa, a ſmall Abyſſinian iſland, on the coaſt of the Red Sea. Yet the quantity of Abyſſinian myrrh is ſo very ſmall, in compariſon of that of Arabia, ſent to Grand Cairo, that we may ſafely attribute to this only the reaſon why our myrrh is not ſo good in quality as the myrrh of the ancients, which was Abyſſinian. Though thoſe barbarians make uſe of the gum, leaves, and bark, of this tree, in diſeaſes to which they are ſubject; yet, as very little is wanted for ſuch purpoſes, and the tree is the common timber of the country, this does not hinder them from cutting it down every day, to burn for the common uſes of life; and, as they never plant, or replace the trees deſtroyed, it is probable that in ſome years the true Troglodyte myrrh will not exiſt; and the erroneous deſcriptions of the Greek phyſicians will lead poſterity, as they have done us now, into various conjectures, all of them falſe, on the queſtion, what that myrrh of the ancients was.

Though the myrrh of the Troglodytes was ſuperior to any Arabian, yet the Greeks perceived that it was not all of equal goodneſs. Pliny and Theophraſtus make this difference to ariſe from the trees being partly wild, partly cultivated. But this is an imaginary reaſon: all the trees were wild. It was the age of the tree and its health, the manner of making the cut or wound in it, the time of gathering the myrrh, and the circumſtances of the climate when it was gathered, that conſtantly determined, and does yet determine, the quality of the drug. In order to have myrrh of the firſt or moſt perfect ſort, the ſavages chooſe a young vigorous tree, whoſe bark is without moſs, or any paraſite plant; and, above the firſt large branches, give the tree a deep wound with an axe. The myrrh which flows the firſt year through this wound is myrrh of the firſt growth, and never in very great quantity. This operation is performed ſome time after the rains have ceaſed; that is, from April to June; and the myrrh is produced in July and Auguſt. The ſap, once accuſtomed to iſſue through this gaſh, continues to do ſo ſpontaneouſly, at the return of every ſeaſon: but the tropical rains, which are very violent, and continue ſix months, waſh ſo much dirt and lodge ſo much water in the cut, that in the ſecond year the tree has begun to rot and turn foul in that part, and the myrrh is of a ſecond quality, and ſells in Cairo about one-third cheaper than the firſt. The myrrh alſo produced from gaſhes near the roots, and in the trunks of old trees, is of the ſecond growth and quality, and ſometimes worſe. This however is the *good myrrh* of the Italian ſhops every-where but in Venice. It is of a blackiſh-red foul colour, ſolid and heavy, loſing little of its weight by being long kept; and it is not eaſily diſtinguiſhed from that of Arabia Felix. The third and worſt kind is gathered from old wounds or gaſhes formerly made in old trees; or myrrh that, paſſing unnoticed, has hung upon the tree ungathered a whole year; black and earth-like in colour, and heavy, with little ſmell and bitterneſs. This apparently is the *caucalis* of the ancients.

Pliny ſpeaks of *ſtacte*, as if it was freſh or liquid myrrh; and Dioſcorides ſays ſomething like this alſo. However, it is not credible that the ancients, either Greeks or Latins, placed at ſuch a diſtance, could ever ſee the myrrh in that ſtate. The natives of its country ſay, that it hardens on the tree inſtantly, on being expoſed to air; and I, (ſays Mr. Bruce,) who was ſeveral months within four days' journey of the place where it grew, and had the ſavages quite at my devotion to go and come from thence, could never ſee the neweſt myrrh ſofter than the (ſolid) ſtate it now is in; though I think it diſſolved more perfectly in water than when it had been kept. Dioſcorides too mentions a kind of myrrh, which he ſays was green, and of the conſiſtence of paſte. But, as Serapion and the Arabs ſay that ſtactè was a preparation of myrrh diſſolved in water, it is probable, that this unknown green kind of Dioſcorides was, like the ſtactè, a compoſition of myrrh and ſome other ingredient, not a ſpecies of Abyſſinian myrrh, which he could never have ſeen, either ſoft or green.

It may be remarked, that, when we buy freſh or new myrrh, it has always a very ſtrong, rancid, oily ſmell; and, when thrown into water, globules of an oily matter ſwim upon the ſurface. This greaſineſs is not from the myrrh; it is owing to the ſavages uſing goats'-ſkins anointed with butter, to make them ſupple, in which to put their myrrh at gathering; and in theſe ſkins it remains, and is brought to market: ſo that, far from its bring a fault, as ſome ignorant druggiſts at Rome and Venice believe, it is a mark that the myrrh is freſh gathered, which is the beſt quality that myrrh of the firſt ſort can have. Beſides, far from injuring the myrrh, this oily covering muſt rather at firſt have been of ſervice; as it certainly impriſons and confines the volatile parts of new myrrh, which eſcape in great quantities, to a very conſiderable diminution in the weight. *Bruce in Phil. Tranſ.* for 1775.

The druggiſts have been accuſtomed to ſell two kinds of myrrh; viz. *myrrh in tears,* which they call *ſtacté;* the other *ungulata,* or in nails. Of the firſt kind, the beſt is bright, yellow, and in tranſparent drops, friable, light, of a ſtrong diſagreeable ſmell: but this is very rare, and moſt of that in uſe is the *ungulated* myrrh, ſo called from little white ſpots obſerved thereon, much like thoſe on the nails of the fingers. The beſt is in little maſſes, or tears, reddiſh and tranſparent: the fineſt pieces of myrrh, when broken, are ſometimes found to contain a kind of unctuous liquor—the moſt precious part of the myrrh, and the real *ſtacté* of the ancients.

Myrrh has ſomewhat of a fragrant odour, and bitter aromatic taſte. Thoſe ſpecies of an irregular ſhape, called *tears,* are tranſlucent, of a reddiſh-yellow colour, brittle, breaking with a reſinous fracture, and eaſily pulverized. It does not melt when bruiſed, and is not very inflammable. Its ſpecific gravity is 1·360. Such are the characteriſtic properties of good myrrh: but it is often adulterated, and then is often opaque, and either white, or of a dark colour approaching to black, with a diſagreeable odour. Myrrh is partially ſoluble in water, alcohol, and ether. In boiling water it almoſt totally diſſolves; but, as the liquor cools, a portion of reſinous matter ſubſides. By evaporating the aqueous infuſion, an extract is obtained; and by diſtillation, with a boiling heat, the whole of its flavour ariſes, partly impregnating the diſtilled water, and partly collected and concentrated in the form of an eſſential oil; which is in ſmell extremely fragrant, in taſte remarkably mild, and ſo ponderous as to ſink in the aqueous fluid; whereas the oils of moſt, perhaps of all, of the other gummy reſins ſwim. Triturated with ſoft or diſtilled water, almoſt the whole will be diſſolved, and form an opaque yellowiſh ſolution: the greateſt part, however, will be depoſited by reſt, and more than one-third of the gum-reſin will be diſſolved. The alcoholic tincture is rendered milky and opaque, when mixed with water, but no precipitate appears.

If ſome powdered myrrh be incloſed in the white of a hard-boiled egg, and ſet in a moiſt cellar, the liquor, into which the egg will be gradually reſolved, will extract nearly all the ſmell and taſte of the myrrh. This liquor, which is commonly called *oil of myrrh, per deliquium,* may be precipitated and coagulated by ſpirit of wine: and this coagulum is ſoluble by water. Rectified ſpirit diſſolves leſs of this concrete than water, but extracts more perfectly that part in which its bitterneſs, flavour, and virtues, reſide.

This bitter, aromatic, gummy, reſin, enters a great number of medicinal compoſitions. It is a warm corroborant, deobſtruent, and antiſeptic: it is given from a few grains to a ſcruple and upwards, in uterine obſtructions, cachexies, putrid fevers, &c. and often employed alſo as an external antiſeptic and vulnerary. It has been ſucceſsfully employed in phthiſical caſes as a pectoral, when the inflammatory ſymptoms and hectic fever do not run high: and, though allied to ſome of the balſams, it is found to be more efficacious and leſs irritating to the ſyſtem. As a tonic, in caſes of debility, as amenorrhœa, chloroſis, and convaleſcencies, myrrh is advantageouſly combined with aloes, cinchona, or other bitters and chalybeates; and, in phthiſis, with nitre, digitalis, opium, camphor, and the ſulphat of iron or zinc. Combined with oxyd of zinc, it has been found extremely uſeful in the peculiar cough which ſometimes accompanies pregnancy, when it continues after abortion. As an expectorant, myrrh is often employed in humoral aſthma and chronic catarrh, and it has been given with the ſame view in phthiſical affections. As a local ſtimulant, the alcoholic ſolution of myrrh diffuſed in water is uſed as a lotion in a ſpongy ſtate of the gums, and for correcting the fœtid diſcharge of vitiated ulcers, eſpecially when connected with caries of the bone; and as a gargle in cynanche maligna. Its bitterneſs renders it good for the ſtomach, and againſt worms; and it is chewed to prevent infection from contagious diſeaſes. Dr. Quincy ſays, it is excellent to cleanſe and ſtrengthen the womb, and againſt tickling rheums; a good detergent; and, as ſuch, much uſed externally in unguents for the healing of wounds. It makes the principal ingredient in embalming.

It is an apophthegm of chemiſts, derived from Van Helmont, that whoever can make myrrh ſoluble by the human body, has the ſecret of prolonging his days; and Boerhaave owns there ſeems to be truth in this, from its reſiſting putrefaction. He himſelf, and other chemiſts before him, have given methods for making ſolutions of myrrh, but only by means of alcohol. It ſeems not a little ſurpriſing that ſuch great chemiſts ſhould never have found out that myrrh is ſoluble in common water.

It is affirmed by ſome, that the myrrh we have at preſent is not equal in quality to that of the ancients, and has not that exquiſite ſmell which all authors aſcribe to the latter. They aromatized their moſt delicious wines with it; and it was preſented as a very valuable perfume to our Lord while he lay in the manger. It was this gum alſo which was mingled with the wine given him to drink at his paſſion, to deaden his pains, and to produce a ſtupor. (See Mark xv. 23.) The *gall* mentioned on the ſame occaſion by St. Matthew is probably the ſame with myrrh; for any thing bitter was uſually diſtinguiſhed by the name of gall. (See Matth. xxvii. 34.) The Hebrews were accuſtomed to give thoſe that were executed ſome ſtupefying draught. The difficulty which ariſes from the ſeeming difference betwixt the two evangeliſts, by ſome is ſolved by ſaying, that St. Matthew, writing in Syriac, made uſe of the word *marra,* which ſignifies "myrrh, bitterneſs, or gall;" but the Greek tranſlator has taken it for *gall,* and St. Mark for *myrrh.* Others think that our Saviour's drink was mingled with myrrh as a ſtupefying drug; but ſuppoſe that the ſoldiers, out of wanton cruelty and inhumanity, infuſed gall; which was the reaſon, ſay they, why, *when he had taſted thereof, he would not drink.*

MYR'RHA, in fabulous hiſtory, a daughter of Cinyras king of Cyprus. She became enamoured of her father, and introduced herſelf into his bed unknown. She had a ſon by him, called Adonis. When Cinyras was appriſed of the inceſt he had committed, he attempted to ſtab his daughter; and Myrrha fled into Arabia, where ſhe was changed into a tree called myrrh. *Hygin.* fab. 58, 275. *Ovid. Met.* x. 298.

MYR'RHA, *ſ.* in botany. See CICUTA.

MYR'RHEN, in ancient geography, a town of Aſia, in Meſopotamia, ſituated on the eaſtern bank of the Euphrates.

MYR'RHINE, *adj.* [*myrrhinus,* Lat.] Made of the myrrhine ſtone. See MURRHINE, p. 232.

How they quaff in gold,
Cryſtal and *myrrhine* cups imboſs'd with gems
And ſtuds of pearl. *Milton's Paradiſe Loſt.*

MYR'RHIS, *ſ.* in botany. See ATHAMANTA, CHÆROPHYLLUM, SCANDIX, and SIUM.

MYR'SILUS, a ſon of Myrſus, the laſt of the Heraclidæ who reigned in Lydia. He is alſo called *Candaules.* See Gyges, vol. ix. p. 135.

MYR'SINE, *ſ.* [the Greek word which properly belongs to the myrtle, Myrtus; but, being unoccupied, Linnæus referred it to this African ſhrub, which is of a ſimilar habit.] African Box-tree; in botany, a genus of the claſs pentandria, order monogynia, (polygamia, dioecia, *Brown,*) natural order bicornes, *Linn.* (ſapotis, *Juſſ.* ophioſperma, *Vent.* myrſineæ, *Brown.*) Generic Characters—Calyx: perianthium five-parted, ſmall; leaflets ſubovate, permament. Corolla: one-petalled, half-five-cleft; ſegments half-ovate, converging, blunt. Stamina: filaments five, ſcarcely viſible, inſerted into the middle of the corolla; antheræ awl-ſhaped, erect, ſhorter than the corolla. Piſtillum: germen ſubglobular, almoſt filling the corolla; ſtyle cylindric, longer than the corolla, permanent; ſtigma large, woolly, hanging on the outſide of the flower. Pericarpium: berry roundiſh, depreſſed, one-celled. Seed: one, ſubglobular, (fixed obliquely to the bottom of the berry. *Gærtner.*) The unripe berry has five ſeeds; but when ripe it has only one.—*Eſſential Character.* Corolla half-five-cleft, converging; germen filling the corolla; berry one-ſeeded, with a five-celled nucleus. There are ſix ſpecies.

1. Myrſine Africana, African myrſine, or box: leaves elliptic, acute. Flowers axillary, in threes, on ſhort peduncles; corolla pale, rugged with teſtaceous dots; ciliate, cloſed; ſtamens oppoſite to, not alternate with, the ſegments of the corolla. Berry of the ſame form and ſhape with that of Uva urſi, blue: Gærtner deſcribes it as globular, depreſſed, pulpy, very dark blue with a bloom on it, ſmooth, one-celled. Rind, before it is fully ripe, ſubcoriaceous, eaſy ſeparating from the inner fleſhy ſpongy ſubſtance, but afterwards very thin and cohering with the pulp. Seeds regularly five, placed round the receptacle in a ring, but only one, or at moſt two, opening; that is, globular, depreſſed, or hemiſpherical, hollowed near the umbilicus, the reſt ſmooth, rufeſcent, and very minutely dotted. Native of the Cape of Good Hope, from whence it was one of the firſt plants introduced into the gardens of Europe. It is a hardy greenhouſe-ſhrub, flowering very plentifully from March to May.

2. Myrſine retuſa, round-leaved myrſine, or tamaja: leaves obovate, obtuſe, emarginate-toothletted at top. Native of the Azores, where it was found by Mr. Francis Maſſon. It was introduced in 1788; and flowers in June. Berries the ſize of red currants, ſpherical, rugged all over with ſmall tubercles. Rind ſubcoriaceous, not coloured, pale or inclined to ſtraw-colour. In other reſpects like the preceding; but every way ſmaller.

3. Myrſine variabilis, or variable-leaved myrſine: leaves obovate-oblong, entire, or toothed; umbels axillary, ſeſſile; antheræ ſeſſile; flowers occaſionally four-cleft. Gathered by the late Mr. David Burton, as well as by Mr. Brown, near Port Jackſon, New South Wales. A larger ſhrub than the foregoing ſpecies. Leaves near three inches long, bluntiſh, with various ſhallow teeth in their upper part; the baſe tapering and entire; both ſides are ſmooth, and of a light green, reticulated with numerous veins. Footſtalks thick, ſmooth, angular, about three quarters of an inch long. Umbels of about eight or ten flowers; their ſtalks angular, one-third of an inch in length, ruſty, like the calyx and corolla. The latter is very deeply divided. The young ſhoots and leaf-buds are clothed with ruſty down.

4. Myrſine craſſifolia, or thick-leaved myrſine: flowers axillary, aggregate, nearly ſeſſile; leaves obovate, nearly entire. Gathered by Mr. Brown in the tropical part of New Holland. The leaves are two or two inches and a half long. The almoſt-ſeſſile flowers form a diſtinguiſhing character.

5. Myrſine urceolata, or cup-flowered myrſine: leaves lanceolate-oblong, entire; umbels axillary, ſeſſile; ſtalks ſmooth; flowers four-cleft; corolla of the male pitcher-ſhaped, longer than the ſtamens. Gathered by ſir Joſeph Banks in the tropical part of New Holland.

6. Myrſine manglillo, or laurel-leaved myrſine: leaves elliptical, obtuſe, entire; umbels axillary, ſeſſile; ſtalks ſmooth; antheræ ſeſſile. Found by Dombey in great plenty about Lima in Peru, growing near rivulets, and flowering in May. It has the aſpect of the cherry-laurel, and riſes to the height of twelve feet. Leaves three or four inches long, on ſhort thick ſtalks, exactly elliptical, quite entire, evergreen, ſmooth. Flowers about ſix in each umbel, five-cleft, ſmooth in all their parts. This ſhrub is taken at Lima for the Paraguay-tea, which its leaves reſemble, but the ſeeds are very different. Dombey named it *Duhamelia,* unconſcious, probably, that *Hamellia* was already conſecrated to the memory of the great French phyſiologiſt of vegetables.

Propagation and Culture. The firſt ſpecies may be increaſed by ſowing the ſeeds in ſpring on a hot-bed; and, when the plants are fit to tranſplant, planting them out ſingly into ſmall pots of good mold, due ſhade and water being given; and in the autumn they may be removed into the green-houſe for protection during the winter-ſeaſon. They may alſo be raiſed by planting cuttings of the young ſhoots in pots in ſummer, due ſhade and water being given. They afterwards require the management of other green-houſe plants. They afford variety among collections of plants of the green-houſe kind.

MYRSINI'TES, *ſ.* in botany. See Euphorbia.

MYR'THE, a town of Hindooſtan, which, in the year 1399, was taken and deſtroyed by Timur Bec. The men were flayed alive, and the women and children ſold for ſlaves. It is 120 miles eaſt of Delhi.

MYR'TI AFFI'NIS. See Liquidambar.

MYRTIDA'NON, *ſ.* A word uſed by the old Greek writers on medicine, but in a different ſenſe by different authors. Hippocrates calls it a round fruit, which the Perſians in his time called *pepper,* and which probably had all the heating qualities of that fruit. Dioſcorides expreſſes by it an excreſcence common on the trunk of the myrtle, and which, as he obſerves, is more aſtringent than the myrtle itſelf. *Myrtidanum vinum* alſo ſignified wine impregnated with myrtle.

MYRTIFO'LIA, *ſ.* in botany. See Celastrus.

MYRTIFO'LIO. See Myrtus.

MYR'TIFORM, *adj.* Having the ſhape of myrtle.

MYR'TILIS, in ancient geography, a town of Spain, in Luſitania, ſituated on the right of the Anas, ſouth-eaſt of Pax Julia; called alſo "Julia Myrtilis." Now *Mertola.*

MYRTIL'LUS, *ſ.* in botany, a name applied to the whortle-berry, Vaccinium, on account of the reſemblance of its round bluiſh-purple berries to thoſe of the myrtle. It is ſtill retained as the ſpecific appellation of our bilberry, Vaccinium myrtillus, to whoſe fruit the above compariſon is moſt applicable. See Vaccinium.

MYR'TILUS, in fabulous hiſtory, a ſon of Mercury and Phaëtuſa, or Cleobulè, arm-bearer to Œnomaus king of Piſa. He was ſo experienced in riding and in the management of horſes, that he rendered thoſe of Œnomaus the ſwifteſt in all Greece. His infidelity proved at laſt fatal to him. Œnomaus had been informed, by an oracle, that his daughter Hippodamia's huſband ſhould cauſe his death, and on that account he reſolved to marry her only to him who ſhould overcome him in a chariot-race. This ſeemed totally impoſſible; and to render it more terrible, Œnomaus declared that death would be the conſequence of a defeat in the ſuitors. The charms of Hippodamia were ſo great, that many ſacrificed their life in the fruitleſs endeavour to obtain her hand. Pelops, at laſt, preſented himſelf, undaunted at the fate of thoſe who had gone before him; but before he entered the courſe he bribed Myrtilus, and aſſured him that he ſhould ſhare Hippodamia's favours if he returned victorious from the race. Myrtilus, who was enamoured of Hippodamia, gave an old chariot to Œnomaus, which broke in the courſe, and cauſed his death. Pelops gained the victory, and married Hippodamia: and, when Myrtilus claimed the reward promiſed to his perfidy, Pelops threw him headlong into the ſea, where he periſhed. The body of Myrtilus, according to ſome, was carried by the waves to the ſea-ſhore, where he received an honourable burial, and, as he was the ſon of Mercury, he was made a conſtellation. *Hygin.* fab. 84, 224.

MYR'TIS, a Greek lady who diſtinguiſhed herſelf by her poetical talents. She flouriſhed about 500 years B.C. and inſtructed the celebrated Corinna in the ſeveral rules of verſification. Pindar himſelf was alſo one of her pupils; as to which, ſee the article MUSIC, p. 358.

MYR'TITES, *ſ.* The name of a compoſition in the ancient pharmacy, made of fine honey and the depurated juice of myrtle-berries boiled up together to a conſiſtence.

MYR'TLE, *ſ.* [*myrtus*, Lat.] A fragrant tree ſacred to Venus. See MYRTUS.—The flower of the *myrtle* conſiſts of ſeveral leaves diſpoſed in a circular order, which expand in form of a roſe; upon the top of the foot-ſtalk is the ovary, which has a ſhort ſtar-like cup, divided at the top into five parts, and expanded; the ovary becomes an oblong umbilicated fruit, divided into three cells, which are full of kidney-ſhaped ſeeds. *Miller.*—Democritus would have Concord like a fair virgin, holding in one hand a pomegranate, in the other a bundle of *myrtle;* for ſuch is the nature of theſe trees, that, if they be planted a good ſpace one from the other, they will meet, and, with twining, one embrace the other. *Peacham.*

There will I make thee beds of roſes,
With a thouſand fragrant poſies;
A cap of flowers, and a girdle
Imbroider'd all with leaves of *myrtle.* *Marlow.*

Nor can the muſe the gallant Sidney paſs
The plume of war! with early laurels crown'd,
The lover's *myrtle* and the poet's bay. *Thomſon.*

Dutch and Candleberry MYRTLE. See MYRICA, p. 441.

MYRTLE-LEAVED SUMACH. See CORIARIA.

MYRTLE I'SLAND, one of the Chandeleur iſlands, in the gulf of Mexico.

MYR'TO-CIS'TUS, *ſ.* in botany. See HYPERICUM.

MYR'TO-GENIS'TA. See SOPHORA.

MYRTOI'DES. See MYRTUS.

MYR'TOS, in ancient geography, an iſland of the Ægean Sea, on the weſtern ſide of the moſt ſoutherly point of the iſland Eubœa. Pliny ſays, that it gave name to that part of the Ægean Sea called *Myrtoum Mare.*

MYRTO'UM MA'RE, a part of the Ægean Sea, which lies between Eubœa, Attica, and Peloponneſus, as far as Cape Malea. It receives this name from *Myrtis*, a woman; or from *Myrtos*, a ſmall iſland oppoſite to Caryſtos in Eubœa; or from *Myrtilus*, the ſon of Mercury, who was drowned there. See thoſe articles.

MYRTUN'TIUM, a name given to that part of the ſea which lies on the coaſt of Epirus, between the bay of Ambracia and Leucas.

MYR'TUS, *ſ.* [of Pliny and other Latin authors; μυρτος of Ariſtole and other good Greek authors; μυρσινη of Galen, Dioſcorides, &c. fabled to be ſo named from *Myrſine*, an Athenian damſel, and favourite of Minerva, who was metamorphoſed into this ſhrub.] MYRTLE; in botany, a genus of the claſs icoſandria, order monogynia, natural order of heſperideæ, (myrti, *Juſſ.*) Generic Characters—Calyx: perianthium one-leafed, four or five cleft, bluntiſh, ſuperior, raiſed internally into a ſubvilloſe ring, permanent. Corolla: petals four or five, ovate, entire, large, inſerted into the calyx. Stamina: filaments very many, capillary, the length of the corolla, inſerted into the calycine ring; antheræ roundiſh, ſmall. Piſtillum; germen inferior, two-celled or three-celled; the ſeeds fixed to the partition; ſtyle ſimple, filiform; ſtigma blunt. Pericarpium: berry oval, umbilicated with the calyx, one, two, or three, celled. Seeds: few, kidney-form.—*Eſſential Character.* Calyx five-cleft, ſuperior; petals five; berry two or three-celled; ſeeds ſeveral, gibbous.

Of this elegant and celebrated genus, only one real ſpecies was known to the older botaniſts, of whoſe varieties, as they are now eſteemed, Tournefort and the writers of his time made various ſpecies, which ſtill make a figure in gardeners' catalogues, and indeed are, ſome of them, very different from each other in their foliage. In the firſt edition of his Species Plantarum, Linnæus defines ſeven ſpecies of Myrtus, and, in his ſecond, thirteen. Of theſe, ſeveral have been removed to other genera; and eſpecially the laſt, M. leucadendra, (Sp. Pl. 676.) was ſubſequently made a diſtinct genus by Linnæus himſelf. See MELALEUCA, vol. xiv. In the Mantiſſa, 74. is an additional Myrtus, named *anguſtifolia;* for which, ſee METROSIDEROS anguſtifolia, vol. xv. p. 273. Myrtus braſiliana of Linnæus is the ſame as Eugenia uniflora, vol. vii. p. 57. Perhaps the genus might better be divided from the number of cells in the berry, and the ſituation of the flowers. Accordingly, M. chytraculia and zuzygium, having a one-celled berry, are diſmiſſed from this genus, and will be found under that of CALYPTRANTHES, vol. iii. p. 638. Dr. Smith obſerves, (Linn. Tranſ. iii. 279.) that few genera are more confuſed in the works of Linnæus than this of Myrtus. All that properly belong to it, are thoſe that have a corolla of five petals with a five-cleft calyx, and a two-celled or three-celled berry. Theſe characters diſtinguiſh it from Eugenia, Pſidium, and Calyptranthes. We, however, follow the arrangement of Mr. Profeſſor Martyn, in his improved edition of Miller, which enumerates ſeveral ſpecies with a four-cleft calyx; in all, thirty-ſix ſpecies, beſides varieties.

1. Myrtus communis, or common myrtle: flowers ſolitary; involucre two-leaved. The common myrtle is well known as an elegant evergreen ſhrub, native of Aſia, Africa, and the ſouthern parts of Europe; unfortunately, too tender to abide our winters without ſome protection in England, except in the moſt ſouthern and weſtern parts of the iſland. Trunk irregular, branching, covered with a brown rough ſcaling bark. Leaves ovate, or ovate-lanceolate, entire, ſmooth on both ſides; dark-green, paler underneath, oppoſite, and decuſſated. The flowers come out ſingly from the axils, and have a two-leaved involucre under them; corolla white; berry inferior or below the calyx, ſubovate, crowned with the permanent calyx, fleſhy and ſpongy, dark purple or black-blue, three-celled; ſeeds in each cell four or five, ſeldom more, kidney-form gibbous, whitiſh, ſhining, ſomewhat bony at the back, the belly filled with a fungous ſubſtance, fixed to the inner angle of the cells: they have a ſingle cartilaginous or ſomewhat-bony thick cover, no albumen, the the embryo conformable to the cavity of the ſeed, roundiſh, curved, milk-white: cotyledons ſemicylindric, ſhort, incumbent: radicle twice the length of the cotyledons, ſemicircular-curved, inferior. They flower in July and Auguſt.

This elegant and ſweetly-ſcented ſhrub has been at all times the favourite theme of poets; cheriſhed by lovers, as the rival of the roſe; and, like that flower, dedicated to the goddeſs of beauty. Virgil mentions it always *con amore*, and repreſents it as thriving moſt ſucceſsfully on the ſea-ſhores, (*et amantes littora myrtos.* Geo. iv. 124.) of which they were reckoned a graceful ornament: *littora myrtis lætiſſima.* And, indeed, we have a proof of it in this country; for there is hardly a place in the world where myrtles grow ſo luſtily and plentifully as on the ſhores of Devonſhire and Cornwall. Some of them, between twelve and fifteen feet in height, are not uncommon at Sidmouth, Exmouth, and all along that Provence-like and moſt pleaſing margin of the ocean. They adorn the cottage of the poor with as much pleaſure as the incloſed gardens of the rich; and, in October, are covered with large white bloſſoms, which, eſpecially in the evening, and through the night, exhale a moſt delightful perſume. The imitator of Virgil, in his "Gardens," father Rapin, whoſe Latin poem would be more admired if it were better known, ſeems to have had this circumſtance in view, when he wrote the following paſſage:

Et quondam, ut fama eſt, cum primas aurea myrtos
Plantaret Venus umbroſis ſub vallibus Idæ,
Nuda cohors illas circum ludebat Amorum,
Lucentem ad lunam, puræ per tempora noctis.
Quippe Venus myrtum, plantis ex omnibus unam
Ipſa ſibi optavit quondam propriamque dicavit.
Non aliam ob cauſam, ſua velant ſimplice myrto
Tempora nuptæ omnes, ad ſolemnes Hymenæos.
Ipſa deum regina, toris præfecta maritis,
Tædiferas adhibet ſacra ad myſteria myrtos.
Hinc etiam Elyſiis in vallibus, omnis amantum
Turba ſuas et habet myrtos, et myrtea circum
Silva tegit, quos non vel amor poſt fata reliquit,
Phædramque, triſtemque Procrin mæſtamque Eryphylen.
Hortorum, lib. ii.

When fair-hair'd Venus in ſweet Ida's vales
Spread the firſt myrtles to the gladdening gales,
During the placid hours of ſilent night,
And Phœbe's ſilver creſcent ſhining bright,
A naked ſwarm of cupids, finding ſoon
The naſcent ſcented ſhrubbery, from the moon
Stole ſilver ſpangles to bedeck their flowers.
Hence myrtles firſt appear'd in Cynthia's bowers.
Hence myrtle-wreaths adorn the virgin hair
To Hymen's altars when young brides repair.
And myrtle-torches ſhed their ſacred lights
O'er myſteries of chaſte connubial rites.
Hence thoſe, whoſe love ſtill burns beyond the grave,
In fields Elyſian myrtle-trees will have,
Where Eryphyle, Phædra, Procris, rove
In the lone windings of a myrtle-grove.

The poet proceeds, giving directions for the preſervation of this ſhrub againſt the rigorous ſeaſon of winter, as if the myrtle had naturally required more care in France than it does here. And, indeed, Virgil appears to have been of the ſame opinion concerning them in Italy; for, he ſays: *dum teneras defendo à frigore myrtos.* Ecl. vii. 6. "Whilſt I ſhelter my tender myrtles from the coldneſs of the weather." It was in winter, however, or late in autumn, that the Romans gathered the black-myrtle berries, *Myrta cruenta*, to make a ſort of wine, which muſt of courſe have been very bitter, but probably wholeſome. The wine made of, or impregnated with, the juice of myrtle-berries, was called *Myrtodanum.* It was not the only inſtance wherein the productions of this uſeful ſhrub were admitted "aux honneurs de la table;" and it may have often happened, that the gueſts, while their perfumed temples were bound with myrtle-chaplets, (*nitidum caput impedire myrto*; Hor. Od. i. 4, 9.) and their lips empurpled with the drops of the *Myrtodanum*, employed their teeth in maſticating the *Myrtatum*, a ſort of pudding, in which, inſtead of pepper, myrtle-berries were introduced. It appears alſo that, under the name of *Myrtodanum*, the Romans knew a kind of Indian pepper, the fruit of a tree which reſembled the Myrtus pimenta, or allſpice.

The myrtle and its berries are ſtyled *bicolor* by Ovid, on account of the different green of the leaves, and various degrees of purple in the berries. This ſhrub was among the obedient trees, which, by the charms of his lyre, the diſconſolate Orpheus forced to take a deliberate walk and waltz up the ſummit of Hæmus: *Et bicolor myrtus*; (Met. book x. 98.) *Myrtea ſilva ſubeſt bicoloribus obſita baccis*; (ib. xi. 234.) Phædrus in the xviith fable of the third book, mentioning the trees which the gods reſpectively placed under their protection, ſays that the myrtle was choſen by Venus: *et myrtus placuit Veneri.* Why the goddeſs of fleeting and temporary pleaſures, of beauty that fades ſo ſoon, of love that laſts ſo ſhort a time, ſhould have ſelected an evergreen for her favourite tree, is not eaſily accounted for, unleſs it were to teach by contraſt, and warn by oppoſition. In conſequence of this, myrtles have been admitted in all luxuriant deſcriptions of Paphian bowers. Voltaire had too much taſte to forget them in his deſcription of the Temple of Love:

Là, tous les champs voiſins peuplés de myrtes verds,
N'ont jamais reſſenti l'outrage des hivers.
Henriade, Chant ix.

Where could Anacreon, the conſtant worſhipper of Venus, Cupid, and Bacchus, find himſelf more at eaſe than under the perfumed ſhades of a myrtle ſhrubbery? His Firſt Ode begins with theſe words:

Επι μυρσιναις τερειναις
Επι λωτιναις ποιαις
Στορεσας, θελω προπινειν.

Where myrtles checquer the green bowers,
Where lotus ſpreads her ſacred flowers,
Reclining there, I love to drink.

It appears, alſo, that myrtle-wreaths were uſed to adorn the victors at the Iſthmic games, according to Pindar, when they had twice obtained the prize. See Pind. Iſtm. Od. iv.

The black juice of the berries, and the circumſtance of darts and lances being made of myrtle-twigs, furniſhed the fanciful mind of the Mantuan bard with the curious ſtory of Polydorus, related in the third book of the Æneid. Pauſanias, Pliny, &c. mention the myrtle as belonging to Venus; and Ariſtophanes, in his play of "the Birds," ſays, that myrtles are Παρθενια μυρτα χαριτων κηπευματα; "the Virginal Gardens of the Graces."

Venus and Mars were ſo intimately united by the endearments of love, that the myrtle of pleaſure was often ſet by the laurel of victory. Hence Virgil ſays: *et te (lauri) proxima myrte.* "The laurel and the myrtle ſweets agree." Ecl. ii. 54. Javelins were made of myrtle; and Camilla is repreſented at the head of her troops, with a myrtle-ſpear in her hand: *Paſtoralem præfixâ cuſpide myrtum.* Dryden tranſlates thus:

She ſhakes her myrtle jav'lin, and behind
Her Lycian quiver dances in the wind. *Æn.* vii.

But what eſtabliſhes moſt indubitably the claim of the myrtle to military and martial fame, is the fact which has been tranſmitted to us by Pliny, l. xv. c. 19. *Triumphans de Sabinis Poſth. Tudertus, primus omnium ovans, ingreſſus urbem myrto coronatus,* which paſſage Rapin has verſified in the following manner:

Is non unus honos myrto. Sibi victor ovantem
Illâ nectebat quondam de fronde coronam,
Tudertus, victis que prior de more Sabinis
Impoſuit capiti myrtum, inſeruitque triumphis.

Nor this the whole of all the myrtle's praiſe.
Its verdant leaves attach'd to purple bays
Enwreath'd the victor's brow, when Sabines bled,
And at Tudertus' feet their weapons laid.
By him a crown of myrtle firſt was worn,
And myrtles ſince triumphal pomp adorn.

We read in Nehemiah, ch. viii. ver. 15, that at the feaſt of the tabernacles the myrtle was one of the choſen trees, the boughs of which were interwoven with palm and olive branches, and others, to form the bowers, or booths, under which the congregation ſat to hear the reading of the law of God. In Zechariah, i. 8, 10, 11, myrtle-trees are mentioned as growing in the valley where the man appeared riding a red horſe. But the meaning of this paſſage is too abſtruſe for us to gueſs why the myrtle ſhould have been introduced in this typical viſion.

The myrtle is a rare inſtance of the ſame name prevailing in the Greek and Latin, and all the modern European languages, with a very ſlight difference. Thus in Greek it is μυρσινη and μυρτος; in Latin, *myrtus*; in German it is *myrte*, or *myrtenbaum*; in Dutch, *myrtus*; in Daniſh, *myrter*; in Swediſh, *myrten*; in French *mirte*; in Italian and Spaniſh, *mirto*; in Portugueſe, *murta*, or *myrta.* But a ſearcher after etymology might be puzzled at firſt to gueſs how the letter *l* inſinuated itſelf into the name of this ſhrub, ſince they find it not in any of the above derivations. The fact is, that the Engliſh word originates immediately from *myrtilli*, the name under which myrtle-berries were ſent to England from Italy.

The cultivation of the myrtle in England, is aſſigned in the Kew Catalogue to the year 1629, when Parkinſon informs us that he had three ſorts (varieties) in his garden; the broad-leaved and two varieties of the box-leaved: Gerard however, in 1597, ſays that myrtles never bear any fruit in England, which ſurely implies the cultivation of it among us before that period. And Bradley informs us, that the myrtle was introduced by ſir Francis Carew and ſir Walter Raleigh in 1585, when they reſided in Spain, and diſcovered the preparations for the Spaniſh armada againſt us. Mr. Evelyn alſo, in the year 1678, ſays, "I know of one (a myrtil) near eighty years old, which has been continually expoſed, unleſs it be, that in ſome exceeding ſharp ſeaſons a little dry ſtraw has been thrown upon it." Perhaps he may allude to the tree at Bedington. But that was the Spaniſh broad-leaved or orange-leaved, variety, which Miller and Bradley report to have been above eighteen feet high, and to have ſpread about forty-five feet. Box-leaved and orange-leaved are ſaid by Johnſon to have been "nouriſhed in the garden of Miſtreſſe Tuggie in Weſtminſter, in 1633."

The principal varieties are erected into ſpecies by Mr. Miller. Their differences, as he has given them, are theſe.

α. Common broad-leaved, or Roman, myrtle. This grows to the height of eight or ten feet in England, but is much higher in Italy, where it is the principal underwood of ſome of the foreſts. The leaves are broader than moſt of the other varieties, being an inch in breadth; they are an inch and a half long, of a lucid green, end in acute points, and are ſubſeſſile, or on very ſhort footſtalks. The flowers are larger than thoſe of the other varieties, on pretty long ſlender peduncles, from two to four at the ſame axil. Berries ovate, or oblong-ovate, very dark purple, ſo that they ſeem to be black when ripe, incloſing from three to ſix hard kidney-ſhaped ſeeds. This variety is called by ſome the *flowering myrtle*, becauſe it flowers more freely in England than the others. By others the *Roman myrtle*, becauſe it abounds about Rome. The woods between Leghorn and Piſa have cork-trees for the timber, and myrtle for the underwood.

β. Box-leaved myrtle: leaves oval, ſmall, ſeſſile, of a lucid green, and ending in obtuſe points. The branches weak, and frequently hanging down, when permitted to grow without ſhortening; the bark is greyiſh. The flowers are ſmall, and come late in the ſummer. The berries are ſmall and round.

γ. Common Italian myrtle with ovate-lanceolate leaves, ending in acute points. The branches grow more erect than in either of the preceding, as do alſo the leaves, whence it is called by the gardeners *upright myrtle*. The flowers are not large, and the petals are marked with purple at their points, whilſt they remain cloſed: the berries are ſmall, oval, and of a purple colour. This is the variety delineated on the annexed Engraving at fig. 1. It is obſervable, that the leaves of this ſhrub have no pungent or even ſenſible ſmell, unleſs bruiſed between the fingers. The leaves and flowers have an aſtringent quality, and are uſed for cleanſing the ſkin, fixing the teeth when looſened by the ſcurvy, and ſtrengthening the fibres. From the flowers and young tops is drawn a diſtilled water that is deterſive, aſtringent, coſmetic, and uſed in gargles. A decoction of the flowers and leaves is applied in fomentations. The berries have a binding deterſive quality; and the chemical oil obtained from them is excellent for the hair, and uſed in pomatums and moſt other external beautifiers of the face and ſkin. As an internal medicine, theſe berries have little or no merit.

There is a ſub-variety of this with white berries; and the *nutmeg-myrtle* ſeems to be only a variety of this, ſeveral plants raiſed from the ſeed of it being ſo like the Italian myrtle as hardly to be diſtinguiſhed from it.

δ. Orange-leaved or (or as it is called by ſome) bay-leaved myrtle, has a ſtronger ſtalk and branches, and riſes to a greater height. The leaves are ovate-lanceolate, in cluſters round the branches, and of a dark green. The flowers are of a middling ſize, and come out ſparingly from between the leaves. The berries are oval, and ſmaller than thoſe of the firſt. It is not ſo hardy as that.

ε. Portugal myrtle: leaves leſs than an inch long, and not more than half an inch broad, lanceolate-ovate acute, of a dull green, and ſet pretty cloſe on the branches. The flowers are ſmaller.

ζ. Broad-leaved Dutch myrtle: leaves much leſs than thoſe of the common ſort, and more pointed, ſtanding cloſe together on the branches; the midrib on the under ſide of the leaves is of a purple colour; they are of a darker green, and ſit cloſer to the branches. The flowers are ſmaller, and on ſhorter peduncles: they come out a little later than the common ſort.

The double-flowering myrtle is probably a variety of this; the leaves and growth of the plant, the ſize of the flowers, and the time of flowering, agreeing better with this than any of the others. Mr. Miller, in his plate, has figured the double myrtle as a variety of the Italian.

η. Roſemary-leaved, or, as ſome call it, thyme-leaved myrtle, has the branches growing pretty erect: the leaves ſmall, narrow, acute, ſeſſile, and of a lucid green. Flowers ſmall, appearing late in the ſeaſon.

The above varieties are conſtant; others there are which are propagated in the gardens and nurſeries for ſale, which are leſs conſiderable and more variable. It may ſuffice to give the names of theſe: 1. Gold-ſtriped broad-leaved myrtle. 2. Broad-leaved Jews' myrtle, having frequently the leaves in threes, on which account it is ſaid to be in eſteem among the Jews in their religious ceremonies. 3. Gold-ſtriped orange-leaved myrtle. 4. Silver-ſtriped Italian myrtle. 5. Striped box-leaved myrtle. 6. Silver-ſtriped roſemary-leaved myrtle. 7. Silver-ſtriped nutmeg myrtle. 8. Cock's-comb or bird's-neſt myrtle.

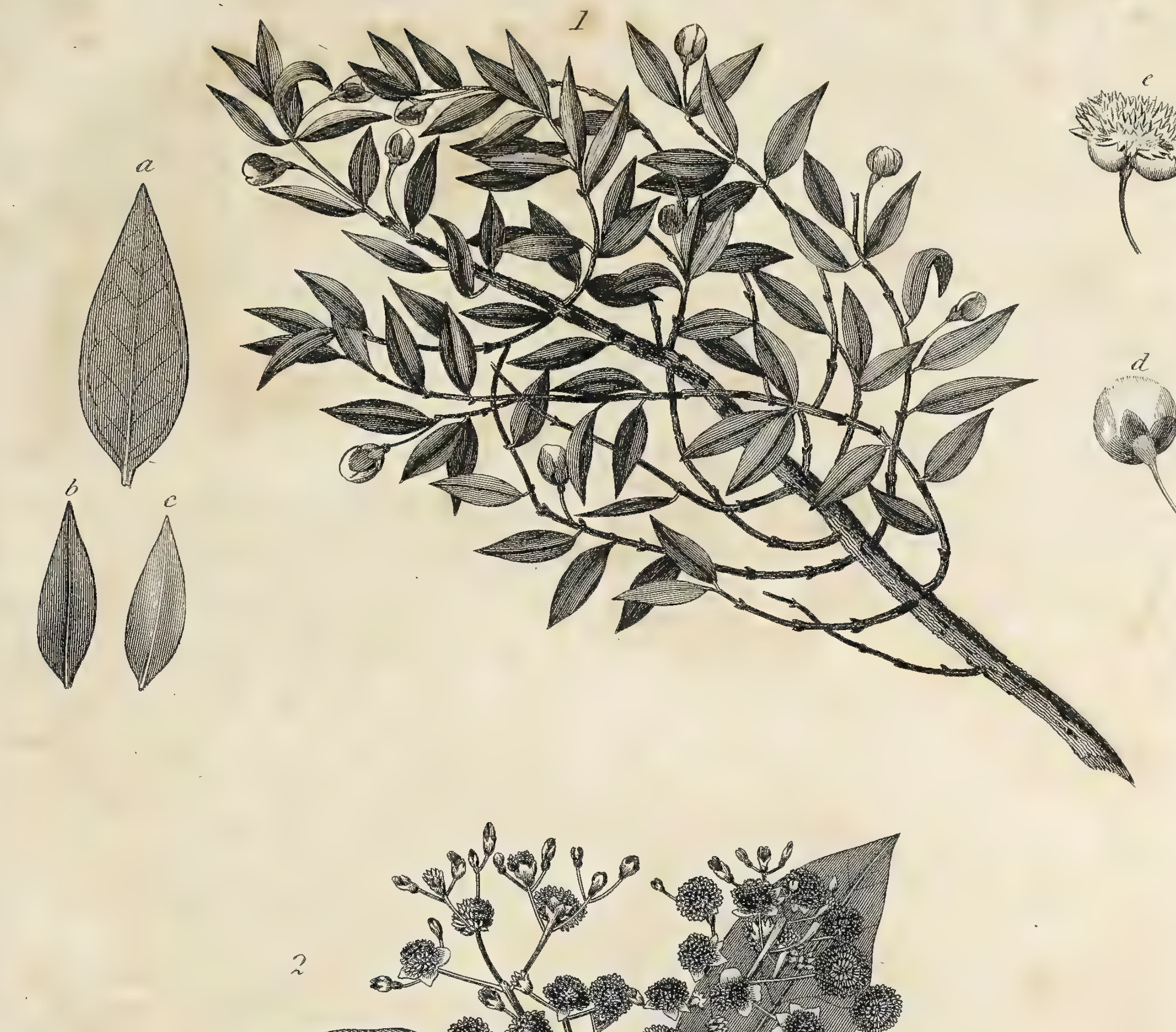
2. Myrtus tomentoſa, or woolly-leaved myrtle: peduncles one-flowered; leaves triple-nerved, tomentoſe underneath. Branches round, tomentoſe. Leaves an inch and a half long, elliptic, blunt, above dark and veined, reflex at the edge, the nerves more conſpicuous underneath; ſmooth above, hoary underneath, on very ſhort petioles. Loureiro thus deſcribes it under the name of M. caneſcens: Stems ſhrubby, erect, ſix feet high, manifold, ſmooth, whitiſh, even; with ſpreading branches. Leaves quite entire, three-nerved, hoary; on petioles connate with the ſtalk. Flowers purpliſh, ſolitary, ſcattered, having a large berried five-cleft calyx, with rounded ſpreading unequal ſegments, and an involucre of two ſmaller leaves underneath. Petals five, roundiſh, ſpreading, longer than the calyx. Stamens nearly equal to the corolla. Berry ovate, crowned, tomentoſe, black-purple, three-celled, with a juicy, blackiſh, ſweet-aſtringent, eſculent pulp; and many minute roundiſh ſeeds. Native of China and Cochinchina. Introduced about 1776, by Mrs. Norman. It flowers in June and July.

3. Myrtus alpina, or alpine myrtle: peduncles ſolitary, terminating, one-flowered, very ſhort; leaves ovate; branchlets in fours, faſtigiate; ſtem arboreous. Native of Jamaica.

4. Myrtus procera, or tall myrtle: peduncles cluſtered, axillary, one-flowered; leaves ovate-acuminate, flat, ſmooth; branches rod-like; ſtem arboreous. 5. Myrtus liguſtrina, or privet-myrtle: peduncles ſolitary, and branched, terminating, one-flowered; leaves lanceolate, blunt, convex, lucid. 6. Myrtus crenulata, or notch-leaved myrtle: peduncles ſolitary, axillary, commonly three-flowered; leaves roundiſh, crenulate, ſmooth. Natives of Hiſpaniola.

7. Myrtus ceraſina, or cherry-myrtle: peduncles lateral and terminating, one-flowered; leaves oblong, ſhining, dotted

MYRTUS.



1. Common Italian Myrtle; a, leaf of the natural size, b, upper side of
the leaf, c, under side; d, the bud; e, the blossom.
2. Jamaica Pepper, or Allspice

Engraved for the Encyclopaedia Londinensis, 1813.

Pass sc.

dotted underneath. The whole of this ſhrub is ſmooth. Branches round, with an aſh-coloured bark. Leaves an inch long, blunt, the upper ſurface ſomewhat veined and ſhining, with a groove along the middle; the under veinleſs, pale, dotted, in cluſters. Native of the Caribbee-iſlands. The fruit has a very thin black ſkin, with a very ſmall purple ſweetiſh pulp, including two white ſtones, flat on one ſide, convex on the other, together making a ſphere. It is ſo like a black cherry, that it has that name in Jamaica.

8. Myrtus tenuifolia, or fine-leaved myrtle: peduncles axillary, ſolitary, one-flowered; leaves linear, mucronulate. This is an elegant little ſhrub, with leaves ſomewhat more than an inch in length, and about a line in breadth, ſlightly revolute, downy beneath. Flower-ſtalks ſilky, ſhorter than the leaves, each bearing a ſmall white flower, often tinged externally with red, and not unlike the common myrtle-bloſſom, though ſcarcely half ſo large. Calyx nearly ſmooth. Petals downy. Germen very ſilky. Native of New South Wales.

9. Myrtus Braſiliana, or Braſilian myrtle: flowers ſolitary; peduncles naked; petals ſubciliate. This plant ſtands in the latter editions of Linnæus in three different places, being his *Eugenia uniflora*, *Myrtus Braſiliana*, and *Plinia pedunculata*. See Eugenia uniflora.

10. Myrtus biflora, or two-flowered myrtle: peduncles two-flowered; leaves lanceolate. This riſes with a divided trunk to the height of eight or ten feet, ſending out many oppoſite branches, covered with a grey bark. Leaves ſhorter and rounder at the points, ſmoother and of a firmer texture, than in M. pimenta. The flowers come out from the ſide of the branches between the leaves, on ſlender footſtalks, about an inch in length, two generally from the ſame point; berries round, of a brighter colour than the pimenta. This tree retaining its leaves, which are of a ſplendent green, all the year, it makes a good appearance; but the flowers, being ſmall, and growing thinly upon the branches, do not make any great figure. It is a native of Jamaica, whence Mr. Miller received it, and cultivated it ſome years before 1759.

11. Myrtus trinervia, or three-nerved myrtle: peduncles axillary, three-flowered; leaves ovate-acuminate, three-nerved, tomentoſe underneath. Leaves large and handſome. Flowers ſmall, generally three together, on ſhort hairy forked flower-ſtalks. Although the teeth of the calyx, and the petals alſo, are generally four only, it is a true Myrtus, and not an Eugenia, the fruit being a berry with many ſhining gibbous curved ſeeds. It has but one cell when ripe, but the germen appears to be divided into two or three cells. Native of New South Wales.

Loureiro has a different ſpecies under the ſame name. He deſcribes it as a tree twelve feet in height, with ſpreading branches. Leaves ovate, acuminate, quite entire, three-nerved, ſmooth on both ſides, petioled. Flowers white, ſubterminating, in long racemes. The berries are ſcarcely half an inch in diameter, and are eatable. Native of Cochinchina.

12. Myrtus anguſtifolia, or narrow-leaved myrtle: peduncles umbelled; leaves ſubſeſſile. Native of the Cape of Good Hope. See Metrosideros.

13. Myrtus lævis, or ſmooth myrtle: peduncles umbelled; leaves ovate, acuminate. Stem ſhrubby, entirely ſmooth. Branches and branchlets alternate, erect. Leaves from the alternate buds, ſingle, in pairs, or in threes, ſharply ſerrate, veined, ſmooth on both ſides, pale underneath, ſpreading, unequal, an inch long and more, on petioles half a line in length. It is nearly allied to Cratægus villoſa and lævis. From the firſt, however, it differs in being wholly ſmooth, in having one piſtil, and aggregate leaves: from the ſecond, in having one piſtil, and ovate ſlender leaves, longly acuminate. Native of Japan.

14. Myrtus lucida, or ſhining myrtle: peduncles ſubtriflorous; leaves ſubſeſſile, lanceolate, attenuated. The leaves are of a ſingular ſtructure, being from ovate remarkably attenuated into a lanceolate top. Flowers five-petalled. Native of Surinam.

15. Myrtus cumini, or ſcented myrtle: peduncles many-flowered; leaves lanceolate-ovate. This is a tree with round aſh-coloured branches: a native of the Eaſt Indies.

16. Myrtus lineata, or lineated myrtle: flowers axillary, ſubſeſſile; leaves ovate-acuminate, rigid, marked with lines, hoary underneath. Native of Hiſpaniola.

17. Myrtus cordata, or heart-leaved myrtle: flowers axillary and lateral, ſubſeſſile; leaves ſeſſile, cordate, ovate, ſhining. Branches aſh-coloured, ſmooth, as is the whole plant, compreſſed at top. Leaves an inch long, ſomewhat leathery, margined, very blunt and ſmooth, veined, dotted underneath, and paler. Native of the Weſt Indies.

18. Myrtus pallens, or aſh-coloured myrtle: racemes terminating, pubeſcent; pedicels one-flowered; leaves broad-lanceolate, attenuated, dotted above. Branches round, aſh-coloured, compreſſed a little at top. Leaves two inches long, blunt, ſomewhat coriaceous, very ſmooth and even, veinleſs, having a groove along the middle, and a nerve within the edge, as in M. Zeylanica.

19. Myrtus dumoſa, or prickly myrtle: racemes axillary, very ſhort; leaves petioled, broad-lanceolate, acuminate. Branches with a coated chinky bark. Leaves two inches long, membranaceous, with numerous ſimple tranſverſe veins, having a longitudinal nerve within the edge on each ſide, paler underneath, on ſhort petioles; the young ones are villoſe-ſilky. It differs from M. glabrata of Swartz in having flat membranaceous leaves, and few-flowered racemes; from M. diſticha of the ſame author, by its few-flowered peduncles, and leaves not bent down. This and the preceding are natives of South America, and were communicated to Vahl by Mr. Forſyth.

20. Myrtus buxifolia, or box-leaved myrtle: racemelets very ſhort, cluſtered, axillary; leaves wedge-ſhaped, oblong, ſomewhat convex. Native of the Weſt Indies.

21. Myrtus glabrata, or poliſhed myrtle: racemelets very ſhort, axillary, many-flowered; leaves elliptic, acuminate, convex, coriaceous, very ſmooth. Native of Hiſpaniola.

22. Myrtus diſticha, or cleft-leaved myrtle: peduncles axillary, many-flowered, ſhorter than the leaves; leaves diſtich, bent down, ovate-lanceolate; branches ſpreading.

23. Myrtus monticola, or mountain-myrtle: peduncles many-flowered, very ſhort, axillary, ſolitary; leaves ovate, blunted, flat, very ſmooth. 24. Myrtus axillaris, or axillary myrtle: peduncles many-flowered, very ſhort, axillary, cluſtered; leaves ovate-acuminate, ſhining, flat. Natives of Jamaica.

25. Myrtus gregii, or round-leaved myrtle: peduncles many-flowered, axillary; leaves ovate-elliptic-acute, quite entire, pubeſcent underneath. Native of Antigua, Barbadoes, and Dominica.

26. Myrtus dioica, or double myrtle: peduncles trichotomous-panicled; leaves oblong; flowers diœcous. Native of America. Communicated to Linnæus by Miller.

27. Myrtus virgultoſa, or ſpriggy myrtle: peduncles axillary and terminating, panicled or racemed; leaves broad-lanceolate, attenuated. Branches rod-like, ſmooth, with an aſh-coloured bark, the young ones villoſe. Leaves petioled, an inch and a half or more in length, ſharpiſh at the baſe, ſmooth above and ſhining, pale underneath and veined; the younger ones ſomewhat dotted above. Native of Jamaica, Santa Cruz, &c.

28. Myrtus ſplendens, or ſhining myrtle: peduncles axillary, ſolitary, trichotomous; leaves elliptic-acuminate, flat, veined, ſcarioſe, ſhining; branches rod-like. Native of Hiſpaniola.

29. Myrtus Zeylanica, or Ceylon myrtle: racemes axillary and terminating; pedicels commonly four-flowered; leaves ovate, attenuated, dotted above. This has a ſtrong upright ſtalk, covered with a ſmooth grey bark, dividing towards the top into many ſlender ſtiff branches. Leaves near two inches long, and an inch and a quarter broad, of a lucid green, and on very ſhort footſtalks. The flowers come out at the ends of the branches, ſeveral on one

common peduncle, which branches out; and each flower ſtands on a very ſlender pedicel: they are very like the flowers of the Italian myrtle. In Linnæus's Flora Zeylanica, the calyxes are ſaid to be five-toothed, the corollas five-petalled, and the berries white: according to Loureiro, the calyx is four-cleft, the corolla four-petalled; the ſtamens about one hundred in number; the berry white, ſmall, roundiſh, one-celled, containing about eight ſeeds; but he doubts whether his plant be the ſame with Herman's. Native of Ceylon; probably of other parts of the Eaſt Indies, and of Cochinchina. Cultivated by Mr. Miller before 1759.

30. Myrtus androſæmoides: racemes axillary and terminating, ſubcompound; pedicels three-flowered; leaves ovate-oblong, ſeſſile. The whole plant is ſmooth. Branches obſcurely four-cornered at top. Leaves very large, being a hand or more in length, veined, a little attenuated at top, blunt, not dotted on either ſide. Loureiro deſcribes the ſpecies to which he gives this name, as a very branching ſmall tree or ſhrub, five feet high, with reddiſh-white flowers, the calyx five-toothed, the corolla five-petalled. Berry duſky-red. Native of Ceylon, and perhaps of Cochinchina.

31. Myrtus caryophyllata: peduncles trichotomous, terminating; calyxes undivided; leaves ovate-lanceolate, undotted. This is a tree with round branches. Native of Ceylon and other parts of the Eaſt Indies: not of America.

32. Myrtus acris: peduncles axillary and terminating, corymbed, trichotomous, longer than the leaves; leaves elliptic-convex, coriaceous, veined, dotted; ſtem arboreous. This may contend the palm of elegance with moſt trees. It grows ſlowly, and flowers late, twice in a year. By age it acquires thickneſs and height beyond mediocrity. Trunk handſome, ſtraight, forming a very lofty thick beautiful pyramidal head. Bark in the younger trees brown, then aſh-coloured, finally white entirely, or with large yellow ſpots; it is very ſmooth and even, eſpecially in old trees, but here and there hangs down in ſlender ſhreds; the flavour is aſtringent, not without ſomething of aromatic. Timber very hard, red, compact, ponderous, and capable of being poliſhed; uſed for the cogs of wheels in the ſugar-mills, and other works where conſiderable friction is required. Leaves numerous, quite entire, ſhining, bright green, with tranſverſe veins, blunt, attenuated into a ſhort petiole; they are always oppoſite, commonly three or four inches long, of a very ſweet aromatic ſmell, and on account of their agreeable aſtringency are uſed for ſauce with food. Flowers ſmall, white with a ſlight tinge of redneſs. Berries round, the ſize of peaſe, crowned with the remains of the calyx, having an aromatic ſmell and taſte, which render them agreeable for culinary purpoſes: they contain about ſeven or eight ſeeds. Native of the Weſt Indies; Martinico, Guadaloupe, and Grenada, where it is called *Bois d'Inde*, and is ſuppoſed to have been introduced from the Eaſt Indies. It is, however, a different ſpecies from the M. caryophyllata of that country. Brown ſays it is common in Antigua and Jamaica, as well as Barbadoes, and grows generally to a conſiderable ſize; that it fills the woods with the fragrant ſmell of its leaves, nearly reſembling that of cinnamon; but that the bark has no warmth of that ſort, though the berries reſemble cloves very much, both in form and flavour. It is commonly called wild cinnamon or wild clove tree, in Antigua and Jamaica. It is the bayberry of Hughes.

33. Myrtus coriacea, or ſumach-leaved myrtle: peduncles trichotomous, terminating; leaves roundiſh-elliptic, convex, coriaceous, veinleſs, dotted, ſhining on both ſides. The whole of this plant is ſmooth. Leaves petioled, an inch long, emarginate, from a reflex margin becoming convex, the upper ſurface ſhining very much, veinleſs, tranſverſely but obliquely marked with duſky nerved lines; the under ſurface leſs ſhining: the younger leaves veined on both ſides, with minute raiſed dots ſcattered over the under ſurface, which vaniſh in the older leaves, and they have duſky ſpots impreſſed on the upper ſurface. Native of the Weſt Indies. Sent to Mr. Philip Miller by Mr. Robert Millar, ſurgeon, from Carthagena in New Spain.

34. Myrtus fragrans, or fragrant myrtle: peduncles axillary, trichotomous, and ſimple; leaves ovate, ſlightly convex, ſomewhat coriaceous, dotted, ſmooth; ſtem arboreous. Native of Jamaica and Guiana.

35. Myrtus Chinenſis, or Chineſe myrtle: peduncles many-flowered; leaves ovate-lanceolate, ſerrate, hairy. This is an upright ſhrub, a foot and a half high, with few, aſcending, branches. Flowers white. Native of China near Canton.

36. Myrtus pimenta, pimento, Jamaica pepper, or allſpice: flowers trichotomous-panicled; leaves oblong-lanceolate. This tree grows to the height of thirty feet or more, with a ſtraight trunk, covered with a ſmooth brown bark, dividing upwards into many branches which come out oppoſite, garniſhed with oblong-acuminate leaves, reſembling thoſe of the bay-tree in form, colour, and texture, but longer, (being four inches in length,) and placed by pairs: when theſe are bruiſed or broken, they have a very fine aromatic odour like that of the fruit. The branches grow very regular, ſo that the trees make a fine appearance; and, as they retain their leaves through the year, the trees are worthy of being propagated for ornament and ſhade about the habitations of the planters. The flowers are produced in large looſe bunches from the ſide of the branches, towards their ends, each branch is alſo terminated by a larger bunch than the other; the flowers are ſmall, and of an herbaceous colour. A branch of this is ſhown on the Plate, at fig. 2.

Mr. Miller ſays they are male and female upon diſtinct trees, and deſcribes both. Swartz informs us, that the pimento is a polygamous tree, having the barren and fertile flowers either together, or on a diſtinct tree; that the calyx, which is called the fruit, or is inferior, is preſent in moſt of the ſpecies, but by no means ſuffices for the character of a diſtinct genus, rather performing the office of a bracte; and that the berry is moſt commonly one-ſeeded, though ſometimes it ſeems to be three-ſeeded.

Brown ſays, that ſome of theſe trees are frequently obſerved to be barren, which has introduced a notion among the people of Jamaica, of their being male and female trees in general, and that ſome of the male or barren trees were requiſite in every walk; all thoſe however that he obſerved, bore only hermaphrodite flowers; and he was credibly informed that thoſe called male trees, when lopped and broken like the reſt for one or two years, bear very well; which he is the more apt to believe, as he never obſerved a diſtinct male or female flower on any of them. He deſcribes the root as branched and ſpreading, the trunk ſmooth and ſhort, ſeldom above eight or ten inches in diameter, the top generally pretty much divided, and riſing in cloſe tufts, the leaves and bark very warm, and full of aromatic particles, which makes the planters very cautious of fire in all pimento-walks, where, if it ſhould once catch, it would run with great fury.

Linnæus ſays, that the calyx of the fruit is inferior and four-toothed, but the calyx of the flower ſuperior and four-parted; and that the berry has two ſeeds. Gærtner deſcribes the berry as ſpherical, crowned with the calyx, which is flattiſh, depreſſed, and five-notched; it is fleſhy, two-celled, and gratefully aromatic: receptacle in the upper part of the partition. Seeds two, rounded-kidneyform, ſomewhat convex on one ſide, flat on the other, rufeſcent, not ſhining. Integument ſingle, ſomewhat membranaceous, thin. No albumen. Embryo roundiſh. Cotyledons linear-acuminate, very ſhort. Radicle very long, thick, ſpirally convoluted, aſcending or ſuperior.

The pimento-tree is a native of the Weſt Indies, and flowers in June, July, and Auguſt. The berries are chiefly imported into England from Jamaica, whence the name *Jamaica pepper.* It is alſo named *all-ſpice*, from a notion of its taſte being compounded of ſeveral other ſpices. Mr. Miller cultivated it in 1739. This tree begins to bear fruit in three years after it is planted, but does not arrive at maturity under ſeven; it then repays very abundantly the patience of the planter, yielding one thouſand pounds weight of fruit from an acre. They are generally gathered in July, in their green ſtate, by twiſting off the twigs with the hand, or a pole cleft at one end; and are laid on cloths ſpread over the barbacues or terraced floors raiſed a little above the ground, incloſed with an upright ledge of eight or ten inches in height, and divided by tranſverſe partitions into four or more ſquare compartments, that each may contain a day's picking. During the firſt and ſecond day they are turned often, that the whole may be more expoſed to the ſun; but, when they begin to dry, they are frequently winnowed, and laid in cloths to preſerve them better from rain and dews, ſtill expoſing them to the ſun every day, and removing them under cover every evening, till they are ſufficiently dried, which uſually happens in ten or twelve days, and is known by the darkneſs of their complexion, and the rattling of the ſeeds; they appear at this time wrinkled and changed to a very dark brown. In this ſtate, being ready for the market, they are ſtowed in bags or caſks. Some planters kiln-dry them with great ſucceſs. Such of the berries as come to full maturity, like many other ſeeds, loſe that aromatic warmth for which they are eſteemed, and acquire a taſte perfectly like that of juniper-berries; which renders them a very agreeable food for the birds, the moſt induſtrious planters of theſe trees.

The berries have an agreeable aromatic ſubaſtringent taſte, which recommends them both in the kitchen and the druggiſt's ſhop. A delicate aromatic oil is diſtilled from them, which anſwers all the purpoſes for which the oils of cinnamon and cloves have been generally uſed; and is thought by ſome to be better than either, as it joins an aſtringency with its warmth. All parts of the tree are more or leſs aromatic and ſubaſtringent; but the leaves ſeem to abound moſt in volatile warm particles.

Mr. Miller was informed by an eminent merchant, through whoſe hands great quantities of the commodity paſſed, that the Dutch purchaſed all-ſpice of the Engliſh at a low price, and, grinding it, ſold it again to us at an advanced price for powder of cloves; and, that they draw an oil from it, which they vend for oil of cloves. Mr. Miller had a phial of this oil ſent him from Jamaica, which was ſhown to ſome of the beſt judges of drugs in London, who, having tried it, declared they thought it as good as any oil of cloves they had ſeen. He ſuggeſts, as worthy of trial, to dry the fruit when firſt formed, as a ſuccedaneum for oriental cloves.

All-ſpice, which was at firſt brought over for dietetic purpoſes, has been long employed in the ſhops as a ſuccedaneum to the more coſtly oriental aromatics. It is moderately warm, of an agreeable flavour, ſomewhat reſembling that of a mixture of cloves, cinnamon, and nutmeg. Diſtilled with water, it yields an elegant eſſential oil, ſo ponderous as to ſink in the water; in taſte moderately pungent, in ſmell and flavour approaching to oil of cloves, or rather a mixture of cloves and nutmegs. To rectified ſpirit it imparts, by maceration or digeſtion, the whole of its virtue: in diſtillation, it gives over very little to this menſtruum, nearly all its active power remaining concentrated in the inſpiſſated extract. Pimento can ſcarcely be conſidered as a medicine; being, however, an agreeable aromatic, it is not unfrequently employed with different drugs, requiring ſuch a grateful adjunct. In the London Pharmacopœia, both an aqueous and ſpirituous diſtilled water of the berries is directed, and the powder of them is an ingredient in ſyrup of buckthorn. The Edinburgh College order alſo the eſſential oil.

β. Short-leaved pimento. This variety has the leaves much ſhorter than the preceding, of an oval and blunt form, more like the common broad-leaved Roman myrtle.

Propagation and Culture. All the varieties of the common myrtle may be propagated from cuttings, the beſt ſeaſon for which is the beginning of July, when you ſhould make choice of ſome of the ſtraighteſt and moſt vigorous young ſhoots, which ſhould be about ſix or eight inches long, and the leaves on the lower part muſt be ſtripped off about two or three inches high, and the part twiſted which is to be placed in the ground; then, having filled a parcel of pots (in proportion to the quantity of cuttings deſigned) with light rich earth, you ſhould plant the cuttings therein, at about two inches diſtance from each other, obſerving to cloſe the earth faſt about them, and give them ſome water to ſettle it to the cuttings; then place the pots under a common hot-bed frame, plunging them either into ſome old dung or tanner's bark, which will prevent the earth from drying too faſt; but you muſt carefully ſhade them with mats in the heat of the day, and give them air in proportion to the warmth of the ſeaſon, not forgetting to water them every two or three days, as you ſhall find the earth in the pots require it.

With this management, in about ſix weeks, the cuttings will be rooted, and begin to ſhoot, when you muſt inure them to the open air by degrees, into which they ſhould be removed towards the latter end of Auguſt or the beginning of September, placing them in a ſituation where they may be ſheltered from cold winds, in which place they may remain till the middle or latter end of October, when the pots ſhould be removed into the green-houſe, but ſhould be placed in the cooleſt part thereof, that they may have air given to them whenever the weather is mild; for they require only to be protected from ſevere cold, except the orange-leaved and the ſtriped nutmeg-myrtles, which are ſomewhat tenderer than the reſt, and ſhould have a warmer ſituation. During the winter-ſeaſon, they muſt be frequently, but gently, watered; and, if any decayed leaves appear, they ſhould be conſtantly picked off; as alſo the pots kept clear from weeds, which, if permitted to grow, will ſoon overſpread the young plants, and deſtroy them. If theſe pots are placed under a common hot-bed frame in winter, where they may be ſcreened from froſt, and have the free air in mild weather, the young plants will ſucceed better than in a green-houſe, provided they do not receive too much wet, and are not kept cloſely covered, which will occaſion their growing mouldy, and dropping their leaves. The ſpring following, theſe plants ſhould be taken out of the pots very carefully, preſerving a ball of earth to the roots of each of them, and every one ſhould be put into a ſeparate ſmall pot filled with rich light earth, obſerving to water them well to ſettle the earth to their roots, and place them under a frame until they have taken root; after which they ſhould be inured to the open air, and in May they muſt be placed abroad for the ſummer, in a ſheltered ſituation, where they may be defended from ſtrong winds. During the ſummer-ſeaſon they will require to be plentifully watered, eſpecially being in ſuch ſmall pots, which in that ſeaſon ſoon dry; therefore you ſhould obſerve to place them where they may receive the morning ſun, for when they are too much expoſed to the ſun in the heat of the day, the moiſture contained in the earth of theſe ſmall pots will ſoon be exhaled, and the plants greatly retarded in their growth thereby. In Auguſt following, you ſhould examine your pots, to ſee if the roots of the plants have not made way out through the hole in the bottom of the pots, which if you obſerve, you muſt then ſhift them into pots a ſize larger, filling them up with light rich earth, and obſerve to trim the roots which were matted to the ſide of the pots, as alſo to looſen the earth from the outſide of the ball with your hands, ſome of which ſhould be taken off, that the roots may the eaſier find paſſage into the freſh earth; then you muſt water them well, and place the pots in a ſituation where they may be defended from ſtrong winds; and at this time you may trim the plants, in order to reduce them to a regular figure; and, if they are inclinable to make crooked ſtems, you ſhould thruſt down a ſlender ſtraight ſtick cloſe by them, to which their ſtems ſhould be faſtened, ſo as to bring them upright. If care be taken to train them thus while they are young, the ſtems afterwards, when they have acquired ſtrength, will continue ſtraight without any ſupport; and their branches may be pruned, ſo as to form either balls or pyramids, which for ſuch plants as are preſerved in the green-houſe, and require to be kept in ſmall compaſs, is the beſt method to have them handſome; but then theſe ſheered plants will not produce any flowers, for which reaſon that ſort with double flowers ſhould not be clipped, becauſe the chief beauty of that conſiſts in its flowers; but it will be neceſſary to ſuffer a plant or two of each kind to grow rude, for the uſe of their branches in noſegays, &c. as it will greatly deface thoſe which have been conſtantly ſheered to cut off their branches.

As theſe plants advance in ſtature, they ſhould annually be removed into larger pots, according to the ſize of their roots; but you muſt be careful not to put them into pots too large, which will cauſe them to ſhoot weak, and many times prove the deſtruction of them; therefore, when they are taken out of the former pots, the earth about their roots ſhould be pared off, and that within-ſide the ball muſt be gently looſened, that the roots may not be too cloſely confined; and then place them in the ſame pots again, provided they are not too ſmall, filling up the ſides and bottom of them with freſh rich earth, and giving them plenty of water to ſettle the earth to their roots; which ſhould be frequently repeated, for they require to be often watered both in winter and ſummer, but in hot weather they muſt have it in plenty. The beſt ſeaſon for ſhifting theſe plants is either in April or in Auguſt; for, if it be done much ſooner in the ſpring, the plants are then in a ſlow growing ſtate, and ſo not capable to ſtrike out freſh roots again very ſoon; and, if later in autumn, the cold weather coming on will prevent their taking root; nor is it adviſable to do it in the great heat of ſummer, becauſe they will require to be very often watered, and alſo to be placed in the ſhade, otherwiſe they will be liable to droop for a conſiderable time; and, that being the ſeaſon when theſe plants ſhould be placed amongſt other exotics, to adorn the ſeveral parts of the garden, theſe plants, being then removed, ſhould not be expoſed until they have taken root again, which, at that time (if the ſeaſon be hot and dry) will be three weeks or a month.

The common broad-leaved, broad-leaved Dutch, and Portugal, myrtles, may be planted abroad in warm ſituations, and upon a dry ſoil, where they endure the cold of our winter very well, only being covered in very hard froſts with mats, and the ſurface of the ground about their roots covered with a little mulch to prevent the froſt from entering the ground; but in Cornwall and Devonſhire, where the winters are more favourable than in moſt other parts of England, there are large hedges of myrtle which have been planted ſeveral years, and are very thriving and vigorous, ſome of which are upwards of ſix feet high; and, if the double-flowering kind were planted abroad, it would endure the cold as well as any of the other ſorts, it being a native of the ſouthern parts of France. This and the orange-leaved are the moſt difficult to take root from cuttings; but if they are planted towards the latter end of June, making choice of only ſuch ſhoots as are tender, and the pots are plunged into an old bed of tanner's bark which has loſt moſt of its heat, and the glaſſes ſhaded every day, they will take root extremely well. The orange-leaved, and thoſe with variegated leaves, are ſomewhat tenderer than the ordinary ſorts, and ſhould be houſed a little ſooner in autumn, and placed farther from the windows of the green-houſe.

The Ceylon myrtle is with difficulty propagated, which occaſions its preſent ſcarcity; for, as it does not produce ripe ſeeds in Europe, it can only be increaſed by layers or cuttings. By the former method the layers are commonly two years before they take root, and the cuttings frequently fail; though the latter is preferred, when performed at a proper ſeaſon and in a right method. The beſt time to plant the cuttings is in May. In the choice of them, it ſhould be the ſhoots of the former year, with a ſmall piece of the two-years' wood at bottom. Theſe ſhould be planted in ſmall pots, filled with ſoft loamy earth, for ſmall pots are to be preferred to large ones for this purpoſe, and they ſhould be plunged into a very moderate hot-bed of tanners' bark; and, if the pots are each covered with ſmall bell or hand glaſſes, ſuch as have been uſed for blowing carnations, to exclude the air, it will be of great ſervice to promote the cuttings putting out roots, though they are covered with the glaſſes of the hot-bed above them. The cuttings ſhould be ſhaded from the ſun in the heat of the day, and gently refreſhed with water, as the earth in the pots is found to dry; but they ſhould by no means have too much wet. Thoſe cuttings which ſucceed will have taken root by July, when they ſhould be gradually inured to bear the open air, into which it will be proper to remove them about the middle of that month, that they may be ſtrengthened before winter, but it will not be proper to tranſplant the cuttings till ſpring: the pots muſt be removed into a temperate ſtove in autumn; and during the winter the cuttings muſt be gently refreſhed with water. In the ſpring they ſhould be carefully taken up, and each planted in a ſmall pot filled with light earth from a kitchen-garden, and plunged into a moderate hot-bed to forward their taking freſh root; then they ſhould be gradually hardened, and in July placed in the open air in a ſheltered ſituation, where they may remain till the end of September, and then be removed into the ſtove. This plant will not live through the winter in England in a green-houſe; but, if it is placed in a moderate degree of warmth, it will flower well in winter; and in July, Auguſt, and September, the plants ſhould be placed abroad in a ſheltered ſituation. The other tender myrtles from the Eaſt and Weſt Indies may be treated in the ſame manner.

The pimento-tree is propagated by ſeeds, which in the natural place of its growth are conveyed, and ſown by birds, to a great diſtance; and, it is very probable, the ſeeds, paſſing through them, are rendered fitter for vegetation than thoſe which are immediately gathered from the tree. The plants cannot be preſerved in England, unleſs they are placed in a ſtove during the winter-ſeaſon; but they will thrive in a moderate degree of warmth. They ſhould be planted in a ſoft light ſoil, and in winter muſt have but little water. In the ſummer they ſhould have a large ſhare of air; and in July, if the ſeaſon proves warm, they may be placed in the open air, in a warm ſheltered ſituation; but upon the approach of cold nights, they muſt be removed into the ſtove again. The expoſing of theſe plants to the open air for one month only, will be of great ſervice to clean their leaves from inſects or filth, which they are ſubject to contract by remaining long in the ſtove; but, if the ſeaſon ſhould prove very wet or cold, it will not be ſafe to truſt the plants long abroad; therefore their leaves ſhould now and then be waſhed with a ſponge to clean them, which will not only render them more ſightly, but alſo promote their growth.

This tree is difficult to propagate in England, where the ſeeds do not ripen: the only method in which this has been done, is by laying down the young branches, ſlitting them at a joint in the ſame manner as is practiſed in making layers of carnations. If this be carefully performed, and the layers are regularly but gently watered, they will put out roots in one year; then they may be carefully ſeparated from the old plants, and each planted in a ſmall pot filled with light earth, and plunged into the tan-bed, either in the ſtove or under a frame, being careful to ſhade them until they have taken new root, after which they may be treated as the older plants. This plant, being an evergreen, makes a fine appearance in the ſtove at all ſeaſons of the year; and the leaves having ſuch an agreeable fragrancy when rubbed, renders them as worthy of a place in the ſtove as any other tender exotic plant which is preſerved for ornament.

As theſe plants do not riſe ſo readily from ſeeds in England, the beſt way to obtain them is to get ſome perſon of ſkill in America, to take up a number of young plants, and plant them cloſe in boxes of earth, ſetting them in the ſhade till they have taken new root; then remove them into an open ſituation where they may have time to eſtabliſh their roots before they are ſhipped for England; and in their paſſage they muſt be guarded from the ſpray of the ſea, and ſhould have very little water given them; for moſt of the plants which are ſent to England are killed in their paſſage by having too much wet. If theſe directions be obſerved, the plants may be brought in good health to England, provided they come over any time in the ſummer, that they may have time to get freſh root before the cold ſeaſon begins; and, when once they are well eſtabliſhed in their roots here, they may be preſerved many years in vigour. See CALYPTRANTHES, EUGENIA, MELALEUCA, METROSIDEROS, and MYRICA.

MYS, an artiſt famous in working and poliſhing ſilver. He beautifully repreſented the battle of the Centaurs and Lapithæ, on a ſhield in the hands of Minerva's ſtatue made by Phidias. *Pauſ.* c. 28.

MY'SA, a river of Germany, which runs into the Muldau a little above Prague.—A river which riſes in Bohemia, on the confines of Bavaria, and runs into the Muldau near Prague.

MYSCEL'LUS, or MISCEL'LUS, a native of Achaia, who founded Crotona in Italy, according to an oracle, which told him to build a city where he found rain with fine weather. The meaning of the oracle long perplexed him, till in Italy he found a beautiful woman all in tears, which circumſtance he interpreted in his favour. According to ſome, Myſcellus, who was the ſon of Hercules, went out of Argos without the permiſſion of the magiſtrates, for which he was condemned to death. The judges had put each a black ball as a ſign of condemnation, but Hercules changed them all, and made them white, and had his ſon acquitted; upon which Myſcellus left Greece, and came to Italy, where he built Crotona. *Ovid.*

MY'SECROS, in ancient geography, a river of Arabia Felix, placed by Pliny in the ſouthern part of that province.

MYSEL'F, *ſ.* An emphatical word added to *I*: as, *I myſelf* do it; that is, Not I by proxy; not another:

As his hoſt,
I ſhould againſt his murderer ſhut the door,
Nor bear the knife *myſelf*. *Shakeſpeare's Macbeth.*

The reciprocal of *I*, in the oblique caſe.—They have miſſed another pain, againſt which I ſhould have been at a loſs to defend *myſelf*. *Swift.*—*I* is ſometimes omitted, to give force to the ſentence:

Myſelf ſhall mount the roſtrum in his favour,
And try to gain his pardon. *Addiſon.*

MY'SHAL, a ſmall poſt-town of Ireland, in the county of Carlow, at the foot of Mount Leinſter. It is forty-ſeven miles ſouth-by-weſt from Dublin.

MYS'IA, in ancient geography, a ſmall country of Aſia Minor, is ſaid to have derived its name from the Lydian word *myſos*, ſignifying a beech-tree, with which tree the country abounded. It was divided, according to Strabo, into major and minor. Myſia Minor lay on the Propontis, and from thence extended to Mount Olympus, bounded by Bithynia and the Propontis on the north and weſt, by Phrygia Minor on the ſouth, and by Phrygia Major on the eaſt. Myſia Major was bounded on the north by Phrygia Minor, on the ſouth by Æolia, on the eaſt by Phrygia Major, and on the weſt by the Ægean Sea. What Strabo calls Myſia Minor, Ptolemy denominates Myſia Major; the former is alſo named *Olympena*, from Mount Olympus, and *Helleſpontiaca*, becauſe ſome towns anciently belonging to it were ſeated on the Helleſpont. That part of Myſia which lay between Ancyra of Phrygia and the river Rhyndacus, is called by Strabo *Abrettana*, and the remaining part *Morena*. The former denomination is often given to all Myſia. In the part of Myſia which lay on the Propontis were the following cities, viz. Cyzicus, Parium, and Lampſacus, which is ſtill in a tolerable good condition, ſituated in a pleaſant plain, and ſurrounded with vineyards that produce excellent wine. The Midland Myſia lay between the river Rhyndacus and Mount Ida. Here Stephanus places the city of Apollonia, on the banks of the Rhyndacus, which riſes from a lake bearing the name of the city; now called the Lake of Abouillon, twenty-five miles in compaſs and eight miles wide, interſperſed with ſeveral iſlands, the largeſt of which is three miles in circuit, and called Abouillon.

The chief rivers of Myſia Minor are the RHYNDACUS (which ſee), and the Granicus, which riſes in Mount Ida, and diſcharges itſelf into the Propontis below Parium and Cyzicus. This river was croſſed by Alexander, at the head of 30,000 Macedonians, in face of the Perſian army, which was 600,000 ſtrong, and notwithſtanding the height and ſteepneſs of its banks. It is now called the *Souſoughirli*, the name of a village which it waters. In this part of Myſia ſtands Mount Olympus, called *Olympus Myſiorum*, to diſtinguiſh it from ſeveral other mountains of the ſame name. It is one of the higheſt in Aſia, and for a great part of the year covered with ſnow.

The city of greateſt note in Myſia Major was PERGAMUS, which ſee. On the coaſt of this Myſia were ſeated the cities Antandrus, Scepſis, Aſſus, Adramyttium, and Pitane. The ſoil of this country was one of the fineſt and richeſt of Aſia, and is celebrated as ſuch by the ancients. It abounded in corn and wine, and was well ſtocked with cattle, and had a great many large plains for paſture. It was plentifully watered with ſmall rivers running down from Mount Ida and Olympus.

As to the origin of the Myſians, Herodotus informs us, that they were Lydians by deſcent. Others derive them from the Phrygians; and tell us that Myſus, from whom their name is ſaid to originate, was not a Lydian, but a Phrygian. Strabo deduces the Aſiatic Myſians from thoſe of Europe, inhabiting that part which lies between Mount Hermus and the Danube, and is now known under the names of Boſnia, Servia, and Bulgaria. As to the character of the ancient Myſians, it muſt be conſidered at different times, for they ſeem to have been once a warlike people. However, in later ages, they degenerated from the valour of their anceſtors, ſo as to be looked upon as the moſt contemptible and inſignificant nation on earth; inſomuch that the Greeks had no expreſſion to ſignify more emphatically a perſon of no worth or merit than to call him "the laſt of the Myſians." They were addicted to tears; and on that account employed by the Greeks to attend their funerals, and lament over the deceaſed. Their language was probably the ſame as the Phrygian and Trojan, with ſome variation of dialect. Nothing is known concerning their manners, cuſtoms, arts, and ſciences. That they were commercial, we may infer from their ſituation and their wealth; for they are repreſented by Philoſtratus as being in ancient times the moſt opulent nation of all Aſia. As to their religion, it was much the ſame with that of the Phrygians, with whom they vied in ſuperſtition. They worſhipped the ſame deities, and uſed the ſame religious ceremonies; whence ſome have concluded, that they were originally Phrygians. Cybele had a ſtately temple at Cyzicus; and there was another dedicated to Apollo Actæus near Parium. Nemeſis was alſo one of their deities; and Priapus was worſhipped by the more modern Myſians, but unknown to them even in the time of Heſiod. The Myſian prieſts abſtained from fleſh, and were not allowed to marry. Upon their initiation into the prieſthood, they ſacrificed a horſe, and ate his entrails.

trails. With regard to their government, it was not always monarchical; for no mention of their kings occurs till the Argonautic expedition, though ſome authors ſuppoſe they had them long before that time. After the deſtruction of Troy, and diſperſion of the Trojans, the Myſians took poſſeſſion of a great part of that country, which they held till they were conquered by Crœſus, king of Lydia. *Anc. Un. Hiſt.* vol. iv.

MYS'IA, was alſo a ſmall country of the Peloponneſus, in which, according to Pauſanias, there was a temple dedicated to the Myſian Ceres.—Alſo, a town of the Troade, placed by Strabo near Adramyttium.—Alſo, a town of Parthia, which Ptolemy places between Parbara and Cherax.

MYS'IA, a feſtival in honour of Ceres, and ſo called from Myſius, an Argian, who dedicated a temple to her, in a place about ten ſtadia diſtant from Pallene, in Achaia; or, according to Phurnentus, from μυσιαν, "to cloy, ſatisfy, or be well fed," becauſe Ceres was the firſt who taught men how to uſe corn. The feſtival continued for ſeven days, upon the third of which all the men and dogs were ſhut out of the temple, whilſt the women, together with the bitches, remained within, performing during the night the accuſtomed rites; on the following day, they returned to the men, with whom they paſſed away their time in jeſting and laughing together. *Potter's Archæol. Græc.* lib. ii. c. 20.

MYS'LOWITZ, a town of Sileſia, in the lordſhip of Pleſz, on the Brzemſa: fifteen miles north of Pleſz.

MYSOL', a iſland in the Eaſtern Indian Sea, of a triangular form, about one hundred miles in circumference, governed by a rajah. Lat. 20. S. lon. 129. E.

MY'SON, a native of Sparta, and one of the ſeven wiſe men of Greece. When Anacharſis conſulted the oracle, in order to know who was the wiſeſt man in Greece, he received a reply, "The perſon who is now ploughing his fields." This was Myſon.

MYSO'RE, or MYSOOR, [contracted from Makeſhaſoor, or "the buffalo-headed monſter."] A province of Hindooſtan, which takes its name from a town ſituated about ten miles ſouth from the river Cauvery, formerly governed by an Hindoo prince. What is called the kingdom of Myſore, includes the Myſore Proper, the countries of Bednore, Coimbetore, Canara, and Dindigul, with ſome others; the whole forming an extent of near 500 miles from north to ſouth, and near 300 where broadeſt from eaſt to weſt, though in ſome places it is hardly 100, and towards the ſouth narrowed almoſt to a point. Myſore on the north is bounded by the countries of Viſiapour and Golconda; on the eaſt by the Carnatic; on the ſouth by Madura, Travancore, and Cochin; and on the weſt by the Indian Sea.

The romantic origin of the houſe of Myſore, as Col. Wilks terms it, ſhall be given in his own words. We muſt premiſe that the tribe of Yedava, of which mention occurs in the following extract, is deſcribed to be a tribe of herdſmen and warriors. "During the period that the dominion of the rajahs of Vigeyannuggur extended, really or nominally, over the greater part of the ſouth of India, (probably then about the middle of the 15th century,) two young men, of the tribe of Yedava, named Vigeya and Kriſtna, departed from that court in ſearch of a better eſtabliſhment in the ſouth. Their travels carried them to the little fort of Hadana, a few miles from the preſent ſituation of the town of Myſore; and, having alighted, as is uſual, near to the border of a tank, they overheard ſome women of the Jungum ſect, who had come for water, bewailing the fate of a young maiden of their tribe, who was about to be married to a perſon of inferior quality. The brothers entered into the circumſtances of the caſe, deſired the women to be comforted, and offered their ſervices in defence of the damſel. She was the only daughter of the Wadeyar, (or lord of thirty-three villages,) who was afflicted with mental derangement; and in this unprotected ſtate, the chief of Carroogully, a perſon of mean caſte, had propoſed to the family, the alternative of immediate war, or the peaceable poſſeſſion of Hadana with this damſel; and to the latter propoſition, they had given a forced and reluctant conſent. The offer of the ſtrangers was made known, and they were permitted to examine the means which the family had of averting the impending danger. In conformity to their advice, no change was made in the preparations for the marriage-feaſt; and, while the chiefs of Carroogully were ſeated at the banquet in one apartment, and their attendants in another, the men of Hadana previouſly ſecreted for this purpoſe, headed by the two brothers, ſprung forth upon their gueſts, and killed them, marched inſtantly to Carroogully, which they ſurpriſed, and returned in triumph to Hadana. The damſel became the bride of Vigeya, who changed his religion (from a diſciple of Viſhnou, to one of the Jungum ſect), and became lord of Hadana and Carroogully."

In 1524, the dominions were divided, and one branch ſeated at Myſore. Shortly after, as the family had become more powerful by conqueſt, we find them becoming dilatory in their payment of tribute to the viceroy of the Vigeyannuggur empire, reſident at Seringapatam; which empire was at this time fully occupied in attempting to reſiſt the Mahometans of the Deckan. At length, in the year 1610, Seringapatam itſelf was ſubject to the houſe of Myſore. The method by which this great acquiſition was obtained, is variouſly ſtated; ſo much ſo indeed, as to preclude the chance of unravelling the true tale with hiſtorical preciſion. Moſt of the manuſcripts, which have been conſulted, concur in deſcribing the occupation as a peaceable one. Raj Wadeyar, who occupied the throne at this period, contributed in all ſurrounding quarters to the enlargement of his hereditary ſtates; and he is indeed conſidered as the founder of the kingdom of Myſore. Raj Wadeyar died in 1618, and was ſucceeded by his grandſon, who firſt built a fort on the iſland of Seringapatam; he died in 1638, and was ſucceeded by his ſon Immerie Raj, who died without iſſue; and a male relation, named Rama Canterwa-Narſa-Raj, was choſen. This rajah improved the fort of Seringapatam, built the pagoda of Narſuma-Samy, coined the gold fanams, named after him Canteria or Canterwa fanams, and made ſeveral conqueſts: he died in 1660. His grandſon Chick-Dewa Raj extended his dominions; and, from taking nine forts in one day, was called Nou-Kottah-Narna. The king of Delhi, having heard of his fame, ſent him the title of Rajah-Juggah-Deoo. He conſtructed two great aqueducts in the vicinity of Seringapatam, for the purpoſes of cultivating the land, whoſe total length is ſuppoſed to be not leſs than ninety miles: he died in 1705. During the reign of Chiaum Raj, who was elected in 1733, the government was managed by Dewa Rajahiah, the delaway or prime miniſter, and the rajah was confined like a priſoner: the ſame circumſtance happened in the following reign, when Chick Kiſna Raj became rajah, and Nunda Raj became delaway; during this time Dewanhully and Dindigul were added to the dominions of Myſore. In 1759, Hyder Ali uſurped the government, and beſieged Nunda Raj in the fort of Myſore; and, at length contrived to inveigle him into his power. The latter would not come till the former had bound himſelf, by the moſt ſolemn oaths, not to injure him. Nunda was, however, ſeized and impriſoned immediately. It was then revealed, that the ſplendid cover on which the oath had been taken enveloped only a blank-paper book; "and it was thus," ſays Mr. Wilks, "by a ſolemn mockery of the religion which they both profeſſed, that Hyder and his caſuiſts reconciled to themſelves the double crime of a falſe oath and a falſe Koran." From this time the rajah became a ſtate priſoner, and died in 1766; and his ſon was placed on the throne by Hyder's command. On the death of Chiaum II. in 1796, Tippoo Sultan did not nominate nor acknowledge a ſucceſſor. He had indeed, immediately upon the death of his father Hyder Ali, in the year 1782, (the beginning of the year 1107 of the hegira,) aſſumed the title of *ſultan*, or king, which had not been taken by either his father or grandfather; and thus became the firſt Mahometan prince who, ſince the eſtabliſhment of the Mogul empire, had openly diſclaimed the authority of the King of Delhi, or Great Mogul; and who had preſumed to impreſs coin with only his own titles. Even the government of Bengal ſtill preſerve that external mark of reſpect to the fallen repreſentative of the houſe of Timur; for, after the capture of Seringapatam in 1799, they placed on the (nominal) throne the only child of Chiaum Raj, who had been elected in 1733; and his reſidence is fixed at the town of Myſore, the ancient capital of the kingdom.

The firſt Mahometan invaſion of the Deccan was in 1293. The extinction of the Mahometan dynaſty took place in 1799.

By a miſtake in the treaty of Paris in 1763, two uſurpers were recognized as lawful ſovereigns, the Subah of the Deccan and the Nabob of the Carnatic. Of this impropriety Hyder availed himſelf to arouſe the rightful heirs and their connections againſt the Engliſh: this war broke out in 1766, and laſted (Hyder being ſupported by the French) till 1772. War was renewed in 1780, and again arreſted by the European peace of 1783. The diſputed queſtion about the lines of Travancore brought on war againſt Tippoo, the ſon and ſucceſſor of Hyder, in 1790. This was concluded by lord Cornwallis under the walls of Seringapatam in 1792. The next war was conducted by lord Mornington, now marquis Welleſley; and this, in 1799, put an end, as we have ſaid, to the Mahometan dynaſty, by the taking of Seringapatam, and the death of Tippoo Saib.

The dominions of Tippoo Saib, previous to the war, rendered his power formidable, not only from their extent and value, but alſo from their advantageous poſition; which, ſtrengthened by numerous fortreſſes, commanded the frontiers of the adjoining countries; and the reſtleſs enterpriſing ſpirit of the ſovereign obliged all around him to be in a ſtate of conſtant preparation for their defence. The ſultan's revenues, it appears, amounted annually to about two and a half millions ſterling. He was, beſides, poſſeſſed of very great treaſures, and had an army conſiſting of eighteen thouſand cavalry, fifty thouſand regular infantry, formed in brigades, completely appointed with field artillery; and twice that number of irregular infantry, employed to garriſon his forts, and for the collection of his revenues.

Whether from the operation of the ſyſtem eſtabliſhed by Hyder; from the principles which Tippoo had adopted for his own conduct; or from his dominions having ſuffered little by invaſion for ſeven years; or from the effect of theſe ſeveral cauſes united; his country was found every-where full of inhabitants, and apparently cultivated to the utmoſt extent of which the ſoil was capable; while the diſcipline and fidelity of his troops in the field, until their laſt overthrow, were teſtimonies equally ſtrong of the excellent regulations which exiſted in his army. He had been diligently employed, ever ſince the former war, in improving his army, and in ſtrengthening his principal forts; and had laid in ſuch ample ſupplies of military ſtores in his frontier poſts to the north, as ſhowed that he meditated extenſive conqueſts.

Tippoo had choſen Mahomet for his model, and wiſhed to force on every man the faith of Iſlam; he had alſo ſome ambition in literature, and compoſed memoirs of his life, intitled "The Sultan of Hiſtories." This work, which reaches down to the year 1789, is a great literary curioſity; and, as we have given one particular trait of Hyder's character from the teſtimony of others, (for Hyder could not write,) we ſhall let Tippoo ſpeak for himſelf, in the following extract, as tranſlated by Col. Wilks: "Among the memorable events of this wonderful year, (1784,) was the making Muſſulmans of the Nazarene Chriſtians. Now, *Chriſtian*, in the language of the Franks, is applied to deſignate a new convert to the religion of Jeſus, (on whoſe race be benediction and peace,) and, as a compound word, it is ſynonymous with *Eeſovian*, (perſons of the religion of Jeſus;) for in the language of the Franks *Chriſt* is a name of the Lord Jeſus. But to proceed with our ſubject. The Portugueſe Nazarenes, who, for a long period, have poſſeſſed factories on the ſea-coaſts, obtained, about three hundred years ago, an eſtabliſhment of this nature, on pretence of trade, on the coaſt of Soonda, at a place (Goa) ſituated midway in the courſe of a large river and eſtuary; and in proceſs of time, watching their opportunity, obtained from the rajah a country yielding a revenue of three or four lacs of rupees. They then proceeded to prohibit the Mahometan worſhip within theſe limits, and to expel its votaries: to the Bramins, and other Hindoos, they proclaimed a notice of three days, within which time they were at liberty to depart, and in failure to be enrolled in the new religion. Some, alarmed at the propoſition, abandoned their property and poſſeſſions; and others, deeming the whole to be an empty threat, ventured to remain; and, on the appointed day, the Nazarenes enrolled them in their own fooliſh religion. In proceſs of time, and by means of rare preſents, and flattery, and pecuniary offerings, they prevailed on the ſenſeleſs rajahs of Nuggur, Courial, (Mangalore,) and Soonda, to tolerate their farther proceedings, and began gradually to erect ſhrines and chapels; and in each of theſe *idol-temples* eſtabliſhed one or two *padrès*, that is to ſay, monks, who, deluding the weak and pliant populace, by a fluency of tongue, alternately ſoothing and ſevere, and by liberal and munificent gifts, led the way to their *aboliſhed* religion; [by aboliſhed he means merged in the ſubſequent revelations of Mahomet;] and in this manner made a multitude of Chriſtians, and continued to that day the ſame practices. When his majeſty, the ſhadow of God, was informed of theſe circumſtances, the rage of Iſlam began to boil in his breaſt: he firſt gave orders, that a ſpecial enumeration and deſcription ſhould be made and tranſmitted, of the houſes of the Chriſtians in each diſtrict: detachments, under truſty officers, were then diſtributed in the proper places, with ſealed orders, to be opened and executed, on one and the ſame day, after the firſt devotions of the morning: and, in conformity to theſe inſtructions, ſixty thouſand perſons, great and ſmall, of both ſexes, were ſeized, and carried to the reſplendent preſence: whence, being placed under proper guardians, and provided with *every thing needful*, they were diſpatched to the royal capital, and, being formed into battalions of five hundred each, under the command of officers well inſtructed in the faith, they were honoured with the diſtinction of Iſlam: they were finally *diſtributed to the principal garriſons*, with orders for a daily proviſion of food, apparel, and other requiſites: and the year of their reception into the pale of Iſlam is deſignated in the following diſtich, each hemiſtich of which contains the date: *The firmament is enlightened by the ſect of Ahmed—God is the protector of the religion of Ahmed;* and, as a diſtinctive appellation for this race, they were thenceforth called *Ahmedy*." A proceeding of this horrible nature, recorded in his own words, and ſung by the laureat of the court as one of the exploits of his reign, gives an authentic impreſs of mind, which no profeſſed delineation of character is capable of conveying: the true numbers were about thirty thouſand: the murderous conſequences of thus wantonly driving off the peaceful and unoffending inhabitants of his own country into captivity and agony, were not ſo fatal as in ſome ſubſequent caſes when the captives were excluſively from the ſea-coaſt; but, as far as could be aſcertained from conjecture, one-third of the number did not ſurvive the firſt year.

A vaſt diſtrict has been added to the Britiſh government by the completed conqueſt of the Myſore. To the intolerance of Iſlamiſm has ſucceeded the liberty of a more philoſophic ſway; and to the perſonal deſpotiſm of an iraſcible and cruel prince the mild ſuperintendence of

Engliſh gentlemen. Under a ſecurer and more ſkilful government, the whole ſurface of the country will be embelliſhed; traffic will ſmooth and decorate its roads; induſtry will widen and variegate its bazaars; and agriculture will ſuſpend in huger tanks its hoards of irrigation. Laſtly, to the intellectual twilight of manuſcript literature will ſucceed the radiations of the preſs of Calcutta; and manners will acquire a nobler tendency from intercourſe with the exemplary civilization of European reſidents.

Cotemporary events have not often been employed as themes of the epopea: yet it would be difficult to indicate any hiſtorical incident of equal importance, ſo glorious in its conduct and ſo flattering to national feelings, which for unity and majeſty of fable, for progreſſive intereſt and deciſive ſolution, is ſo well fitted to the purpoſes of the poet, and ſo capable of mythological decoration, as this final conqueſt of the Myſore. The ancient divinities of Hindooſtan, not in alliance indeed with the ſaints of Chriſtianity, but with the higher powers of its empyreum, have driven the demons of Iſlamiſm from their moſques, and buried the ſabre of perſecution in the tomb of the perſecutor. *Wilks's Hiſtorical Sketches of the South of India*, vol. i. See alſo the article HINDOOSTAN, vol. x. p. 98, 99, 100. and the places there referred to; and the article HYDER ALI, in the ſame volume.

MYSO'RE, a fortified town of Hindooſtan, anciently the capital of the country ſo called: ten miles ſouth of Seringapatam.

MYSTAGO'GICAL, *adj.* Belonging to a myſtagogue.

MYS'TAGOGUE, *ſ.* [from the Gr. μυϛης, a teacher of ſacred things, and αγωγος, a leader.] One who interprets divine myſteries; alſo one who keeps church-relics, and ſhows them to ſtrangers.—The *myſtagogue* taught them, that Jupiter, Mercury, Bacchus, Venus, Mars, and the whole rabble of licentious deities, were only dead mortals. *Warburton's Div. Leg.*

MYS'TAGOGY, *ſ.* An initiation into the myſteries of religion; the act of initiating into ſacred myſteries.

MYS'TAX, *ſ.* in botany. See HUGONIA.

MYSTE'RIAL, *adj.* [from *myſtery.*] Containing a myſtery or enigma:

Beauty and love, whoſe ſtory is *myſterial,*
In yonder palm-tree and the crown imperial,
Do, from the roſe and lily ſo delicious,
Promiſe a ſhade, ſhall ever be propitious
To both the kingdoms. *B. Jonſon's Maſques.*

MYSTE'RIARCH, *ſ.* [from the Gr. μυϛηριον, a myſtery, and αρχος, a chief.] One who has the charge or management of ſacred myſteries.

MYSTE'RIOUS, *adj.* [from *myſtery.*] Inacceſſible to the underſtanding; awfully obſcure:

Then the true Son of knowledge firſt appear'd,
And the whole dark *myſterious* clouds were clear'd.
Denham.

Artfully perplexed.—Thoſe princes who were diſtinguiſhed for *myſterious* ſkill in government, found, by the event, that they had ill conſulted their own quiet, or the happineſs of their people. *Swift.*

MYSTE'RIOUSLY, *adv.* In a manner above underſtanding.—Obſcurely; enigmatically.—Each ſtair *myſteriouſly* was meant. *Milton's Paradiſe Loſt.*

MYSTE'RIOUSNESS, *ſ.* Holy obſcurity.—My purpoſe is, to gather together into an union all thoſe ſeveral portions of truth, and differing apprehenſions of *myſteriouſneſs.* *Bp. Taylor's Worthy Communicant.*—Artful difficulty or perplexity.

To MYS'TERIZE, *v. a.* To explain as enigmas.—*Myſterizing* their enſigns, they make the particular ones of the twelve tribes accommodable unto the twelve ſigns of the zodiack. *Brown's Vulg. Err.*

MYS'TERY, *ſ.* [μυϛηριον, Gr.] Something above human intelligence; ſomething awfully obſcure.—If God ſhould pleaſe to reveal unto us this great *myſtery* of the Trinity, or ſome other *myſteries* in our holy religion, we ſhould not be able to underſtand them unleſs he would beſtow on us ſome new faculties of the mind. *Swift.*

They can judge as fitly of his worth,
As I can of thoſe *myſteries* which heaven
Will not have earth to know. *Shakeſpeare's Coriol.*

An enigma; any thing artfully made difficult.—To thy great comfort in this *myſtery* of ill opinions, here's the twin-brother of thy letter. *Shakeſpeare's Merry Wives of Windſor.*

Important truths ſtill let your fables hold,
And moral *myſteries* with art unfold. *Granville.*

A trade; a calling; [from *meſtier,* Fr. a trade.]—*Myſtery* is a ſpecious and eaſy corruption of *maiſtery* or *maſtery*, the Engliſh of the Latin *magiſterium,* or *artificium;* in French, *maiſtriſe, meſtier, meſtrie.* *Warton's Hiſt. of Eng. Poetry.*—Chaucer writes it *miſtere:*

In youth he lerned hadde a good *miſtere:*
He was a wel-good wright, a carpentere. *Chaucer.*

Inſtruction, manners, *myſteries,* and trades,
Degrees, obſervances, cuſtoms, and laws,
Decline to your confounding contraries. *Shakeſpeare.*

MYSTERY, in its modern acceptation, imports ſomething above human intelligence, ſomething awfully obſcure and enigmatical; any thing artfully made difficult; the ſecret of any buſineſs or profeſſion. The word is often uſed by the founder of the Chriſtian religion, and more frequently by his apoſtles, eſpecially St. Paul. In theſe caſes, it generally ſignifies thoſe doctrines of Chriſtianity which the Jews, prior to the advent of the Meſſiah, either did not or could not underſtand.

The word comes from the Greek μυϛηριον; and that, according to ſome etymologiſts, from μυω, I ſhut, and ϛομα, mouth; but it ſeems derived, with more propriety, from the Hebrew סתר, *ſatar,* to hide; whence is formed מסתר, miſtar, *a hidden thing.*

Myſtery is primarily uſed in ſpeaking of certain truths revealed in Scripture, into the full underſtanding of which human reaſon cannot penetrate. Such are the doctrines of the Trinity, the Incarnation, &c. We have an epitome of the myſteries of faith, or the myſteries of Chriſtianity, in the ſymbols or creeds ſaid to have been compoſed by the apoſtles, the council of Nice, and St. Athanaſius. In ſome of theſe, mention is made of the myſtery of the Trinity; the myſteries of the incarnation of the Son of God, his death and paſſion, and his deſcent into hell, for the redemption of mankind; of his reſurrection the third day, his aſcenſion into heaven, his ſitting on the right hand of God, and his coming again to judge the world; of the divinity and coequality of the Holy Ghoſt with the Father and the Son; of the unity of the church; of the communion of ſaints; the participation of the ſacraments; and the general reſurrection. Such are the principal myſteries of faith; which the church declares neceſſary to be known and believed, in order to ſalvation.

From the earlieſt ages there have been particular feſtivals inſtituted in honour of theſe myſteries; to return thanks to God for having revealed them, and to oblige the miniſters and paſtors to inſtruct the people in them. Such are the feaſts of the myſtery of the Incarnation, called alſo Chriſtmas; thoſe of the Circumciſion, Paſſion, Reſurrection, &c.

The heathens alſo had their *myſteries,* particularly thoſe of Ceres (ſee ELEUSINIA), the Bona Dea, &c. Thoſe who revealed the myſteries of the Bona Dea were ſeverely puniſhed; and none were truſted with them but thoſe ſolemnly initiated, and ſworn to ſecrecy. But theſe were not called myſteries, as being incomprehenſible, or raiſed above the power of reaſon; but becauſe they were covered and diſguiſed under types and figures, to raiſe the greater veneration in the people.

At the concluſion of the myſteries of Eleuſis, the congregation was diſmiſſed in theſe words: Κονξ, Ὀμ, Παξ. Theſe myſterious words have been conſidered hitherto as inexplicable: but they are pure Shanſcrit, and uſed to this day by Brahmins at the concluſion of religious rites. They are thus written in the "language of the gods," as the Hindoos call the language of their ſacred books, *Canſcha, Om, Pacſha.* Now *Canſcha* ſignifies the object of our moſt ardent wiſhes. *Om*, or *Ohm*, is the famous triliteral monoſyllable uſed both at the beginning and concluſion of a prayer, or any religious rite, like Amen. *Pacſha* exactly anſwers to the obſolete Latin word *Vix*; it ſignifies change, courſe, ſtead, place, turn of work, duty, fortune. It is uſed particularly after pouring water in honour of the gods. It appears alſo from Heſychius, 1. That theſe words were pronounced aloud at the concluſion of every momentous tranſaction, religious or civil. 2. That when judges, after hearing a cauſe, gave their ſuffrages, by dropping of pebbles of different colours into a box, the noiſe made by each pebble was called by one of theſe three words, (if not by all three,) but more probably by the word *pacſha*; as the turn, or *pacſha*, of the voting judge, was over. When lawyers pleaded in a court of juſtice, they were allowed to ſpeak two or three hours, according to the importance of the cauſe; and for this purpoſe, there was a *clepſydra*, or water-clock, ready, which, making a certain noiſe at the end of the expired *pacſha*, or turn, this noiſe was called *pacſha*, &c. The word *pacſha* is pronounced *vacſh* and *vact* in the vulgar dialects; and from it the obſolete Latin word *vix* is obviouſly derived. The Greek language has certainly borrowed largely from the Shanſcrit; but it always affects the ſpoken dialects of India; the language of the Latins, in particular, does, which is acknowledged to have been an ancient dialect of the Greek. *Aſiatic Reſearches*, vol. v.

The myſteries of paganiſm were uſually celebrated in caves and grottos, fitter for the concealment of crimes than the celebration of religious rites. The temples in theſe ſecret receſſes were ſo conſtructed as to favour the artifices of prieſts. Some veſtiges of theſe ſubterraneous apartments, which by their gloom diffuſed an air of ſolemn ſecrecy, and, by the hieroglyphic paintings and ſculptures that covered their walls, anſwered the ſame purpoſe, have been diſcovered by ſome modern travellers. Each of the pagan gods had, ſays biſhop Warburton, beſides the public and open, a ſecret worſhip paid them; into which none were admitted but thoſe who had been ſelected by preparatory ceremonies, called initiation. This ſecret worſhip was termed the *myſteries.* The firſt and original myſteries of which we have any account, were thoſe of Iſis and Oſiris in Egypt; (ſee EGYPT, vol. vi. p. 369, & ſeq.) From the Egyptians they were derived to the Greeks, under the preſidency of various gods, ſuch as the inſtitutor thought moſt ſuitable to his purpoſe; and, in proceſs of time, theſe myſteries were diſſeminated through the northern and weſtern nations of Europe.

The learned prelate above named obſerves, that the nature and end of all theſe myſteries were the ſame, viz. "to teach the doctrine of a future ſtate." He repreſents the deſign of them in general to have been, to engage men to a holy and virtuous practice, to give them juſt notions of religion, and to detect the error of the vulgar polytheiſm. And he concludes his account of the myſteries with obſerving, that there were three things about which they were principally concerned; viz. 1. The riſe and eſtabliſhment of civil ſociety. 2. The doctrine of a future ſtate of rewards and puniſhments. 3. The error of polytheiſm, and the principle of the unity of the Supreme Being. Which latter was the object of the greater myſteries, in which the whole deluſion of paganiſm was diſcloſed, and the initiated were inſtructed, that Jupiter, Mercury, Venus, Mars, and the whole rabble of licentious deities, were only deified mortals; and that God alone was the creator of the univerſe, who pervaded all things by his virtue, and governed all by his providence: whereas in the leſs myſteries, which were preparatory to the other, the general belief of a providence and future ſtate, and its conſequent engagements to a virtuous life, were inculcated. But as theſe myſteries, according to the biſhop's hypotheſis, were an inſtitution of the ſtate for a benefit of the people, it is natural to inquire into the reaſons of their being kept ſecret, which, he ſays, were the following. Nothing ſtimulates curioſity like that which retires from obſervation, and ſeems to forbid ſearch; and yet there was a neceſſity of teaching ſome things to the initiated, not expedient for others to know; hence he obſerves, that the ſecret in the leſs myſteries was ſome hidden rites and ſhows, to be kept from the people, only to invite their curioſity; and that the ſecret in the greater was ſome hidden doctrines to be kept from the people for the contrary purpoſe. Beſides, as the legiſlators had been principally concerned in the riſe of the vulgar polytheiſm, this circumſtance furniſhed another reaſon for the ſecrecy attending theſe myſteries. And that theſe myſteries were invented, eſtabliſhed, and ſupported, by the legiſlature, he argues from the place of their origin, which was Egypt, where all religious worſhip was formed and propagated by ſtateſmen, and directed to political ends, becauſe the ſages who brought them out of Egypt, and propagated them in Aſia, Greece, and Britain, were all kings or legiſlators; becauſe the ſtate preſided in the myſteries; becauſe, according to their original inſtitution, neither ſlaves nor foreigners, who had no concern, no property, and no country, were to be admitted into them; becauſe an inſtitution which taught the neceſſity of a ſtrict and holy life, muſt be the invention of legiſlators, to whoſe ſcheme virtue and the proſpect of immortality were ſo neceſſary; and hence they were actually of infinite uſe to the ſtate; and finally, from the expreſs teſtimony of Plutarch, who, in his Treatiſe of Iſis and Oſiris, aſcribes them to this original. However, theſe myſteries, in proceſs of time, greatly degenerated: one cauſe of their corruption ſeems to have been the ſeaſon in which they were performed, and the profound ſecrecy obſerved in them; for the night gave opportunity to wicked men to attempt evil actions; and the ſecrecy, encouragement to perpetrate them. Another cauſe of their depravation was their being ſometimes under the patronage of thoſe deities who were ſuppoſed to inſpire and preſide over irregular paſſions; ſuch as Bacchus, Venus, and Cupid; to which the biſhop adds the hierophant's withdrawing himſelf from the care and inſpection of the civil magiſtrate. Such is the ingenious and plauſible ſcheme largely diſcuſſed and maintained by Dr. Warburton, in his "Divine Legation," book ii. ſec. 4.

Other learned writers, however, have advanced a very different opinion on this ſubject. Some, who have allowed that the myſteries originated in Egypt, which is the moſt probable opinion, have aſcribed their inſtitution to the prieſts; who eſtabliſhed them, from motives of prieſtcraft, to aggrandize their order, to extend their influence, and to increaſe their revenues. Accordingly, they annexed to the obſervance of them every circumſtance that tended to delude the multitude, to gratify their ſenſes and paſſions, and to promote among them the influence of ſuperſtition and enthuſiaſm. At a ſubſequent period, it is not at all unlikely that princes and legiſlators would avail themſelves of the advantages which they might derive from theſe inſtitutions for eſtabliſhing their own power, and accompliſhing their own plans of government. Moſheim, in his edition of Cudworth's Intellectual Syſtem, ſuggeſts that the myſteries were altogether commemorative; and that they were eſtabliſhed with a view of preſerving the remembrance of heroes and great men, who had been deified in conſideration of their martial exploits, uſeful inventions, and public virtues; and more eſpecially in acknowledgment of the benefits conferred by them on their contemporaries. To this purpoſe, he conceives, that the myſteries of Mithras in particular were inſtituted; (ſee MITHRAS, vol. xv.) And he aſcribes to the ſame origin the myſteries of the Egyptians, Phœnicians, Greeks, and Etruſcans, and indeed all other ſimilar inſtitutions throughout the world. But it does not appear from any hiſtorical records, that this deſign was ever declared and avowed in their original appointment; and we know, that the names and illuſtrious deeds of the heroes of antiquity were commemorated, with profeſſed intentions, by feſtivals, games, ſacrifices, hymns, and other ſuch inſtitutions, obſerved in honour of them.

Dr. Leland, in particular, has very accurately examined the origin and ends of the inſtitution of myſteries. According to this writer, they ſeem to have been originally deſigned to tame and civilize the rude and barbarous people, to form and poliſh their manners, and by ſhows and repreſentations, which were fitted to ſtrike the imagination, to bring them to a greater awe and veneration for the laws and religion of their country; which, among the Pagans, was always regarded as a neceſſary ingredient in a virtuous character. On this account they are highly commended by Cicero, de Leg. lib. ii. cap. 14. as they tended to reclaim men from a rude and ſavage life; and they were called *initia*, becauſe they furniſhed the firſt principles of a human and civilized life. But, whatever was the original intention of theſe myſteries, there is great reaſon to apprehend, that, upon the whole, they proved rather detrimental than advantageous to the cauſe of virtue; and the corruption of them ſeems to have been owing to a fundamental defect in their original conſtitution. Dr. Leland farther examines whether, and how far, the myſteries were deſigned to detect the error of polytheiſm, and to inſtruct the initiated in the knowledge of the one true God. With reſpect to this point, he maintains, that the whole evidence, produced by biſhop Warburton, amounts only to this; that in the myſteries the initiated were inſtructed that the popular deities had been once men; but no proof is brought, that the αποῤῥητα overthrew the vulgar polytheiſm, the worſhip of dead men: nay, the inſtitutors of the myſteries, whilſt they taught the initiated that the gods, commonly received, had been once men, took care that the public religion ſhould not ſuffer by it, by letting them know, that, notwithſtanding this, they ought to be regarded as gods, and to have that divine worſhip and honour rendered to them, which ancient tradition and the laws required. The Chriſtians, indeed, argued from the hiſtory of the heathen gods to diſprove their divinity: and this was probably the reaſon why the myſtagogues were very careful, in their entrance on the celebration of the myſteries, that no Chriſtian ſhould be preſent at them.

Dr. Leland farther contends, that the doctrine of the unity was not taught in the myſteries. With this view he examines the teſtimonies adduced by the biſhop, which, he ſays, afford no ſufficient evidence that they taught the doctrine of the unity. Beſides, there is great reaſon to think, that the notion given of the Deity in the myſteries was not very right and juſt: and moreover, if they had taught juſt notions of God, theſe could be of no great uſe, becauſe they taught this part of the ſecret doctrine of the myſteries to very few perſons. It is farther urged, that the legiſlators and civil magiſtrates, who firſt inſtituted the myſteries, and who regarded not truth but utility, could never, in good earneſt, attempt to draw the people off from that polytheiſm, which they themſelves had encouraged for the eſtabliſhment and welfare of the ſtate, and to keep the people under a greater veneration for the laws. And the myſteries ſeem to have been deſigned, not to diſcard the worſhip of the deities, to whom they were appropriated, but to add a greater ſolemnity to it. To which it may be added, from fact and experience, that though the myſteries were generally celebrated in almoſt all the heathen nations, and eſpecially throughout the whole Roman empire, no effect of them appears in turning any of the people from their polytheiſm or idolatry: nor is it conceivable, if the deſign of the myſteries were as laudable as Dr. Warburton repreſents, that the ancient Chriſtian writers ſhould have ſo univerſally exclaimed againſt them. Many of theſe had been converted from Heatheniſm to Chriſtianity, and, while they were Heathens, had been initiated into both the leſs and greater myſteries; ſo that they were thoroughly acquainted with their nature and deſign. If they had known that the myſteries obliged thoſe who were initiated to lead a virtuous and holy life, and that they were deſigned to overturn polytheiſm, and to proſelyte men from the worſhip of idols to that of the one true ſupreme God, they muſt have had a good opinion of them; and, in their apologies for Chriſtianity, they would naturally have been induced to ſpeak favourably of them. Whereas, in diſcourſes addreſſed to the Heathens themſelves, they frequently ſpeak of the myſteries in terms of the greateſt abhorrence, as impure and abominable, and as tending rather to confirm the people in their idolatry than to draw them from it. On this occaſion it will be ſufficient to ſelect the teſtimony of Clemens Alexandrinus, who was a man of learning and probity. From the accounts which he gives from his perfect knowledge of them, it appears, that the repreſentations made in the myſteries were agreeable to the fables of the poets and mythologiſts, concerning Jupiter, Bacchus, Ceres, Proſerpina, and other deities; that in the Eleuſinia ſacra, they celebrated the rape of Proſerpina, the lamentations of Ceres, her wanderings in queſt of her daughter, her congreſs with Jupiter, and ſupplications to him, with ſeveral other particulars which were both riduculous and obſcene. He calls thoſe who brought theſe myſteries from Egypt into Greece, "the fathers of an execrable ſuperſtition, who ſowed the ſeed of wickedneſs and corruption in human life;" and ſays, "the myſteries were full of deluſion and portentous repreſentations, calculated to impoſe upon the people." He concludes his account of them by ſaying, "theſe are the myſteries of atheiſtic men. I may rightly call thoſe atheiſts, who are deſtitute of the knowledge of him who is truly God, and moſt impudently worſhip a boy torn in pieces by the Titans, a woman lamenting, and the parts which modeſty forbids to name." And he repeats it again, that "they are ignorant of God, and do not acknowledge that God who is, or really exiſts." Euſebius tranſcribes and approves this deſcription of the myſteries by Clemens. The account which Arnobius, who had been a learned Pagan, gives of the myſteries, particularly of the Eleuſinian myſteries, celebrated at Athens, coincides with that of Clemens.

In order to evade the force of theſe teſtimonies, the learned prelate obſerves, that the ancient Chriſtian writers bore a ſecret grudge to the myſteries for their injurious treatment of Chriſtianity at its firſt appearance in the world; but this apology intimates, that the myſtagogues and managers of the myſteries did what they could to uphold the common polytheiſm and idolatry; and that this was the cauſe of their enmity to Chriſtianity. They repreſented the Chriſtians as atheiſts, becauſe they declaimed againſt the worſhip of the publicly-adored deities. Whereas if the deſign of the ſecret doctrine of the greater myſteries had been to detect the error of the vulgar polytheiſm, and to teach the initiated that the popular deities were really no gods, the charge might have been retorted upon themſelves. Nor is it ſufficient to allege with the biſhop, that the ancient fathers of the church, after all which they ſaid againſt them, ſtudiouſly and formally transferred the terms, phraſes, rites, ceremonies, and diſcipline, of theſe odious myſteries, into our holy religion; for the Chriſtians, though they did not conſider them as deſigned to detect and overthrow the popular polytheiſm, but the contrary, were fully apprized of the veneration that was generally paid to them, and therefore applied to their own uſe the terms made uſe of in thoſe myſteries, the better to gain upon the Heathens, and to ſhow that Chriſtianity did in reality effect that which the Pagan myſteries vainly pretended to do. *Leland's Advantage and Neceſſity of the Chriſtian Revelation*, vol. i. c. 9.

Mystery, in ſcripture-language, is uſed with ſome latitude. Sometimes it denotes any thing not to be known without divine revelation. It is alſo uſed to denote the ſecret things which God has diſcovered by his miniſters, the prophets, Jeſus Chriſt, and the apoſtles.

Dr. Campbell, in his "Preliminary Diſſertations," obſerves, that, after the moſt careful examination of all the paſſages in the New Teſtament in which the Greek word μυστηριον occurs, and after conſulting the uſe made of the term by the ancient Greek interpreters of the Old, and borrowing aid from the practice of the Helleniſt Jews in the writings called Apocrypha, he can find only two ſenſes, nearly related to each other, which can ſtrictly be called ſcriptural. The firſt and leading ſenſe of the word is *arcanum*, a ſecret, any thing not diſcloſed, not publiſhed to the world, though perhaps communicated to a ſelect number. This is totally different from the current ſenſe of the Engliſh word *myſtery*, or ſomething incomprehenſible. In the former acceptation, a thing was no longer a myſtery than whilſt it remained unrevealed; in the latter, a thing is equally a myſtery after the revelation as before. To the former we apply, properly, the epithet "unknown;" to the latter, we may, in a great meaſure, apply the term "unknowable." Thus, that God would call the Gentiles, and receive them into his church, was as intelligible, or comprehenſible, as that he had once called the deſcendants of the patriarchs, or as any plain propoſition, or hiſtorical fact. Yet, whilſt undiſcovered, or, at leaſt, veiled under figures and types, it remained, in the ſcriptural idiom, a myſtery, having been hidden from ages and generations. But, after it had pleaſed God to reveal this his gracious purpoſe to the apoſtles, by his ſpirit, it was a myſtery no longer. The terms communication, revelation, manifeſtation, connected with that of *myſtery*, and bearing relation to it, plainly ſhow the import of the term to which they are applied. This is a point that ſeems to be univerſally acknowledged by the learned, and therefore, it is merely neceſſary to refer the judicious reader, for further proof of it from the New Teſtament, to the following paſſages, viz. Rom. xvi. 25, 26. 1 Cor. ii. 7, 8, 9, 10. Epheſ. i. 9. iii. 3, 5, 6, 9. vi. 19. Col. i. 26, 27. in all which it will be plainly perceived, that the apoſtle treats of ſomething which had been concealed for ages, but was then openly revealed; and not of any thing in its own nature dark and inconceivable. According to the uſage of the LXX, we ſhall find that, in the prophecy of Daniel, (ii. 18, 19, 27, 30, 47. iv. 9.) the word of μυστηριον occurs not fewer than nine times, anſwering always to the Chaldaic רזא, *raza*, "a thing concealed," and uſed in relation to Nebuchadnezzar's dream, which was become a "ſecret" even to the dreamer himſelf, as he had forgotten it. In the common verſion it is uniformly rendered *ſecret*, and it is found connected with the verbs γνωριζω, φωτιζω, and αποκαλυπτω, in a manner ſimilar to the uſage of the New Teſtament already noticed. In the apocryphal writings, the word μυστηριον frequently occurs in the ſame ſenſe, and is uſed in reference to human ſecrets, as well as to divine. Indeed, in the New Teſtament the word is not confined to divine ſecrets. Thus, the apoſtle, ſpeaking of the antichriſtian ſpirit, ſays, (2 Theſſ. ii. 7.) *The myſtery of iniquity doth already work*; "The ſpirit of antichriſt hath begun to operate; but the operation is latent and unperceived." Both the goſpel of Chriſt and the ſpirit of antichriſt are equally denominated *myſtery*, or ſecret, whilſt they remained concealed.

In the New Teſtament the word ſometimes bears another meaning. It is ſometimes employed to denote the figurative ſenſe, as diſtinguiſhed from the literal, which is conveyed under any fable, parable, allegory, ſymbolical action, repreſentation, dream, or viſion. In this caſe the term is uſed comparatively; the meaning being obſcure compared with the literal ſenſe. To this import of the term our Lord probably refers (Mark, iv. 11.) when he ſays to his diſciples, "To you it is given to know the *myſtery* of the kingdom of God; but to them that are without, all theſe things are done in parables." The apoſtles were let into the ſecret, and got the ſpiritual ſenſe of the ſimilitude, whilſt the multitude amuſed themſelves with the letter, and ſearched no further. In this ſenſe μυστηριον is uſed Rev. i. 20. xvii. 7. and Epheſ. v. 32.

Dr. Campbell obſerves, that the earlieſt perverſion of this word μυστηριον from its genuine and original ſenſe, a "ſecret," or ſomething concealed, was the application of it to denote ſome ſolemn and ſacred ceremony. What led to this uſe of the term was a reſemblance in one particular between ſome rites of Chriſtian worſhip and thoſe performed by Heathens in honour of their deities, and denominated, from their ſecrecy, *myſteries*. Although thoſe ceremonies to which we refer, and which were practiſed in the Chriſtian church, were eſſentially different from all Pagan rites, yet they ſo much reſembled the latter, in the excluſion of the multitude, as to give the Heathens occaſion to ſtyle them the *Chriſtian myſteries*. The term would probably be firſt applied, in this ſenſe of it, to what was called in the primitive church "the Euchariſt," or as it is now denominated "the Lord's ſupper," and afterwards extended to "baptiſm," and other ſacred ceremonies. The name ſeems to have originated with the Heathens, and in proceſs of time was adopted by Chriſtians themſelves. One paſſage has been mentioned in which the word μυστηριον ſeems to have been uſed in the modern ſenſe of the Engliſh word *myſtery*, and to denote ſomething which, though revealed, is inexplicable, and, to human faculties, unintelligible. The words are, *Without controverſy, great is the myſtery of godlineſs*, &c. 1 Tim. iii. 16. which, as they occur in our verſion, differ from the reading of the two moſt ancient verſions, the Syriac and the Vulgate, and ſome of the oldeſt MSS. The purport of this ſentence is conformable to the ſenſe above given of the term μυστηριον; and it is plainly this; "Great unqueſtionably is the divine ſecret, of which our religion brings the diſcovery," &c.

A popular preacher of the laſt century, after obſerving that a myſtery, in the ſcripture ſenſe of it, is a thing that natural reaſon could not diſcover, and, conſequently, which muſt have been unknown if God had not revealed it, nevertheleſs acknowledges, that of this kind there are ſeveral doctrines in the Chriſtian religion: before the revelation was given, they were myſteries; but ceaſe to be myſteries now they are revealed. To this purpoſe he cites Mark, iv. 11. Rev. xvi. 25. 1 Cor. xv. 51. Hence this writer infers, that myſteries, i. e. things which reaſon cannot diſcover, and which are not revealed, are, according to the language of Scripture (Deut. xxix. 29.) *the ſecret things that belong to God*, and what we have nothing at all to do with; or, in other words, though certain things are parts of our religion that *were* myſterious, it is not our duty to believe or practiſe any thing that is *ſtill* a myſtery. To believe doctrines that are *ſtill* myſterious is to believe without *ideas*, to believe what we know nothing of; but this, in the nature of the thing, is *impoſſible*. We may indeed, he allows, believe that there is *ſome general truth* contained in propoſitions which we do not underſtand; and ſo far our faith may be rational, becauſe we know what we believe; but of the propoſitions themſelves, we can believe nothing *particularly*, becauſe we underſtand nothing: nor can greater diſhonour be done to the infinite wiſdom of God than by ſuppoſing that he has made it a part of our religious obligation only to believe in general, that there is ſome truth diſguiſed under unintelligible terms, to which we have no ideas. For this is making no *revelation* at all, but leaving things in abſolute darkneſs. And, if we examine the doctrines of the Chriſtian religion, we ſhall find in fact, ſays this writer, that they are plain and eaſy truths; and that, as we cannot in *reaſon*, we are not obliged by *revelation*, to carry our faith one jot beyond our underſtanding. If it ſhould be ſaid, that we cannot account for the *manner* of God's creating the world, or for the *manner* in which he exiſts every-where, of the general reſurrection, and the like, this author replies, that it is no part of our *religion* to account for it. "Where the *myſtery* begins, *religion* ends." Does the moſt warm and forward enthuſiaſt pretend to believe more than that thoſe things are true? Does he believe any thing at all with reſpect to the *manner* of them? Nay, is not his urging that it is myſterious and incomprehenſible a demonſtration, that he himſelf knows he can believe nothing *particularly* about it? It is yet more ſtrange to talk of *myſterious precepts* than of unintelligible doctrines; for laws that are not underſtood can, moſt certainly, never be obeyed. "It is indeed very ſurpriſing," as this author proceeds, "that mankind, in all ages, have been ſo fond of myſteries. That the crafty and deſigning, who make a gain of the credulity of the multitude, ſhould uſe all their art and intereſt to propagate them, is indeed natural enough; but why ſhould the more honeſt and diſintereſted part of the people plead ſo zealouſly for them? Whence comes it to paſs, that, when they chooſe to ſee their way plain before them in all other caſes, they ſhould affect to be without light in matters of religion? Religion is of vaſtly greater importance than the common affairs of life, and this they readily acknowledge; and yet they ſeem to like it the better, the leſs they underſtand it. Such a conduct is very unaccountable, becauſe there can, one would think, be no motive to it. Myſteries yield neither pleaſure nor profit. For as, with reſpect to the works of nature, all our pleaſure ariſes from the perception of beauty, harmony, and uſefulneſs; and, however we may imagine innumerable ſecret beauties which we have not diſcovered, yet until they are known they afford no real ſatisfaction, nor can we reap any advantage from them; it is juſt the ſame with reſpect to myſteries in *religion*; we can neither be delighted nor profited by them, becauſe we do not underſtand them; i. e. in other words, they are really nothing at all to us. Nay, we cannot ſo much as *admire* them; becauſe admiration neceſſarily ſuppoſes, that we have a knowledge of the grandeur, or of the worth and excellency, of the object. The utmoſt that can be ſaid therefore is, that we are confounded and puzzled.

"However, if this were all, a man would only prove himſelf a *weak* (and might at the ſame time be an *innocent*) enthuſiaſt, by ſuppoſing things that are, in truth, *nothing* to him, to be important parts of revelation. But, when myſteries are propagated with zeal, and impoſed on conſcience; when, for the ſake of what is allowed to be *incomprehenſible*, the plain and indiſpenſable obligations of juſtice and charity are infringed and violated, (of which the hiſtory of the Chriſtian church, in almoſt every age, affords many flagrant examples,) it is then our duty to oppoſe an error which makes religion contemptible, and ſtrikes at the foundation of Chriſtianity, and, indeed, of all good morals. I ſhall only add, that there is a great difference between a *myſtery* and a direct abſurdity and contradiction, ſuch as *tranſubſtantiation* and other doctrines which have been ſcreened under that more venerable name; for *myſteries* are only things that we certainly know *nothing at all of*, the *other things* we certainly know to be *falſe*;—the former we only *do not* underſtand, the latter we ſee *cannot* be underſtood." Foſter's Sermons, vol. i. ſerm. 7.

Although we may reaſonably be required to believe, on the unqueſtionable evidence of divine teſtimony, doctrines which we cannot adequately comprehend and ſatiſfactorily explain, and to comply with precepts, as rules of conduct on the authority that enjoins them, the deſign and uſe of which we do not clearly perceive, at leaſt, when they are firſt propoſed, we can never admit the rant, as Dr. Watts has properly called it, of Tertullian, *Credo, quia impoſſibile eſt;* "I believe becauſe it is impoſſible;" nor undertake to vindicate the language of the celebrated lord Bacon, who ſays that "we muſt not ſubmit the myſteries of faith to our reaſon;" or to concur with an eminent prelate (the late Dr. Hurd) in his deſcription of certain doctrines "at which reaſon ſtands aghaſt, and faith herſelf is half confounded," and which, according to the expreſſion of another pious biſhop (Beveridge) "would be ridiculed as abſurdities, if they were not to be adored as myſteries."

MYS'TERY, *ſ.* [*miſtere*, old Fr.] A kind of ancient dramatic repreſentation.—Dramatick poetry, in this and moſt other nations of Europe, owes its origin, or at leaſt its revival, to thoſe religious ſhows, which in the dark ages were uſually exhibited on the more ſolemn feſtivals. At thoſe times they were wont to repreſent, in the churches, the lives and miracles of the ſaints, or ſome of the more important ſtories of Scripture. And, as the moſt myſterious ſubjects were frequently choſen, ſuch as the incarnation, and reſurrection of Chriſt, &c. theſe exhibitions acquired the name of miracles and *myſteries*. *Bp. Percy on the Orig. of the Eng. Stage.*

Monſ. Siſmonde de Siſmondi juſtly aſcribes the invention of the myſteries, the firſt modern efforts of the dramatic art, to the French; but the inference which he draws from it, that this was owing to the great dramatic genius of that people, muſt excite a ſmile in many of his readers: for, certainly, if there ever was a nation utterly and univerſally incapable of forming a conception of any other manners or characters than thoſe which exiſt among themſelves, it is the French. The learned author is right, however, in ſaying that the Myſtery of the Paſſions, and the moralities performed by the French company of players, laid the foundation of the drama in various parts of Europe, and alſo ſuggeſted the firſt probable hint of the plan of the Divine Comedy of Dante.

In France, all dramatic pieces were indiſcriminately called "myſteries," whether a martyr or a heathen god, whether St. Catharine or Hercules, was the ſubject. In that country, the religious myſteries, often called "Piteaux," or "Pitoux," were very faſhionable, and of high antiquity, though not more ancient than thoſe of the Engliſh. The French myſteries were chiefly performed by the religious communities. In France, as well as in England, it was cuſtomary to celebrate the feaſt of the boy-biſhop, during which moralities were preſented, and ſhows of miracles, with farces and other ſports.

Mr. T. Warton, in the ſecond volume of his Hiſtory of Engliſh Poetry, has introduced ſome diſcuſſions with regard to the probable cauſes of the riſe of the myſteries. "About the eighth century," he ſays, "trade was principally carried on by means of fairs, which laſted ſeveral days. Charlemagne eſtabliſhed many great marts of this ſort in France; as did William the Conqueror, and his Norman ſucceſſors, in England. The merchants, who frequented theſe fairs in numerous caravans or companies, employed every art to draw the people together. They were therefore accompanied by jugglers, minſtrels, and buffoons; who were no leſs intereſted in giving their attendance, and exerting all their ſkill, on theſe occaſions. As now but few towns exiſted, no public ſpectacles or popular amuſements were eſtabliſhed; and, as the ſedentary pleaſures of domeſtic life and private ſociety were yet unknown, the fair-time was the ſeaſon for diverſion. In proportion as theſe ſhows were attended and encouraged, they began to be ſet off with new decorations and improvements; and the arts of buffoonery, being rendered ſtill more attractive by extending their circle of exhibition, acquired an importance in the eyes of the people. By degrees the clergy, obſerving that the entertainments of dancing, muſic, and mimicry, exhibited at theſe protracted annual celebrities, made the people leſs religious, by promoting idleneſs and a love of feſtivity, proſcribed theſe ſports, and excommunicated the performers. But, finding that no regard was paid to their cenſures, they changed their plan, and determined to take theſe recreations into their own hands. They turned actors; and, inſtead of profane mimicries, preſented ſtories taken from legends in the Bible. This was the origin of ſacred comedy. Muſic was admitted into the churches, which ſerved as theatres for the repreſentation of holy farces. The feſtivals among the French, called "La Fête des Foux, de l'Ane," &c. and "Des Innocens," at length became great favourites, as they certainly were not more capricious and abſurd than the interludes of the buffoons at the fairs. Theſe are the ideas of a judicious French writer, now alive, who has inveſtigated the hiſtory of human manners with great comprehenſion and ſagacity."

Voltaire's theory on this ſubject is alſo very ingenious, and quite new. Religious plays, he ſuppoſes, came originally from Conſtantinople; where the old Grecian ſtage continued to flouriſh in ſome degree, and the tragedies of Sophocles and Euripides were repreſented, till the fourth century. About that period, Gregory Nazianzen, an archbiſhop, a poet, and one of the fathers of the church, baniſhed Pagan plays from the ſtage at Conſtantinople, and introduced ſelect ſtories from the Old and New Teſtament. As the ancient Greek tragedy was a religious ſpectacle, a tranſition was made on the ſame plan; and the choruſſes were turned into Chriſtian hymns. Gregory wrote many ſacred dramas for this purpoſe, which have not ſurvived thoſe inimitable compoſitions over which they triumphed for a time; one, however, his tragedy called Χριϛος πασχων, or Chriſt's Paſſion, is ſtill extant. In the prologue it is ſaid to be in imitation of Euripides, and that this is the firſt time the Virgin Mary has been produced on the ſtage. The faſhion of acting ſpiritual dramas, in which, at firſt, a due degree of method and decorum was preſerved, was at length adopted from Conſtantinople by the Italians; who framed, in the depth of the dark ages, on this foundation, that barbarous ſpecies of theatrical amuſement called *myſteries*, or ſacred comedies, and which were ſoon afterwards received in France. This opinion is ſuppoſed, by Mr. Warton, to derive confirmation from the early commercial intercourſe that ſubſiſted between Italy and Conſtantinople. In further defence of this hypotheſis, it may be obſerved, that the Feaſt of Fools, and of the Aſs, together with other religious farces of that ſort, ſo common in Europe, originated in Conſtantinople. They were inſtituted, though perhaps under other names, in the Greek church, about the year 990, by Theophylact, patriarch of Conſtantinople, probably with the deſign of weaning the minds of the people from the Pagan ceremonies, particularly the Bacchanalian and calendary ſolemnities, by the ſubſtitution of Chriſtian ſpectacles, partaking of the ſame ſpirit of licentiouſneſs. This practice was ſubſiſting in the Greek church two hundred years afterwards.

We may here remark, that in the fourth century it was cuſtomary to make Chriſtian parodies and imitations in Greek, of the beſt Greek claſſics, for the uſe of the Chriſtian ſchools. This practice prevailed much under the emperor Julian, who forbade the Pagan poets, orators, and philoſophers, to be taught in the Chriſtian ſeminaries. Apollinaris, biſhop of Laodicea, wrote Greek tragedies, adapted to the ſtage, on moſt of the grand events recorded in the Old Teſtament, after the manner of Euripides. On ſome of the familiar and domeſtic ſtories of Scripture, he compoſed comedies in imitation of Menander. He wrote Chriſtian odes on the plan of Pindar. In imitation of Homer, he wrote an heroic poem on the hiſtory of the bible, as far as the reign of Saul, in twenty-four books.

Mr. Warton mentions a much earlier and more ſingular ſpecimen of a theatrical repreſentation of ſacred hiſtory than that which is mentioned by Voltaire. Some fragments of an ancient Jewiſh play on the Exodus, or departure of the Iſraelites from Egypt, under their leader and prophet Moſes, are yet preſerved in Greek iambic. The principal characters of this drama are Moſes, Zipporah, and God ſpeaking from the burning buſh. Moſes delivers the prologue, or introduction, in a ſpeech of ſixty lines, and his rod is turned into a ſerpent on the ſtage. The author of this piece is Ezekiel, a Jew, who is called the tragic poet of the Jews; and, according to Huetius, he lived at leaſt before the Chriſtian era. Some ſay that he was one of the LXX, under the reign of Ptolemy Philadelphus. Warton thinks that he compoſed this play after the deſtruction of Jeruſalem, and in the time of Barocbas, as a political ſpectacle, with a view of animating his dejected countrymen with the hopes of a future deliverance from their captivity under the conduct of a new Moſes, like that from the Egyptian ſervitude.

Boileau, on the authority of Meneſtrier, ſeems to think that the ancient pilgrims, on their return from Jeruſalem, introduced theſe ſacred exhibitions into France, among whom are reckoned St. James of Compoſtella, St. Bourne of Provence, St. Remi, &c. &c. who compoſed ſongs on their adventures; intermixing recitals of paſſages in the life of Chriſt, deſcriptions of his crucifixion, of the day of judgment, of miracles, and of martyrdoms. To theſe tales, which were recommended by a pathetic chant, and a variety of geſticulations, the credulity of the multitude gave the name of "Viſions." Theſe were recited by the pious itinerants, with accompaniments which formed a ſort of theatrical ſpectacle. At length their performances excited the compaſſion and charity of ſome citizens of Paris, who erected a theatre for their exhibition of theſe ſtories, with the additional advantage of ſcenery and other decorations. At length profeſſed practitioners in the hiſtrionic art were hired to perform theſe ſolemn mockeries of religion, which ſoon became the principal public amuſement of a devout but undiſcerning people.

Mr. Strutt (Sports and Paſtimes of the People of England) has given a detailed account of the ſucceſſive uſe of the miracles, myſteries, and moralities, in this country; and in this enquiry they muſt be conſidered in connexion with each other.

The theatrical exhibitions at London, in the twelfth century, were called MIRACLES, becauſe they conſiſted of ſacred plays, or repreſentations of the *miracles* wrought by the holy confeſſors, and the ſufferings by which the perſeverance of the martyrs was manifeſted. Such ſubjects were certainly very properly choſen, becauſe the church was uſually the theatre wherein theſe pious dramas were performed, and the actors were the eccleſiaſtics or their ſcholars. The firſt play of this kind ſpecified by name, I believe, is called *St. Catharine*, and, according to Matthew Paris, was written by Geofrey, a Norman, afterwards abbot of St. Alban's; he was ſent over into England to take upon him the direction of the ſchool belonging to that monaſtery; but, coming too late, he went to Dunſtable and taught there, where he cauſed his play to be performed, and borrowed from the ſacriſt of St. Alban's ſome of the eccleſiaſtical veſtments of the abbey to adorn the actors. But M. Paris, who wrote about the year 1240, does not ſpeak of them as things newly invented, but ſuch as "miracula vulgariter appellamus." In later times, theſe dramatic pieces acquired the appellation of MYSTERIES.

Theſe miracle-plays, or myſteries, in Chaucer's days, were exhibited during the ſeaſon of Lent, and ſometimes a ſequel of Scripture-hiſtories was carried on for ſeveral days. In the reign of Richard the Second, (1380.) the pariſh-clerks of London put forth a play at Skinner's Wells, near Smithfield, which continued three days; the king, queen, and many of the nobility, being preſent at the performance. In the ſucceeding reign another play was acted at the ſame place, and laſted eight days; this drama began with the creation of the world, and contained the greater part of the hiſtory of the Old and New Teſtament. It does not appear to have been honoured with the royal preſence, but was well attended by moſt of the nobility and gentry of the realm. The laſt of theſe performances, no doubt, bore a cloſe analogy to the well-known myſtery entitled *Corpus Chriſti*, or *Ludus Coventriæ*, the Coventry Play; tranſcripts of this play, nearly if not altogether coeval with the time of its repreſentation, are yet in exiſtence. The prologue to this curious drama is delivered by three perſons who ſpeak alternately, and are called *vexillators*; it contains the argument of the ſeveral *pageants*, or acts, that conſtitute the piece, and they amount to no leſs than forty; and every one of theſe acts conſiſts of a detached ſubject from the holy writ, beginning with the creation of the univerſe, and concluding with the laſt judgment. In the firſt pageant, or act, the Deity is repreſented ſeated on his throne by himſelf; after a ſpeech of ſome length, the angels enter ſinging, from the church-ſervice, "To Thee all angels cry aloud, the heavens and all the powers therein; To Thee Cherubim and Seraphim continually do cry, Holy, holy, holy, Lord God of Sabbaoth." Lucifer then makes his appearance, and deſires to know if the hymn they ſang was in honour of God or in honour of him? The good angels readily reply, In honour of God. The evil angels incline to worſhip Lucifer, and he preſumes to ſeat himſelf in the throne of the Deity; who commands him to depart from heaven to hell, which dreadful ſentence he is compelled to obey, and with his wicked aſſociates deſcends to the lower regions.

Notwithſtanding the ſerioufneſs of the ſubjects that conſtituted theſe myſteries, it ſeems clear that they were not exhibited without a portion of pantomimical fun to make them palatable to the vulgar taſte; and indeed the length and the dulneſs of the ſpeeches required ſome ſuch aſſiſtance to enliven them, and keep the ſpectators in good humour; and this may be the reaſon why the myſteries are in general much ſhorter than the modern plays. Beelzebub ſeems to have been the principal comic actor, aſſiſted by his merry troop of under-devils, who, with variety of noiſes, ſtrange geſtures, and contortions of the body, excited the laughter of the populace.

When the myſteries ceaſed to be played, the ſubjects for the drama were not taken from hiſtorical facts, but conſiſted of moral reaſonings in praiſe of virtue and condemnation of vice, on which account they were called Moralities; and theſe performances, requiring ſome degree of invention, laid the foundation for our modern comedies and tragedies. The dialogues were carried on by allegorical characters, ſuch as Good Doctrine, Charity, Faith, Prudence, Diſcretion, Death, and the like; and their diſcourſes were of a ſerious caſt; but the province of making the ſpectators merry deſcended from the ***Devil*** in the myſtery, to *Vice* or *Iniquity* of the morality, who uſually perſonified ſome bad quality incident to human nature, as Pride, or Luſt, or any other evil propenſity; and, even when regular tragedies and comedies were introduced upon the ſtage, we may trace the deſcendants of this facetious Iniquity in the Clowns and the Fools which ſo frequently diſgraced them. The great maſter of human nature, in compliance with the falſe taſte of the age in which he lived, has admitted this motley character into the moſt ſerious parts of one of his beſt tragedies. The propenſity to laugh at the expenſe of good ſenſe and propriety, is well ridiculed in the "Intermeane" at the end of the firſt act of the Staple of Newes, by Jonſon, and again in the Preludium to the Careleſs Shepherdeſs, where ſeveral characters are introduced upon the ſtage as ſpectators, waiting for the commencement of the performance. One of them ſays,

Why, I would have a fool in every act,
Be't comedy or tragedy: I've laugh'd
Until I cry'd again, to ſee what faces
The rogue will make. Oh! it does me good
To ſee him hold out's chin, hang down his hands,
And twirle his bawble. There is nere a part
About him but breaks jeſts. I heard a fellow
Once on the ſtage, cry doodle doodle dooe
Beyond compare; I'de give the other ſhilling
To ſee him act the Changling once again.

To this another character replies,

And ſo would I; his part has all the wit,
For none ſpeakes, carps, and quibbles, beſides him;
I'd rather ſee him leap, or laugh, or cry,
Than hear the graveſt ſpeech in all the play;
I never ſaw Rheade peeping through the curtain,
But raviſhing joy entered into my heart.

A boy then comes upon the ſtage, and the firſt ſpeaker inquires for the *fool*; but, being told he is not to perform that night, he ſays,

Well, ſince there will be nere a fool i'th' play,
I'll have my money again; the comedy
Will be as tedious to me as a ſermon.

The miracles, myſteries, and moralities, differed greatly from the *ſecular plays* and *interludes* which were acted by ſtrolling companies, compoſed of minſtrels, jugglers, tumblers, dancers, bourdours or jeſters, and other performers properly qualified for the different parts of the entertainment, which admitted of a variety of exhibitions. Theſe paſtimes, Mr. Strutt agrees with Warton, are of higher antiquity than the eccleſiaſtical plays; and they were much reliſhed, not only by the vulgar part of the people, but alſo by the nobility. The courts of the kings of England, and the caſtles of the great earls and barons, were crowded with the performers of the ſecular plays, where they were well received and handſomely rewarded; vaſt ſums of money were laviſhly beſtowed upon theſe ſecular itinerants, which induced the monks and other eccleſiaſtics to turn actors themſelves, in order to obtain a ſhare of the public bounty. But, to give the better colouring to their undertaking, they took the ſubjects of their dialogues from the holy writ, and performed them in the churches. The ſecular ſhowmen, however, retained their popularity notwithſtanding the exertions of their clerical rivals, who diligently endeavoured to bring them into diſgrace, by bitterly inveighing againſt the filthineſs and immorality of their exhibitions. On the other hand, the itinerant players ſometimes invaded the province of the church-men, and performed their myſteries or others ſimilar to them, as we find from a petition preſented to Richard III. by the ſcholars of St. Paul's ſchool, (1378.) wherein complaint is made againſt the ſecular actors, becauſe they took upon themſelves to act plays compoſed from the ſcripture-hiſtory, to the great prejudice of the clergy, who had been at much expenſe to prepare ſuch performances for public exhibition at the feſtival of Chriſtmas. But, generally ſpeaking, the ſecular plays had nothing to do with religion, and, if an early writer of our own country (John of Saliſbury) may be fully credited, but little with morality; they conſiſted of comic tales, dialogues, and ſtories, to which were added coarſe and indecent jeſts, intermixed with inſtrumental muſic, ſinging, dancing, tumbling, geſticulation, and mimicry, to excite laughter, without the leaſt regard to decency; and for this reaſon, the clergy were prohibited from going to ſee them. Cardinal Wolſey, in his regulations for the monaſtery of the canons regular of St. Auſtin, forbade the brethren to be players or mimics; but the prohibition meant, that they ſhould not go abroad to exerciſe thoſe talents in a ſecular and mercenary capacity.

The performances exhibited by the ſecular players, were certainly of a jocular nature, calculated to promote mirth; and therefore they are cenſured as "vain paſtimes" by Matthew Paris. Something of this kind was the repreſentation made before Henry VIII. at Greenwich, thus related by Hall: "Two perſons plaied a *dialogue*, the effect whereof was, whether riches were better than love; and, when they could not agree upon a concluſion, each called in thre knightes all armed; thre of them woulde have entered the gate of the arche in the middle of the chambre, and the other thre reſiſted; and ſodenly betweene the ſix knightes, out of the arche fell downe a bar all gilte, at the which bar the ſix knightes fought a fair battail, and then they departed, and ſo went out of the place; then came in an olde man with a ſilver berd, and he concluded, that love and riches bothe be neceſſarie for princes; that is to ſay, by love to be obeyed and ſerved, and with riches to rewarde his lovers and frendes; and with this concluſion the dialogue ended." We hereby find, that theſe dialogues were not only a part of the entertainment, but alſo ingeniouſly made the vehicles for the introduction of other ſports; ſometimes they were of a ſatirical nature; and, when occaſion required, they took another turn, and became the agents of flattery and adulation. Both theſe purpoſes were anſwered by the following dialogue, taken from the author juſt now quoted: "On Sonday at night the fifteenth of June, in the great halle at Wyndſore," the emperor Maximilian and Henry VIII. being preſent, "was a *diſguiſiyng*, or play; the effect of it was, that there was a proud horſe which would not be tamed nor brideled; but Amitie ſent Prudence and Policie which tamed him, and Force and Puiſſance brideled him. By this horſe was meant the Frenche kyng, and by Amitie the kynge of England; and the emperor and the other perſons were their counſail and power."

The eccleſiaſtical plays, as we obſerved before, were uſually performed in churches, or chapels, upon temporary ſcaffolds erected for that purpoſe; and ſometimes, when a ſufficient number of clerical actors were not to be procured, the churchwardens and chief pariſhioners cauſed the plays to be acted by the ſecular players, in order to collect money for the defraying of the church-expenſes; and in many inſtances they borrowed the theatrical apparel from other pariſhes when they had none of their own. The acting of plays in churches was much declaimed againſt by the religious writers of the ſixteenth century; and Bonner, biſhop of London, in the thirty-third year of the reign of Henry VIII. iſſued a proclamation to the clergy of his dioceſe, prohibiting all manner of common plays, games, or interludes, to be played, ſet forth, or declared, within their churches or chapels.

In Cornwall the miracle-plays were differently repreſented: they were not performed in the churches nor under any kind of cover, but in the open air, as we learn from Carew, whoſe words upon this ſubject are as follow: "The *guary-miracle*, in Engliſh a miracle-play, is a kind of enterlude compiled in Corniſh out of ſome ſcripture-hiſtory, with that groſſneſs which accompanied the Romanes *vetus comedia*. For repreſenting it, they raiſe an earthen amphitheatre in ſome open field, having the diameter of his enclined plain ſome forty or fifty feet. The country-people flock from all ſides many miles of, to hear and ſee it, for they have therein devils and devices to delight as well the eye as the eare. The players conne not their parts without booke, but are prompted by one called the *ordinary*, who followeth at their backs with the book in his hand, and telleth them what to ſay." This ſpecies of amuſement continued to be exhibited in Cornwall long after the abolition of the miracles and moralities in the other parts of the kingdom, and when the eſtabliſhment of regular plays had taken place. *Strutt*, p. 116–123.

Upon the whole, we may conclude, with Mr. Warton, that "the *myſteries* appear to have originated among the eccleſiaſtics; and were probably firſt acted, at leaſt with any degree of form, by the monks. This was certainly the caſe in the Engliſh monaſteries. As learning increaſed, and was more widely diſſeminated from the monaſteries, the practice migrated to ſchools and univerſities, which were formed upon the monaſtic plan; and it is well known, that the practice of acting Latin plays in the colleges of Oxford and Cambridge continued until Cromwell's uſurpation. Many inſtances of its occurrence in ſchools and ſeminaries of an inferior nature, both in England and France, might be enumerated; and it has been perpetuated to the preſent day."

MYS'TIC, or Mistic, a ſhort river which falls into the north ſide of Boſton harbour, by a broad mouth on the eaſt ſide of the peninſula of Charleſtown. It is navigable for ſloops four miles to the town of Medford; and is croſſed by two bridges, one at its mouth, and another a mile above it. The Middleſex-canal connects this river with the Merrimack.

MYS'TIC, or Mystical, *adj.* Sacredly obſcure.—Let God himſelf that made me, let not man that knows not himſelf, be my inſtructor concerning the *myſtical* way to heaven. *Hooker.*—Involving ſome ſecret meaning; emblematical.—It is Chriſt's body in the ſacrament and out of it; but in the ſacrament not the natural truth, but the ſpiritual and *myſtical*. *Bp. Taylor.*—It is plain from the Apocalypſe, that *myſtical* Babylon is to be conſumed by fire. *Burnet.*

Ye five other wandering fires! that move
In *myſtick* dance not without ſong, reſound
His praiſe, who out of darkneſs call'd up light. *Milton.*

Obſcure; ſecret:

Leſt new fears diſturb the happy ſtate,
Know, I have ſearch'd the *myſtick* rolls of fate. *Dryden.*

MYS'TIC, *ſ.* [from the adj.] One of an enthuſiaſtic ſect of Chriſtians that prevailed in the firſt ages of Chriſtianity.—The *myſtics* were a kind of religious ſect diſtinguiſhed by their profeſſing pure, ſublime, and perfect, devotion, with an entire diſintereſted love of God, free from all ſelfiſh conſiderations. *Chambers.*—It is this way of thinking and talking in religion, that, I ſuppoſe, has given riſe to what is called myſtical theology; the teachers whereof have accordingly been ſtyled *myſticks*. *Coventry's Phil. to Hyd.*—This moſt excellent principle had been ſtretched too far, perhaps even to enthuſiaſm; as formerly among the *myſtics* of the ancient Church. *Shafteſbury.*

The myſtics, to excuſe their fanatic extacies and licentious extravagances, allege that paſſage of St. Paul, *The Spirit prays in us by ſigns and groans that are unutterable.* Now if the Spirit, ſay they, pray in us, we muſt reſign ourſelves to its motions, and be ſwayed and guided by its impulſe, by remaining in a ſtate of mere inaction. Paſſive contemplation, therefore, is that ſtate of perfection to which the myſtics all aſpire.

The authors of this myſtic ſcience, which ſprung up towards the cloſe of the ſecond century, are not known; but the principles from which it was formed are manifeſt. Its firſt promoters argued from the known doctrine of the Platonic ſchool, which was alſo adopted by Origen and his diſciples, that the Divine Nature was diffuſed through all human ſouls; or that the faculty of reaſon, from which proceed the health and vigour of the mind, was an emanation from God into the human ſoul, and comprehended in it the principles and elements of all truth, human and divine. They denied that men could, by labour or ſtudy, excite this celeſtial flame in their breaſts; and therefore they diſapproved highly of the attempts of thoſe, who, by definitions, abſtract theorems, and profound ſpeculations, endeavoured to form diſtinct notions of truth, and to diſcover its hidden nature. On the contrary, they maintained that ſilence, tranquillity, repoſe, and ſolitude, accompanied with ſuch acts as might tend to extenuate and exhauſt the body, were the means by which the internal word was excited to produce its latent virtues, and to inſtruct men in the knowledge of divine things. For thus they reaſoned; thoſe who behold with a noble contempt all human affairs, who turn away their eyes from terreſtrial vanities, and ſhut all the avenues of the outward ſenſes againſt the contagious influences of a material world, muſt neceſſarily return to God, when the ſpirit is thus diſengaged from the impediments that prevented that happy union. And in this bleſſed frame they not only enjoy inexpreſſible raptures from their communion with the Supreme Being, but alſo are inveſted with the ineſtimable privilege of contemplating truth undiſguiſed and uncorrupted, in its native purity, while others behold it in a vitiated and deluſive form.

Towards the cloſe of the fifth century, the myſtics, pretending to higher degrees of perfection than other Chriſtians, drew every-where to their party, particularly in the eaſtern provinces, a vaſt number of the ignorant and inconſiderate multitude, by the ſtriking appearance of their ſingular and auſtere piety. It is impoſſible to deſcribe the rigour and ſeverity of the laws which theſe ſenſeleſs fanatics impoſed upon themſelves, in order, as they alleged, to appeaſe the Deity, and to deliver the celeſtial ſpirit from the bondage of this mortal body. They not only lived among the wild beaſts, but alſo lived after the manner of thoſe ſavage animals. They ran naked through the lonely deſerts with a furious aſpect, and with all the agitations of madneſs and phrenſy; they prolonged the life of their emaciated bodies by the wretched nouriſhment of graſs and wild herbs; avoided the ſight and converſation of men; remained motionleſs in certain places for ſeveral years, expoſed to the rigour and inclemency of the ſeaſons; and, towards the concluſion of their lives, ſhut themſelves up in narrow and miſerable huts; and all this they conſidered as true piety, the only acceptable method of worſhipping the Deity, and rendering him propitious. The myſtics, for the moſt part, were led into the abſurdities of this extraordinary diſcipline, not ſo much by the pretended force of reaſon and argument, as by a natural propenſity to ſolitude, a gloomy and melancholy caſt of mind, and an implicit and blind ſubmiſſion to the authority and example of others. For the diſeaſes of the mind, as well as thoſe of the body, are generally contagious; and no peſtilence ſpreads its infection with a more dreadful rapidity than ſuperſtition and enthuſiaſm.

In the ninth century, the doctrine of the myſtics, the origin of which is falſely attributed to Dionyſius the Areopagite, which had been for a long time in vogue among the Greeks, and eſpecially among the monaſtic orders, was diſſeminated in the weſtern churches. The Latins had hitherto eſcaped the contagious influence of this doctrine; but, when the Grecian emperor, Michael Balbus, or the Stammerer, ſent to Louis the Meek, in the year 824, a copy of the pretended works of Dionyſius the Areopagite, (now univerſally allowed to be ſpurious, even among the moſt learned and impartial of the Roman Catholic writers,) this preſent kindled the flame of myſticiſm in the weſtern provinces, and inſpired the Latins with the moſt enthuſiaſtic admiration of this new religion. The tranſlation of theſe works into Latin, by order of the emperor Louis, contributed much to the progreſs of myſticiſm. By the order of the ſame emperor, Hilduin, abbot of St. Denys, compoſed an account of the life, actions, and writings, of Dionyſius, under the title of "Areopagitica;" in which work, among other impudent fictions, uſual in thoſe times of ſuperſtition and impoſture, he maintained, in order to exalt the honour of his nation, that Dionyſius the Areopagite, and Dionyſius, or St. Denys, the biſhop of Paris, were one and the ſame perſon. This fable was received with avidity by the credulous multitude; and its credit is hardly extinct at this day. As the firſt tranſlation of the works of Dionyſius, that had been executed by order of Louis, was probably in a barbarous and obſcure ſtyle, a new and more elegant one was made by the famous Johannes Scotus Erigena, at the requeſt of Charles the Bald; the publication of which conſiderably increaſed the partiſans of the myſtic theology among the French, Italians, and Germans. Scotus himſelf, called the Wiſe, was ſo enchanted with this new doctrine, that he incorporated it into his philoſophical ſyſtem; and upon all occaſions either accommodated his philoſophy to it, or explained it according to the principles of his philoſophy. Thus philoſophical enthuſiaſm, born in the Eaſt, nouriſhed by Plato, educated in Alexandria, matured in Aſia, and adopted into the Greek church, found its way, under the pretext and authority of an apoſtolic name, into the Weſtern Church, and there produced many injurious effects.

In the twelfth century, theſe myſtics took the lead in their method of expounding Scripture; and, by ſearching for myſteries and hidden meaning in the plaineſt expreſſions, forced the word of God into a conformity with their viſionary doctrines, their enthuſiaſtic feelings, and the ſyſtem of diſcipline which they had drawn from the excurſions of their irregular fancies. In the thirteenth century they were the moſt formidable antagoniſts of the *ſchoolmen*, who, as they were leſs popular, endeavoured to recommend themſelves by extolling, illuſtrating, and defending, the ſentimental ſyſtem of their adverſaries. Towards the cloſe of the fourteenth century, many of them reſided and propagated their tenets almoſt in every part of Europe. They had, in the fifteenth century, many perſons of diſtinguiſhed merit in their number; and in the ſixteenth century, previous to the reformation, if any ſparks of real piety ſubſiſted under the deſpotic empire of ſuperſtition, they were only to be found among the myſtics. For this ſect, renouncing the ſubtilty of the ſchools, the vain contentions of the learned, and all the acts and ceremonies of external worſhip, exhorted their followers to aim at nothing but internal ſanctity of heart, and communion with God, the centre and ſource of holineſs and perfection. Hence the myſtics were loved and reſpected by many perſons who had a ſerious ſenſe of religion, and a devotional frame of mind. Yet, as they were not entirely free from the reigning ſuperſtitions, but aſſociated many vulgar errors with their practical directions and precepts; and as their exceſſive paſſion for contemplation led them into chimerical notions, and ſometimes into a degree of fanaticiſm that approached to madneſs; more effectual ſuccours than theirs were neceſſary to combat the inveterate errors of the times, and to bring about the reformation which was expected with ſuch impatience.

The principles of this ſect were adopted by thoſe called Quietiſts in the ſeventeenth century; and, under different modifications, by the Quakers and Methodiſts. *Moſh. Eccl. Hiſt. Brucker's Hiſt. Phil. by Enfield.*

MYS'TICALLY, *adv.* In a manner, or by an act, implying ſome ſecret meaning; emblematically.—Unto which I conceive the prophet Iſaiah to allude, in that paſſage touching the city of Tyre, repreſenting there *myſtically* the church of Rome. *More's Ant. againſt Idolatry.*

Theſe two in thy ſacred boſom hold,
Till *myſtically* join'd but one they be. *Donne.*

MYS'TICALNESS, *ſ.* Involution of ſome ſecret meaning.

MYS'TICISM, *ſ.* The pretences of the myſtics; fanaticiſm.—This ingenious man has ſpent a long life in hunting after, and with an incredible appetite devouring, the traſh dropt from every ſpecies of *myſticiſm. Warburton's Doct. of Grace.*

MYS'TRUM, *ſ.* A liquid meaſure among the ancients, containing the fourth part of the cyathus, and weighing two drams and a half of oil, or two drams two ſcruples of water or wine. It nearly anſwers to our ſpoonful.

MYSZ, a town of Lithuania, in the palatinate of Novogrodek: thirty-ſix miles ſouth of Novogrodek.

MY'TACISM, *ſ.* [μυτακισμος, Gr.] In rhetoric, the too frequent repetition of the letter M; thus, *Mammam ipſam amo quaſi meam animam.*

MY'TENS (Daniel), of the Hague, was an admired painter in the reigns of James I. and Charles I. to the latter of whom he was made picture-drawer in ordinary, in May 1625. He continued to hold this ſtation at the arrival of Vandyke in England; but, upon that artiſt being made principal painter to his majeſty, he aſked leave to retire. The king, however, retained him for ſome time longer in his ſervice; and the two rivals, if they may be ſo called, lived amicably together. Mytens ſaw and acknowledged the high degree of Vandyke's talents, and benefited by the obſervance of his productions. There are a great many excellent portraits by Mytens in this country, which are diſtinguiſhable by the neat ſmoothneſs and clearneſs of their finiſhing, and their great air of nature. We have none of his pictures painted after 1630. The period of his death is not exactly known.

MYTH'ECUS, a ſophiſt of Syracuſe. He ſtudied cookery; and, when he thought himſelf ſufficiently ſkilled in dreſſing meat, he went to Sparta, where he gained much practice, eſpecially among the younger citizens. But he was expelled by the magiſtrates, who obſerved that the aid of Mythecus was unneceſſary, as hunger was the beſt ſeaſoning.

MY'THIC, or MYTHICAL, *adj.* [μυθικος, Gr.] Fabulous.—The account we have of them, ſo far from being *mythick* or unintelligible, is moſt plainly written for our admonition. *Shuckford on the Creation.*

MYTHOG'RAPHER, *ſ.* [from the Gr. μυθος, fable, and γραφω, to write.] A writer of fables.—The ſtatues of Mars and Venus I imagined had been copied from Fulgentius, Boccacio's favourite *mythographer. Warton's Hiſt. E. P.*

MYTHOLOG'IC, or MYTHOLO'GICAL, *adj.* [from *mythology.*] Relating to the explication of fabulous hiſtory.—A relation, which her maſters of the *mythologic* proſopopeia expreſſed, we may ſuppoſe, by giving them in marriage to each other. *Coventry.*—The original of the conceit was probably hieroglyphical, which after became *mythological,* and by tradition ſtole into a total verity, which was but partially true in its covert ſenſe and morality. *Brown's Vulg. Err.*

MYTHOLOG'ICALLY, *adv.* In a manner ſuitable to the ſyſtem of fables.—The relating *mythologically* phyſical or moral truths concerning the origin and nature of things, was not, perhaps, as modern writers too haſtily imagine, the cuſtomary practice of Moſes's age; but rather began after his times. *Shuckford.*

MYTHOL'OGIST, *ſ.* A relater or expoſitor of the ancient fables of the heathens.—It was a celebrated problem among the ancient *mythologiſts,* What was the ſtrongeſt thing, what the wiſeſt, and what the greateſt? *Norris's Miſcell.*

To MYTHOL'OGIZE, *v. n.* To relate or explain the fabulous hiſtory of the heathens.—They *mythologized,* that five gods were now born, Oſiris, Orus, Typho, Iris, and Nephte. *Shuckford.*

MYTHOL'OGY, *ſ.* [from the Gr. μυθος, fable, λογος, diſcourſe.] Syſtem of fables; explication of the fabulous hiſtory of the gods of the heathen world.—The modeſty of *mythology* deſerves to be commended: the ſcenes there are laid at a diſtance; it is once upon a time, in the days of yore, and in the land of Utopia. *Bentley.*

MYTHOLOGY, which leads us into an acquaintance with the gods and fables of ancient times and remote nations, is of ſuch importance, that, notwithſtanding the obſcurity and uncertainty in which it is involved, and the ſcope which it affords for conjectures and differences of opinion, the ſtudy of it cannot be wholly diſregarded; more eſpecially by perſons who peruſe the writings of the Greeks and Romans, and particularly thoſe of their moſt celebrated poets. It likewiſe bears relation to various branches of literature and ſcience, that are deemed both curious and uſeful; and will contribute to guide and aſſiſt the reſearches of hiſtorians, antiquarians, and of artiſts of various deſcriptions. Whilſt the claſſical ſcholar finds it neceſſary to acquaint himſelf with the pagan gods and fables, the fictions of antiquity, and the numerous monuments that record them, duly examined, will ſerve to amuſe and inſtruct thoſe who inveſtigate them; and mythology will thus ſubſerve many uſeful purpoſes in chronology, hiſtory, ſculpture, painting, and other arts and ſciences. It will require, indeed, a conſiderable ſhare of judgment to guard againſt deluſion, correctly to interpret the fables that preſent themſelves, and to form a juſt opinion of the rank, attributes, and character, as well as of the number and variety, of the deities which were acknowledged as ſuch in different ages and nations. Mythology has additional claims on our attention, if we allow, with ſome writers, that the fables of antiquity are not mere fictions, but that they have a real connection with the hiſtory of the firſt ages, and comprehend ſome of their moſt conſiderable tranſactions; and that moſt of the gods had been men, whoſe hiſtory forms a part of that of the particular nations in which they became objects of veneration, and even of worſhip.

Lord Bacon thinks that a great deal of concealed inſtruction and allegory was originally intended in moſt parts of the ancient mythology; he obſerves, that ſome fables diſcover a great and evident ſimilitude, relation, and connection, with the thing they ſignify, as well in the ſtructure of the fable as in the meaning of the names whereby the perſons or actors are characterized. The ſame writer thinks it may paſs for a farther indication of a concealed and ſecret meaning, that ſome of theſe fables are ſo abſurd and idle in their narration, as to ſhow an allegory even afar off; but the argument of moſt weight upon this ſubject he takes to be this, that many of theſe fables appear by no means to have been invented by the perſons who relate them: he looks on them not as the product of the age, nor the invention of the poets, but as ſacred relics, as he terms them, gentle whiſpers, and the breath of better times, that, from the tradition of more ancient nations, came at length into the flutes and trumpets of the Greeks. He concludes, that the knowledge of the early ages was either great or happy: great, if they by deſign made this uſe of trope and figure; or happy, if, whilſt they had other views, they afforded matter and occaſion to ſuch noble contemplations.

To whatever remote period we may trace back the hiſtory of the human race, and in whatever ſtate of ignorance we may find them, we muſt allow them to poſſeſs thoſe feelings and characteriſtics which are common to our ſpecies. Hence man, in his moſt uncultivated ſtate, is as much alive to acts of beneficence as when he is improved by taſte or enlightened by ſcience. Whether we ſuppoſe the idea of a Supreme Being to be innate or acquired, it is certainly one of thoſe ſentiments which are incident to the earlieſt periods of ſociety; inſomuch that we can ſcarcely ſuppoſe any nation to have been ſo ignorant as to have enjoyed the bounties of Providence without once aſking whence they were derived. *Roſcoe's Diſc. at the Opening of the Royal Inſtitution at Liverpool,* 1818.

If the various ſyſtems of pagan idolatry be compared together, ſo many points of arbitrary reſemblance and ſuch a palpable uniformity of ſentiment and principle will be diſcovered, that we ſhall find ourſelves inevitably compelled to pronounce them all of common origin. What is meant is this. If we had obſerved, that every heathen nation *merely* worſhipped the ſouls of deified anceſtors, and that each people *ſimply* venerated the Sun and the Moon and the Stars; we ſhould then have had no proof that their ſeveral modes of idolatry emanated from a common centre; becauſe, in that caſe, though they would all be ſubſtantially the ſame, yet they would be marked by no *arbitrary* points of agreement; and it is obvious, that nations, without the leaſt anterior communication with each other, might univerſally lapſe into *theſe* methods of worſhip, ſince they are preciſely the methods which would moſt naturally preſent themſelves to *all* apoſtate tribes. Hence we could no more infer the common origination of their various ſyſtems, from *ſuch* coincidences, than we could argue the common deſcent of two barbarous nations, in directly oppoſite quarters of the globe, from the circumſtance of their individual members being hunters and fiſhers and warriors; from their being alike clad with the ſkins of ſlaughtered wild beaſts; or from their equally uſing the rudely-formed bow and arrows. But, if we ſhould obſerve that all pagan nations, wherever ſituated, not only worſhipped their deified anceſtors, but aſcribed to them the very ſame actions and ſufferings; if we ſhould find, that they not only adored the heavenly bodies, but entertained the ſelf-ſame notions reſpecting them, although ſuch notions were wholly *arbitrary,* and entirely abhorrent from the nature of thoſe bodies; and, if we ſhould likewiſe perceive that one ruling idea, itſelf an *arbitrary* idea, conſtantly pervaded the general combination of the ſeveral parts that compoſed the ſeveral ſyſtems, animating them all as it were with one ſoul; we ſhould then find it impoſſible to account for the phenomenon in queſtion on any other principle than that of common origination. This mode of reaſoning is preciſely the ſame as that which is uſed in tracing the deſcent of nations. Things, in themſelves *not arbitrary*, prove nothing whatſoever; and tribes may be alike hunters and fiſhers and bowmen, though they have ſprung from very different anceſtors. But things, in themſelves *altogether arbitrary*, are acknowledged to form the baſis of a reaſonable argument; and, if tribes are found to ſpeak dialects of the ſame language, and to be attached throughout to the ſame whimſical cuſtoms, which are not deducible from *the nature of things*, but from *pure caprice* merely; *ſuch* points of coincidence are commonly and rationally thought to furniſh a moral demonſtration of the common origin of thoſe tribes.

Now this is preciſely the argument which will be afforded by a *comparative* ſurvey of the different ſyſtems of pagan idolatry, both ancient and modern. Not only the ſame gods are adored; but they are adored alſo in the very ſame manner, and have the very ſame arbitrary notions attached to them. There is likewiſe a grand leading idea, to ſay nothing of various other minor ideas, which pervades the whole theology of the gentiles; and this idea is altogether of an *arbitrary* nature. Hence the inevitable concluſion is, that the reputed various ſyſtems of paganiſm are in reality but one ſyſtem: that they have all originated from a common ſource; that they were not *independently* invented *ſubſequent* to the arrival of each body of coloniſts in any particular country; but that they were ſeverally brought by thoſe coloniſts, *ready faſhioned*, from ſome univerſal centrical point. Such being the concluſion, it will obviouſly follow, that the whole human race muſt once have been aſſembled in ſome centrical region, and muſt there have formed a ſingle great community; that they fell into idolatry *while* thus aſſembled; and that, when they afterwards broke aſunder into different ſmaller communities, they all equally carried with them into the lands which they occupied the peculiar and arbitrary mode of worſhip which was firſt jointly excogitated.

But this concluſion, to which we are irreſiſtibly led by the force of entirely-unconnected maſſes of evidence, is exactly that which Holy Scripture requires us to expect: and the ſame divine book likewiſe poſitively declares to be *fact*, what an inveſtigation like the preſent actually *finds* to be the caſe; namely, that *the idolatry of the whole world was derived from a common centre.* We are taught, that, after the deluge, the whole race of mankind aſſembled together under one head in the plains of Shinar; that they there erected a vaſt pyramidal temple; that, in this enterpriſe, they were under the rule of Nimrod and the adventurous children of Cuſh; that they were thence miraculouſly ſcattered into every part of the world; and that Babylon, the centrical point of their congreſs, was the parent of all the ſlightly-varied modes of idolatry, which they of the diſperſion carried with them into the ſeveral countries that they planted. Thus does paganiſm, in all regions of the globe, bear an involuntary teſtimony to the ſtrict truth of the inſpired hiſtory. We have a phenomenon which can only be accounted for by *the ſuppoſition* of a particular fact; and *the reality* of this neceſſary fact is poſitively declared in the Pentateuch.

As idolatry then originated *prior* to the diſperſion from Babel, it is obvious, that thoſe theories, which diſcover the worthies of the Hebrew polity in the gods of the Gentiles, which make the Pagans ſervile copyiſts from the Iſraelites, and which, in their zeal for promoting the ſuppoſed honour of Moſes, will not even leave to Rome its own founder;—it is obvious, to ſay nothing of their utter intrinſical improbability, that ſuch theories as thoſe which have been advocated by Huet and Gale, and others of the ſame ſchool, are but the baſeleſs fabric of a mere viſion. Idolatry was regularly organiſed long before the birth either of Moſes or even Jacob; and, ſo far from its principal object being the Hebrew legiſlator, the choſen people found it already eſtabliſhed in Paleſtine when they emerged from the wilderneſs.

But the concluſion, to which we have been brought, not only confutes the idle humour of transforming Moſes and Joſhua and Sampſon into the great gods of the gentiles: it likewiſe ſhuts out all thoſe perſons, who flouriſhed *after* the diſperſion, from being at leaſt the generally-received deities of paganiſm; and, as *theſe* are far conſpicuous above any accidentally and partially canonized mortals, ſo with theſe only are we at preſent concerned. This exactly accords, both with the explicit teſtimony of the gentiles themſelves, and with the legendary tales invariably attached to the worſhipped divinities. They tell us, that the hero-gods were their deified anceſtors; that they flouriſhed during an early period, deſcribed as an age of gold; and that this golden age immediately followed both the creation of the world and its renovation ſubſequent to the deluge. Hence, according to their own account, the immortals, whom they worſhipped, were the two firſt races of men: and with this explicit declaration the character of their gods will be found to agree, though in a manner ſo peculiar that it ought particularly to be noticed.

This peculiarity however has almoſt, if not entirely, been overlooked by thoſe who have hitherto treated of the preſent ſubject; and the conſequence has been, that, while ſome have pronounced *the great father* of paganiſm to be Adam, and others to be Noah, neither of them have in abſolute ſtrictneſs been right in their opinion. The true key to ancient idolatry is a very ſingular opinion, which, with more or leſs diſtinctneſs, may be traced in almoſt every part of the globe. This is the doctrine of *an endleſs ſucceſſion of perfectly-ſimilar worlds;* in which all the ſame actors re-appear, and in which all the ſame events re-occur. During an intermediate period of chaotic confuſion, the Great Father floats upon the ſurface of a ſea without land, either incloſed within an egg, or upborne by a ſhip, or reclining upon a bed or a navicular leaf, or a ſerpent coiled in the form of a boat. At this time he is variouſly deſcribed as being dead, or aſleep, or wrapt in a ſtate of profound meditation; and the vehicle, which ſupports him, is repreſented as being a form of his conſort, the Great Mother. Thus he remains during a whole year of the gods; but at the end of it he awakes or revives, and reſumes his active powers; he cauſes the waters to retire from off the ſurface of the earth; and then both he and his navicular conſort fly away in the ſhape of two doves. His firſt habitation, at the commencement of a new world, is a lofty mountain, the bliſsful abode of the gods. From its ſummit pour four rivers in different directions; and the tree of immortality blooms in the midſt of amaranthine groves. Here the Great Father is ſaid to triplicate himſelf, or (as the phraſe is literally explained) to become the parent of the three ſons. One of them ſlays his brother at a ſacrifice: but that brother is reſtored to life; and from this triad the whole world is peopled. The beginning of the new epoch is an age of gold: but, corruption creeping in, it is ſucceeded by other ages of inferior dignity, until at length the mundane ſyſtem, which had thus originated, draws to an end. All things are then abſorbed into the eſſence of the Great Father: he himſelf dies, or drops into a profound ſleep; and, chaos again commencing, he is compelled by a monſtrous enemy, who (we are aſſured) is merely a perſonification of the ocean, to enter into the ſame vehicle which he had occupied at the cloſe of a former world. This, as we have ſeen, is no other than his metamorphoſed conſort: and, as he is ſaid to be dead during the time that he is ſupported by it on the ſurface of the waters; it is deſcribed as his floating coffin, or as an infernal ſhip, and his entrance into it is deemed a deſcent into Hades, or the grave. He now again floats on the waves of an univerſal inundation: and, when it retires, he again appears tranſmigratively on the ſummit of the Elyſian mountain, again becomes the parent of three ſons, and again preſides over a world peopled as before by his deſcendants. Every event, that had already occurred, occurs afreſh: every perſon, that had already appeared, re-appears. The new world is a perfect tranſcript of its predeceſſor: and it is followed *ad infinitum* by other deluges and other worlds, each of which is an exact copy of a former deluge and a former world. Now it ſeems evident from this brief ſketch of the character of the Great Father, that he is neither Adam nor Noah, but a being fancifully compounded of both. As a human being, he is Adam tranſmigratively re-appearing in the perſon of Noah: while his three ſons, or three inferior manifeſtations, are, in a ſimilar manner, the three ſons of the former re-appearing as the three ſons of the latter. Such ſpeculations originated from the numerous points of reſemblance between the commencements of the two worlds, antediluvian and poſtdiluvian, which have *actually* exiſted. Theſe points were well known to the architects of Babel: and, by a ſingular kind of analogical reaſoning, they inferred from them an *endleſs ſucceſſion* of ſimilar mundane ſyſtems, divided from each other by an equally *endleſs ſucceſſion* of univerſal floods.

Such was the demonolatry of the gentiles; but it was intimately connected with their veneration of the hoſt of heaven. They did not *ſimply* worſhip the celeſtial bodies; but they adored them with thoſe *arbitrary* notions, to which we have already alluded as marking the common origin of the ſeveral mythologic ſyſtems. Thus the Sun was thought to have ſailed in a ſhip over the ocean, to have been plunged into the ſea, to have been born out of the intermediate deluge, to have been preceded, as he will be ſucceeded, by other Suns, to have hid himſelf in a floating iſland that he might eſcape the rage of the perſonified abyſs, to have been produced out of a gloomy cave within which he had laid concealed, to have reigned an univerſal ſovereign upon earth, to have wonderfully triplicated himſelf, to have deſcended into the infernal regions, and to have been eminently the parent of a warlike tribe of conquerors. Thus again the Moon was ſuppoſed to have been a ſhip, to have been the floating coffin of the Great Father, to have taken refuge in a floating iſland which yet is identified with itſelf, to have been the hiding-place of the Great Father and ſeven other holy perſonages, to have ſailed over the lake of Hades, to have been an inſular Elyſium, to have been born out of each intermediate deluge, to have reſted on the top of a lofty mountain, to have been the parent of the Great Father and of the whole world, and to have once had the branches of certain trees conveyed to it by doves. Thus likewiſe the whole ſolar ſyſtem was ſaid to be one enormous veſſel, of which the Sun was the pilot, while the ſeven then-known planets dependent upon him were the mariners. All theſe notions are plainly *arbitrary:* they could not have ariſen from the bare-abſtracted contemplation of the heavenly bodies: hence their general adoption proves the exiſtence of ſome modes of ſpeculating, which have pervaded the moſt diſtant regions of the earth, and which muſt have paſſed to them from ſome *common* centre.

But this is not all. The ſame Great Father, who floated in a ſhip on the ſurface of an univerſal deluge, was viewed as the intelligent ſoul of the world; and the ſame Great Mother, who ſuſtained him in the form of that ſhip, was conſidered in the light of its material or inert ſubſtance. Hence this intelligent ſoul was ſaid to have produced three younger intelligences, among whom he divided, and through whoſe agency he ruled, the univerſe: and hence this material body of the earth was compared to a ſhip, and a large floating iſland; while, in return, the ſhip of the deluge was pronounced to be a ſmall floating iſland, and a microcoſmic epitome of the world. From the tranſmigrating three ſons of the Great Father, or (as the idea was ſometimes expreſſed) from the ſelf-triplicated royal intelligence, plainly originated the various triads of the gentiles; which, far too haſtily, have been by ſome pronounced corruptions of the Holy Trinity. They have however nothing in common, except mere numerical coincidence: every other particular relative to the triads ſhows them incontrovertibly to have ſprung from a totally-different ſource.

The theological ſpeculations of the pagans neceſſarily influenced their religious worſhip; the whole of it accordingly was framed with an expreſs reference to their opinions. In their imitative myſterious rites, the Great Father was bewailed as dead, and ſhut up in a floating coffin, as purſued by an implacable enemy, as deſcending into Hades. Afterwards his ſuppoſed revival, or new birth into another world, or liberation from his coffin, or return from the infernal regions, was welcomed with the moſt frantic expreſſions of joy.

The ſame ſpeculations equally affected their religious architecture, and were carried into thoſe more ancient ſanctuaries which were furniſhed by the hand of nature. Whether we conſider the mountain, or the grove, or the lake, or the holy iſland, or the natural cavern, or the pyramid, or the pillared temple, or the gloomy central chamber, or the artificial ſepulchral excavation; ſtill, in every caſe, we ſhall find an expreſs reference to the peculiarities of their theology.

Every heroic fable, whether ancient or modern, ſecular or eccleſiaſtical, has been affected by theſe peculiarities. The mythology of one age becomes the romance of another; and the ſame notions and legends, which pervade the former, may be diſtinctly traced alſo in the latter.

On the whole, the apoſtate religion of the gentiles, viewed as one regular and well-compacted ſyſtem, will be found, in every particular, to bear the ſtrongeſt atteſtation to the truth of inſpired hiſtory. It firſt compels us to aſſume as a fact, that all mankind muſt once have been aſſembled together in a ſingle community: and then it exhibits, in groteſque maſquerade, the two firſt races of the two worlds, as conſtituting, upon the principles of the metempſychoſis, the hero-gods univerſally adored by them of the diſperſion. Holy Scripture is full of references to it: and many are the paſſages, hitherto ill underſtood, to which it alone can furniſh the key. *Pref. to Faber's Origin of Pagan Idolatry.*

Though almoſt every nation on the face of the globe, however remote from the centre of population, however ſavage and averſe from cultivation, has fabricated and adopted its own ſyſtem of mythology; the ORIENTALS, however, have diſtinguiſhed themſelves in a peculiar manner, by the boldneſs, the inconſiſtency, and the extravagance, of their mythology. The genial warmth of thoſe happy climes, the fertility of the ſoil, which afforded every neceſſary, every conveniency, and often every luxury, of life, without depreſſing their ſpirits by laborious exertions; the face of nature perpetually blooming around them, the ſkies ſmiling with uninterrupted ſerenity; all contributed to inſpire the Orientals with a glow of fancy and a vigour of imagination rarely to be met with in leſs happy regions. Hence every object was ſwelled beyond its natural dimenſions. Nothing was great or little in moderation, but every ſentiment was heightened with incredible hyperbole. The magnificent, the ſublime, the vaſt, the enormous, the marvellous, firſt ſprung up, and were brought to maturity, in thoſe native regions of fable and fairy land. As nature, in the ordinary courſe of her operations, exhibited neither objects nor effects adequate to the extent of their romantic imaginations, they naturally deviated into the fields of fiction and fable. Of conſequence, the cuſtom of detailing fabulous adventures originated in the Eaſt, and was from thence tranſplanted into the weſtern countries.

As the allegorical taſte of the eaſtern nations had ſprung from their propenſity to fable, and as that propenſity had in its turn originated from the love of the marvellous, ſo did allegory in proceſs of time contribute its influence towards multiplying fables and fiction almoſt *in infinitum.* The latent import of the allegorical doctrines being in a few ages loſt and obliterated, what was originally a moral or theological tenet, aſſumed the air and habit of a perſonal adventure.

The propenſity towards *perſonification*, almoſt univerſal among the Orientals, was another fruitful ſource of fable and allegory. That the people of the Eaſt were ſtrongly inclined to perſonify inanimate objects and abſtract ideas, we imagine will be readily granted, when it is conſidered, that, in the formation of language, they have generally annexed the affection of ſex to thoſe objects. Hence the diſtinction of grammatical genders, which is known to have originated in the eaſtern parts of the world. The practice of perſonifying virtues, vices, religious and moral affections, was neceſſary to ſupport that allegorical ſtyle which univerſally prevailed in thoſe countries. This mode of writing was in high reputation even in Europe ſome centuries ago; and to it we are indebted for ſome of the moſt noble poetical compoſitions now extant in our own language. Thoſe productions, however, are but faint imitations of the original mode of writing ſtill current among the eaſtern nations. The Europeans derived this ſpecies of compoſition from the Mooriſh inhabitants of Spain, who imported it from Arabia, their original country.

The general uſe of hieroglyphics in the Eaſt, muſt have contributed largely towards extending the empire of mythology. As the import of the figures employed in this method of delineating the ſigns of ideas was in a great meaſure arbitrary, miſtakes muſt have been frequently committed in aſcertaining the notions which they were at the firſt intended to repreſent. When the developement of theſe arbitrary ſigns happened to be attended with uncommon difficulty, the expounders were obliged to have recourſe to conjecture. Thoſe conjectural expoſitions were for the moſt part tinctured with that bias towards the marvellous which univerſally pervailed among the primitive men. This we find is the caſe even at this day, when moderns attempt to develope the purport of emblematical figures, preſerved on ancient medals, entaglios, &c.

The wiſe men of the Eaſt delighted in obſcure enigmatical ſentences. They ſeem to have diſdained every ſentiment obvious to vulgar apprehenſion. The words of the wiſe, and their *dark ſayings*, often occur in the moſt ancient records, both ſacred and profane. The ſages of antiquity uſed to vie with each other for the prize of ſuperior wiſdom, by propounding riddles, and dark and myſterious queſtions, as ſubjects of inveſtigation. The conteſt between Solomon and Hiram, and that between Amaſis king of Egypt, and Polycrates tyrant of Samos, are univerſally known. As the import of thoſe enigmatical propoſitions was often abſolutely loſt, in ages when the art of writing was little known, and ſtill leſs practiſed, nothing remained but fancy and conjecture, which always verged towards the regions of fable. This then, we think, was another ſource of mythology.

The pagan prieſts, eſpecially in Egypt, were probably the firſt who reduced mythology to a kind of ſyſtem. The ſacerdotal tribe, among that people, were the grand depoſitories of learning as well as of religion. That order of men monopolized all the arts and ſciences. They ſeem to have formed a conſpiracy among themſelves, to preclude the laity from all the avenues of intellectual improvement. This plan was adopted with a view to keep the laity in ſubjection, and to enhance their own importance. To accompliſh this end, they contrived to perform all the miniſtrations of their religion in an unknown tongue, and to cover them with a thick veil of fable and allegory. The language of Ethiopia became their ſacred dialect, and hieroglyphics their ſacred character. Egypt, of courſe, became a kind of fairy-land, where all was jugglery, magic, and enchantment. The initiated alone were admitted to the knowledge of the occult myſtical exhibitions, which, in their hands, conſtituted the eſſence of their religion. From theſe the vulgar and profane were prohibited by the moſt rigorous penalties. The Egyptians, and indeed all the ancients without exception, deemed the myſteries of religion too ſacred and ſolemn to be communicated to the herd of mankind, naked and unreſerved; a mode by which they imagined thoſe ſacred and ſublime oracles would have been defiled and degraded. "Procul, ô procul eſte profani; Odi profanum vulgus et arceo." Egypt was the land of graven images; allegory and mythology were the veil which concealed religion from the eyes of the vulgar; fable was the groundwork of that impenetrable covering.

In the earlieſt and moſt unpoliſhed ſtate of ſociety we cannot ſuppoſe fable to have exiſted among men. Fables are always *tales of other times*; but at this period other times did not reach far enough backward to afford thoſe fruits of the imagination ſufficient time to arrive at maturity. Fable requires a conſiderable ſpace of time to acquire credibility, and to riſe into reputation. Accordingly, we find that both the Chineſe and Egyptians, the two moſt ancient nations whoſe annals have reached our times, were altogether unacquainted with fabulous details in the moſt early and leaſt improved periods of their reſpective monarchies. It has been ſhown almoſt to a demonſtration, by a variety of learned men, that both the one and the other people, during ſome centuries after the general deluge, retained and practiſed the primitive Noachic religion, in which fable and fancy could find no place: all was genuine unſophiſticated truth.

As ſoon as the authentic tradition concerning the origin of the univerſe was either in a good meaſure loſt, or at leaſt adulterated by the inventions of men, fable and fiction began to prevail. The Egyptian *Thoth* or Thyoth, or Mercury Triſmegiſtus, and Moſchus the Phœnician, undertook to account for the formation and arrangement of the univerſe upon principles purely mechanical. Here fable began to uſurp the place of genuine hiſtorical truth. According, we find that all the hiſtorians of antiquity, who have undertaken to give a general detail of the affairs of the world, have uſhered in their narration with a fabulous coſmogony. Here imagination ranged unconfined over the boundleſs extent of the primary chaos. To be convinced of the truth of this aſſertion, we need only look into Sanchoniathon's Coſmogony, Euſeb. Præp. Evang. l. 1. ſub init. and Diodorus Sic. l. 1. From this we ſuppoſe it will follow, that the firſt race of fables owed their birth to the erroneous opinions of the formation of the univerſe.

Having thus endeavoured to point out the origin of mythology, or fabulous traditions, we ſhall now proceed to lay before our readers a brief detail of the mythology of the moſt reſpectable nations of antiquity, following the natural order of their ſituation.

The *Chineſe*, if any credit be due to their own annals, or to the miſſionaries of the church of Rome, who pretend to have copied from them, were *the firſt of the nations*. Their fabulous records reach upwards many myriads of years before the Moſaic era of the creation. The events during that period of time, if any had been recorded, muſt have been fabulous as the period itſelf. Theſe, however, are buried in eternal oblivion. The miſſionaries, who are the only ſources of our information with relation to the earlieſt periods of the Chineſe hiſtory, repreſent thoſe people as having retained the religion of Noah many centuries after the foundation of their empire. Upon this ſuppoſition, their coſmogony muſt have been ſound and genuine, without the leaſt tincture of thoſe fabulous ingredients which have both diſguiſed and diſgraced the coſmogonies of moſt other nations.

According to the moſt authentic accounts, Fohi laid the foundation of that empire about 4000 years ago. This emperor, according to the Chineſe, was conceived in a miraculous manner. His mother, ſay they, one day as ſhe was walking in a deſert place, was ſurrounded by a rainbow; and, being impregnated by this meteor, was in due time delivered of that celebrated legiſlator. This perſonage, like the Athenian Cecrops, was half a man and half a ſerpent. His intellectual powers were truly hyperbolical. In one day he diſcovered fifty different ſpecies of poiſonous herbs. He taught his countrymen the whole art of agriculture in the ſpace of a very few years. He inſtructed them how to ſow five different ſorts of grain. He invented boats, and nets for fiſhing, the art of fabricating porcelain, the management of ſilk-worms, the manufacturing of ſilk, &c. In a word, that wonderful perſonage was inſpired by Heaven with knowledge which qualified him for compoſing that incomparable body of laws which are even at this day the wonder of the world. Our readers will admit, that this whole detail is fabulous and chimerical. The moſt learned part of them will readily obſerve, that the Chineſe, in aſcribing the invention of all the uſeful arts to their Fohi, are perfectly agreed with almoſt all the other nations of antiquity. The Indians aſcribe every invention to Budha, or Viſhnu, or Fo; the Perſians to Zoroaſter; the Chaldeans to their man of the ſea, whom they call Oannes; the Egyptians to Thoth; the Phœnicians to Melicerta; the Greeks to the family of the Titans; and the Scandinavians to Odin, &c.

About 551 years before the Chriſtian era, appeared the famous Chineſe philoſopher *Con-fu-tſe*, or Confucius. Concerning the birth of this prince of philoſophers, the Chineſe have propagated the following legendary tale. His mother, walking in a ſolitary place, was impregnated by the vivifying influence of the heavens. The babe, thus produced, ſpake and reaſoned as ſoon as it was born. Confucius, however, wrought no miracles, performed no romantic exploits, but lived an auſtere aſcetic life, taught and inculcated the doctrines of pure morality, and died, remarkable only for ſuperior wiſdom, religious, moral, and political. See CONFUCIUS, vol. v.

About the year before Chriſt 601, flouriſhed the ſect of *Lao-kiun*. This philoſopher was the Epicurus of the Chineſe. His diſciples, who were denominated *tao-ſſe*, i. e. heavenly doctors, were the firſt who corrupted the religion of the Chineſe. They were addicted to magic, and introduced the worſhip of good and bad demons. Their doctrine was embraced by a long ſucceſſion of emperors. One of theſe princes, called You-ti, had been deprived by death of a favourite miſtreſs, whom he loved with the moſt extravagant paſſion. The emperor, by the magical ſkill of one of theſe doctors, obtained an interview with his deceaſed miſtreſs, a circumſtance which rivetted the whole order in the affection and eſteem of the deluded prince. Here our readers will obſerve the exact counterpart of the fable of Eurydice, ſo famous in the mythology of the Greeks and Romans. That ſuch a ſyſtem of religious principles muſt have abounded with mythological adventures is highly probable; but, as the miſſionaries, to whom we are chiefly indebted for our information relating to the religion of the Chineſe, have not taken the pains to record them, we find it impoſſible to gratify the curioſity of our readers on that head.

The worſhip of the idol Fo, or Foe, was tranſplanted from India into China about the 56th year of the Chriſtian era. If the earlier ages of the Chineſe hiſtory are barren of mythological incidents, the later periods, after the introduction of the worſhip of Fo, furniſh an inexhauſtible ſtore of miracles, monſters, fables, intrigues, exploits, and adventures, of the moſt villanous complexion. Indeed, moſt of them are ſo abſurd, ſo ridiculous, and at the ſame time ſo impious and profane, that we are convinced our readers will eaſily diſpenſe with a detail from which they could reap neither entertainment nor inſtruction. Some of them, however, are related under the article CHINA, vol. iv. p. 457, 8, 9.

The *Hindoos*, like the other nations of the Eaſt, for a long time retained the worſhip of the true God. At length, however, idolatry broke in, and, like an impetuous torrent, overwhelmed the country. Firſt of all, the genuine hiſtory of the origin of the univerſe was either utterly loſt, or diſguiſed under a variety of fictions and allegories. And, at preſent, mythology is ſo intimately blended in all their writings, that unleſs the ſtudent hath ſome information on that point, he will be continually at a loſs in comprehending the alluſions ſo frequently recurring. The whole of this popular religion, their hiſtory, and literature in general, even the ſciences and mechanical arts, are buried in a maſs of mythological allegory. It is, indeed, all-pervading; and, if we deem it worth while, as it ſurely is, to examine the ſtores of Indian learning, a knowledge of its mythology is no leſs neceſſary than a knowledge of its languages. One cannot indeed be acquired, without acquiring, at the ſame time, ſome knowledge of the other. This has been ſo much felt, that our moſt celebrated oriental ſcholars have profitably employed themſelves in the inveſtigation of this curious and comprehenſive ſubject. It affords alſo conſiderable elucidations of the primeval traditions of the human race. It illuſtrates what is extant, and ſuggeſts ſome parts of what is loſt in the hiſtory of almoſt every nation of antiquity. The analogy between the Hindoo and the Grecian and Roman mythology, has been copiouſly developed by ſir W. Jones, Mr. Colebroke, major Wilford, and other writers in the different volumes of the Aſiatic Reſearches. Coincidences too ſtrong and numerous to be accidental may be traced in the fabulous hiſtories of India, Egypt, and Perſia: the two latter, probably, being the intermediate countries through which the ſtream of allegory flowed to Greece, Rome, and to the Gothic and other nations of Europe, among all of whom a ſimilarity of tradition and popular ſuperſtition is found to have prevailed. Even in Ireland, ſome amuſing inſtances of relationſhip have been diſcovered. Which is the parent country of theſe widely-ſpread impreſſions, is not altogether agreed on. India ſeems to have ſtrong claims to this honour, ſuch as it is, and it is accordingly ſtrongly claimed for her. The mode and courſe of their propagation ſtill afford farther ſcope for the induſtry of reſearch, and the exertion of analogical deduction.

Among the many writers who have diſcuſſed the ſubject of this article, we may notice the Rev. Mr. Maurice; who, in his Indian Antiquities, and Ancient Hiſtory of India, has brought together many coincidences of opinion in different nations, and diſcuſſed them learnedly and at length. Sonnerat and Bartolemeo, not to mention Baldæus and other early Romiſh travellers, have entered pretty fully into the popular legends of Indian mythology; and "Moor's Hindoo Pantheon," recently publiſhed, contains a great number of exact repreſentations of the deities, perſonifications, and ſymbols, with deſcriptive illuſtrations, of this ſuperſtitious polytheiſm. But it is in the Aſiatic Reſearches that we are ſtill to look for the moſt ſatisfactory and authentic developements of this intereſting ſubject. The ſyſtem of the Hindoos ſeems a ſeries of endleſs perſonifications, and the invention rather of poets than of prieſts; but in early ages the poet and the prieſt were, perhaps, generally combined. It has animated all nature. It has peopled the heavens, the air, the earth, and waters, with innumerable tribes of imaginary beings, arrayed in tints correſponding with the fervid imagination of tropical climes; and we are diſpoſed to contemplate Hindoo mythology as a well-ſtored magazine, whence poets may ſupply themſelves with an almoſt infinity of imagery and incident. From the above, and other ſources, we have collected, under the article HINDOOSTAN, vol. x. p. 115–169, a pretty correct view of the mythology of this country. Yet the following ſhort and compendious ſketch, from Forbes's Oriental Memoirs, publiſhed ſince our account was written, will, we think, be ſtill acceptable to the reader.

"The Hindoo religion admits of no proſelytes; and is therefore a principal means of preſerving the caſtes pure and diſtinct: neither have the Mahomedan conqueſts and oppreſſions, nor the intercourſe of Europeans with the Hindoos, been able to ſubvert a ſyſtem of theology and juriſprudence, founded on a firm baſis, and interdicted from all change by the moſt rigid laws.

“ This religious and moral ſyſtem is no doubt of great antiquity; but thoſe who have deeply inveſtigated the ancient and pleaſing fictions in the Hindoo mythology, which bears a great reſemblance to that of the Greeks, and may perhaps be traced to the ſame origin, are of opinion, that the religious and civil laws of the Hindoos, called the Inſtitutes of Menu, were compiled about 880 years before the birth of our Saviour; that the Vedas, or ſacred volumes, were written three hundred years prior to the Inſtitutes; and that, preceding this period, every thing being handed down by oral tradition, the account was obſcure and fabulous.

But, diveſted of extraneous matter, there appears to be a great degree of purity and ſublimity in the genuine principles of the Hindoo religion, though now obſcured by ſuperſtitious rites and ceremonies, and blended with groſs idolatry: in their original ſimplicity, they teach that there is one ſupreme ruler of the univerſe; who is ſtyled *Brahma*, or the Great One: they inculcate alſo, that this ſupreme intelligence conſiſts of a triad, or triple divinity, expreſſed by the myſtic word Om; and diſtinguiſhed by the names of *Viſhnu*, *Brahma*, and *Siva;* or the creating, preſerving, and deſtructive, power of the Almighty. Images of theſe attributes are placed in their temples; and worſhip and ſacrifices are daily performed before them, and a variety of other ſtatues, repreſenting the different qualities of the Supreme Being: ſo that it is a complete ſyſtem of polytheiſm, and the ſource of a thouſand fables ſubverſive of truth and ſimplicity. Yet it ever was, and ever muſt be, difficult, for either Chriſtians or Mahomedans, to convert a Hindoo: for, with them theology is ſo blended with the whole moral and civil obligations of life, that it enters into every habit, and ſanctions almoſt every action.

“ On withdrawing the veil from the ſacred volumes of the Hindoos, we ſee *Brahma*, or the Supreme Deity, repreſented as abſorbed in the contemplation of his own eſſence, but, from an impulſe of divine love, reſolving to create other beings to partake of his glory, and to be happy to all eternity. He ſpake the word, and angels roſe into exiſtence! He commanded, and the hoſt of heaven were formed! they were created free; and were made partakers of the divine glory and beatitude, on the eaſy condition of praiſing their Creator, and acknowledging him for their ſupreme Lord. But, not content with this happy ſtate in the celeſtial regions, ſome of the principal ſpirits rebelled, and drew a number after them; who were all doomed to languiſh in that ſcene of horror ſo finely deſcribed by our ſublime poets.

“ In proceſs of time, at the interceſſion of the faithful angels, the fatal doom of theſe fallen ſpirits was revoked; and they were releaſed on the conditions of repentance and amendment in a ſtate of probation. For this purpoſe a new creation of worlds took place; and mortal bodies were prepared for the apoſtate angels, which they were to animate for a certain ſpace; there to be ſubject to natural and moral evils; through which they were doomed to tranſmigrate under eighty-nine different forms! the laſt into that of man! when their powers and faculties are enlarged, and a merciful Creator reſts his chief expectations of their repentance and reſtoration to his favour. If they then fail, their puniſhment is renewed, and they are doomed to begin again their firſt ſtate of tranſmigration. In this ſyſtem we are ſtruck with the intermixture of truth with error, and falſe traditions, bearing in many particulars a reſemblance to the ſacred truths of divine revelation.

“ On this hypotheſis, it appears that one principal reaſon for the Hindoos regarding the *cow* with ſuch religious veneration, is, that they believe the ſoul tranſmigrates into this animal immediately preceding its aſſumption of the human form. No Hindoo, even of the loweſt caſte, will kill a cow, or taſte its fleſh; they will die with perfect reſignation rather than violate this tenet; as has been frequently experienced on-board the veſſels in the Indian ſeas, when all the proviſion except ſalt beef has been expended. But I am not certain reſpecting the firſt principle of the Hindoo's veneration for the cow; ſince many conjecture the command to have originated in the preſervation of an animal ſo uſeful to mankind: and it is well known, that the Egyptians, Phœnicians, and other ancient nations, have equally venerated this valuable animal.

“ The Hindoos eſtimate the delinquency of theſe apoſtate ſpirits, by the claſs of mortal forms which they are doomed to inhabit; thus all voracious and unclean animals, whether inhabitants of earth, air, or water, as well as men whoſe lives and actions are publicly and atrociouſly wicked, are ſuppoſed to contain a malignant ſpirit; on the contrary, thoſe animals which ſubſiſt on vegetables, and do not prey upon each other, are pronounced favoured of the Almighty.

“ That every animal form is endued with cogitation, memory, and reflection, is one of the eſtabliſhed tenets of the Brahmins, indeed it muſt neceſſarily follow, from the ſuppoſed metempſychoſis of the apoſtate ſpirits through theſe mortal forms: they alſo believe that every diſtinct ſpecies of the animal creation have a comprehenſive mode of communicating their ideas, peculiar to themſelves; and that the metempſychoſis of the delinquent ſpirits extends through every organized body, even to the ſmalleſt inſect and reptile. They highly venerate the bee, and ſome ſpecies of the ant; and conceive the ſpirits animating theſe forms to be favoured by God, and that the intellectual faculties are more enlarged under them than in moſt others.

“ The devotion of the Hindoos to the Supreme Being, and the inferior deities, conſiſts in a regular attendance at the *dewals*, or temples, eſpecially at the ſolemn feſtivals; in performing particular religious ceremonies in their own houſes; in prayers, ablutions, faſting, and penances; but eſpecially in oblations, which conſiſt chiefly of ſpices, incenſe, rice, fruits, and flowers; and, although they have been in former times accuſed of offering human ſacrifices, it is certain they now very rarely ſhed even the blood of an animal in their religious ſervices.”

We need not dwell here on the religious books of the Hindoos, having extracted largely from them under the article HINDOOSTAN; but it would be injuſtice to omit the following ſublime deſcription of the Supreme Being, from the writings of governor Holwell; who was an early inveſtigator of thoſe ſubjects, before the field of oriental literature ſo laudably engaged the attention of the Engliſh. “ God is one! Creator of all that is! God is like a perfect ſphere, without beginning, and without end! God rules and governs all creation by a general providence, reſulting from firſt determined and fixed principles. Thou ſhalt not make enquiry into the eſſence of the Eternal One, nor by what laws he governs. An inquiry into either is vain and criminal. It is enough that, day by day, and night by night, thou ſeeſt, in his works, his wiſdom, his power, and his mercy. Benefit thereby!”

The mythology of the *Perſians* is, if poſſible, ſtill more extravagant than that of the Hindoos. It ſuppoſes the world to have been repeatedly deſtroyed, and repeopled by creatures of different formation, who were ſucceſſively annihilated or baniſhed for their diſobedience to the Supreme Being. The monſtrous griffin *Sinergh* tells the hero *Caherman*, that ſhe had already lived to ſee the earth ſeven times filled with creatures, and ſeven times a perfect void; and that, before the creation of Adam, this globe was inhabited by a race of beings called *Peri* and *Dives*, whoſe characters formed a perfect contraſt. The Peri are deſcribed as beautiful and benevolent; the Dives as deformed, malevolent, and miſchievous, differing from infernal demons only in this, that they are not as yet confined to the pit of hell. They are for ever ranging over the world, to ſcatter diſcord and miſery among the ſons of men. The Peri nearly reſemble the fairies of Europe; and perhaps the Dives gave birth to the giants and magicians of the middle ages. The Peri and Dives wage inceſſant wars; and, when the Dives make any of the Peri priſoners, they ſhut them up in iron cages, and hang them on the higheſt trees to expoſe them to public view, and to the fury of every chilling blaſt. When the Peri are in danger of being overpowered by their foes, they ſolicit the aſſiſtance of ſome mortal hero; which produces a ſeries of mythological adventures, highly ornamental to the ſtrains of the Perſian bards, and which, at the ſame time, furniſhes an inexhauſtible fund of the moſt diverſified machinery.

One of the moſt celebrated adventurers in the mythology of Perſia is *Tahmuras*, one of their moſt ancient monarchs. This prince performs a variety of exploits, while he endeavours to recover the fairy Merjan. He attacks the dive Demruſh in his own cave; where, having vanquiſhed the giant or demon, he finds vaſt piles of hoarded wealth: theſe he carries off with the fair captive. The battles, labours, and adventures, of Roſtan, another Perſian worthy, who lived many ages after the former, are celebrated by the Perſian bards with the ſame extravagance of hyperbole with which the labours of Hercules have been ſung by the poets of Greece and Rome. The adventures of the Perſian heroes breathe all the wildneſs of achievement recorded of the knights of Gothic romance. The doctrine of enchantments, transformations, &c. exhibited in both, is a characteriſtic ſymptom of one common original. Perſia is the genuine claſſic ground of eaſtern mythology, and the ſource of the ideas of chivalry and romance; from which they were propagated to the regions of Scandinavia, and indeed to the remoteſt corners of Europe towards the weſt.

Perhaps our readers may be of our opinion, when we offer it as a conjecture, that the tales of the war of the Peri and Dives originated from a vague tradition concerning good and bad angels; nor is it, in our opinion, improbable, that the fable of the wars between the gods and giants, ſo famous in the mythology of Greece and Italy, was imported into the former of theſe countries from the ſame quarter. For a more particular account of the Perſian mythology, our readers may conſult Dr. Hyde Relig. vet. Perſ. Medor. &c. D'Herbelot's Bibl. Orient. and Mr. Richardſon's Introduction to his Perſian and Arabic Dictionary.

The mythology of the *Chaldeans*, like that of the other nations of the eaſt, commences at a period myriads of years prior to the era of the Moſaic creation. Their coſmogony, exhibited by Beroſus, who was a prieſt of Belus, and deeply verſed in the antiquities of his country, is a piece of mythology of the moſt extravagant nature. It has been copied by Euſebius (Chron. lib. i.) it is likewiſe to be found in Syncellus, copied from Alexander Polyhiſtor. According to this hiſtorian, there were at Babylon written records preſerved with the greateſt care, comprehending a period of fifteen myriads of years. Thoſe writings likewiſe contained a hiſtory of the heavens and the ſea, of the earth, and of the origin of mankind. "In the beginning (ſays Beroſus, copying from Oannes, of whom we ſhall give a brief account below) there was nothing but darkneſs and an abyſs of water, wherein reſided moſt hideous beings produced from a twofold principle. Men appeared with two wings; ſome with two and ſome with four faces. They had one body, but two heads; the one of a man, the other of a woman. Other human figures were to be ſeen, furniſhed with the legs and horns of goats. Some had the feet of horſes behind, but before were faſhioned like men, reſembling hippocentaurs." The remaining part of this mythology is much of the ſame complexion; indeed ſo extravagant, that we imagine our readers will readily enough diſpenſe with our tranſlating the ſequel. "Of all theſe (ſays the author) were preſerved delineations in the temple of Belus at Babylon. The perſon who was ſuppoſed to preſide over them was called *Omorea*. This word, in the Chaldean language, is *Thalath*, which the Greeks call *Thalaſſa*; but it more properly imports the Moon. Matters being in this ſituation, *their* god (ſays Euſebius), *the* god (ſays Syncellus), came and cut the woman aſunder; and out of one half of her he formed the earth, and out of the other he made the heavens; and, at the ſame time, he deſtroyed the monſters of the abyſs. This whole mythology is an allegorical hiſtory copied from hieroglyphical repreſentations, the real purport of which could not be deciphered by the author. Such, in general, were the conſequences of the hieroglyphical ſtyle of writing.

Oannes, the great civilizer and legiſlator of the Chaldeans, according to Apollodorus, who copied from Beroſus, was an amphibious animal of a heterogeneous appearance. He was endowed with reaſon, and a very uncommon acuteneſs of parts. His whole body reſembled a fiſh. Under the head of a fiſh he had alſo another head, and feet below ſimilar to thoſe of a man, which were ſubjoined to the tail of the fiſh. His voice and language were articulate and perfectly intelligible; and there was a figure of him ſtill extant in the days of Beroſus. He made his appearance in the Erythrean or Red Sea, where it borders upon Babylonia. This monſtrous being converſed with men by day; but at night he plunged into the ſea, and remained concealed in the water till next morning. He taught the Babylonians the uſe of letters, and the knowledge of all the arts and ſciences. He inſtructed them in the method of building houſes, conſtructing temples, and all other edifices. He taught them to compile laws and religious ceremonies, and explained to them the principles of mathematics, geometry, and aſtronomy. In a word he communicated to them every thing neceſſary, uſeful, and ornamental; and ſo univerſal were his inſtructions, that not one ſingle article had ever been added to them ſince the time they were firſt communicated. Helladius is of opinion that this ſtrange perſonage, whoever he was, came to be repreſented under the figure of a fiſh, not becauſe he was actually believed to be ſuch, but becauſe he was clothed with the ſkin of a ſeal. By this account our readers will ſee that the Babylonian Oannes is the exact counterpart of the Fohi of the Chineſe; and the Thoth, or Mercury Triſmegiſtus, of the Egyptians. It is likewiſe apparent, that the idea of the monſter compounded of the man and the fiſh has originated from ſome hieroglyphic of that form grafted upon the appearance of man. Some modern mythologiſts have been of opinion that Oannes was actually Noah, the great preacher of righteouſneſs; who, as ſome think, ſettled in Shinar or Chaldea after the deluge, and who, in conſequence of his connexion with that event, might be properly repreſented under the emblem of *the Man of the Sea*.

The nativity of Venus, the goddeſs of beauty and love, is another piece of mythology famous among the Babylonians and Aſſyrians. An egg, ſay they, of a prodigious ſize, dropt from heaven into the river Euphrates. Some doves ſettled upon this egg, after that the fiſhes had rolled it to the bank. In a ſhort time this egg produced Venus, who was afterwards called *Dea Syria*, the Syrian Goddeſs. In conſequence of this tradition (ſays Hyginus) pigeons and fiſhes became ſacred to this goddeſs among the Syrians, who always abſtained from eating the one or the other. Of this imaginary being we have a very exact and entertaining hiſtory in the treatiſe *De Dea Syria*, generally aſcribed to Lucian.

The fable of Semiramis is nearly connected with the preceding one. Diodorus Siculus has preſerved the mythological hiſtory of this deity, which he and all the writers of antiquity have confounded with the Babylonian princeſs of the ſame name. That hiſtorian informs us, that the word *Semiramis*, in the Syrian dialect, ſignifies "a wild pigeon;" but we apprehend that this term was a name or epithet of the Moon, as it is compounded of two words of an import naturally applicable to the lunar planet: *ſem*, a ſign; and *ramah*, high. It was a general practice among the Orientals to denominate their ſacred animals from that deity to which they were conſecrated. Hence, the Moon being called *Semiramis*, and the pigeon being ſacred to her divinity, the latter was called by the name of the former. As the bounds preſcribed to this arcle render it impoſſible for us to do juſtice to this intereſting piece of mythology, we muſt beg leave to refer our readers for farther information to Diod. Sic. lib. ii. Hyginus Poet. Aſtron. Fab. 197. Ovid. Metam. lib. iv. Athen. in Apol. Izetzes, Chil. ix. cap. 275. and Selden de Diis Syr.

In *Egypt* we find idolatry, theology, and mythology, almoſt inſeparably blended together. The inhabitants of this region, too, as well as of others in the vicinity of the centre of population, adhered for ſeveral centuries to the worſhip of the true God. At laſt, however, conſcious of their own ignorance, impurity, imperfection, and total unfitneſs to approach an infinitely-perfect Being, diſtant, as they imagined, and inviſible, they began to caſt about for ſome beings, more exalted and more perfect than themſelves, by whoſe mediation they might prefer their prayers to the Supreme Majeſty of heaven. The luminaries of heaven, which they imagined were animated bodies, naturally preſented themſelves. Theſe were ſplendid and glorious beings. They were thought to partake of the divine nature: they were revered as the ſatraps, prefects, and repreſentatives, of the Supreme Lord of the univerſe. They were viſible, they were beneficent; they dwelt nearer to the gods; they were near at hand, and always acceſſible. Theſe were, of courſe, employed as mediators and interceſſors between the Supreme Divinity and his humble ſubjects of this lower world. Thus employed, they might claim a ſubordinate ſhare of worſhip, which was accordingly aſſigned them. In proceſs of time, however, that worſhip, which was originally addreſſed to the Supreme Creator by the mediation of the heavenly bodies, was in a great meaſure forgotten, and the adoration of mankind ultimately terminated on thoſe illuſtrious creatures. To this circumſtance, we think, we may aſcribe the origin of that ſpecies of idolatry called *zabiiſm*, or the worſhip of the hoſt of heaven, which overſpread the world early and almoſt univerſally. In Egypt this mode of worſhip was adopted in all its moſt abſurd and moſt enthuſiaſtic forms; and at the ſame time the moſt heterogeneous mythology appeared in its train. The mythology of the ancient Egyptians was ſo various and multiform, ſo complicated and ſo myſterious, that it would require many volumes, even to give a ſuperficial account of its origin and progreſs, not only in its mother-country, but alſo in many other parts of the eaſtern and weſtern world. We hope, therefore, our readers will not be diſappointed, if, in a work of this nature, we touch only upon ſome of the leading or moſt intereſting articles of this complicated ſubject.

The Egyptians confounded the revolutions of the heavenly bodies with the reigns of their moſt early monarchs. Hence the incredible number of years included in the reign of their eight ſuperior gods, who, according to them, filled the Egyptian throne ſucceſſively in the moſt early periods of time. To theſe, according to their ſyſtem, ſucceeded twelve demigods, who likewiſe reigned an amazing number of years. Theſe imaginary reigns were no other than the periodical revolutions of the heavenly bodies preſerved in their almanacs, which might be carried back, and actually were carried back, at pleaſure. Hence the fabulous antiquity of that kingdom. The imaginary exploits and adventures of theſe gods and demigods furniſhed an inexhauſtible fund of mythological romances. To the demigods ſucceeded the kings of the *cynic cycle*, perſonages equally chimerical with the former. The import of this epithet has greatly perplexed critics and etymologiſts. We apprehend it is an oriental word importing royal dignity, elevation of rank. This appellation intimated, that the monarchs of that cycle, admitting that they actually exiſted, were more powerful and more highly revered than their ſucceſſors. After the princes of the cynic cycle comes another race, denominated *Nekyes*, a title likewiſe implying royal, ſplendid, glorious. Theſe cycles figure high in the mythological annals of the Egyptians, and have furniſhed materials for a variety of learned and ingenious diſquiſitions. The wars and adventures of Oſiris, Oris, Typhon, and other allegorical perſonages who figure in the Egyptian rubric; the wanderings of Iſis, the ſiſter and wife of Oſiris; the transformation of the gods into divers kinds of animals; their birth, education, peregrinations, and exploits;—compoſe a body of mythological fictions ſo various, ſo complicated, ſo ridiculous, and often ſo apparently abſurd, that all attempts to develope and explain them have hitherto proved unſucceſsful. All, or the greateſt part of, thoſe extravagant fables are the offspring of hieroglyphical or allegorical emblems deviſed by the prieſts and ſages of that nation, with a view to conceal the myſteries of their religion from that claſs of men whom they ſtigmatized with the name of the uninitiated rabble.

The worſhip of brute-animals and of certain vegetables, univerſal among the Egyptians, was another exuberant ſource of mythological adventures. The Egyptian prieſts, many of whom were likewiſe profound philoſophers, obſerved, or pretended to obſerve, a kind of analogy between the qualities of certain animals and vegetables, and thoſe of ſome of their ſubordinate divinities. Such animals and vegetables they adopted, and conſecrated to the deities to whom they were ſuppoſed to bear this analogical reſemblance; and in proceſs of time they conſidered them as the viſible emblems of thoſe divinities to which they were conſecrated. By theſe, the vulgar addreſſed their archetypes: in the ſame manner as, in other countries, pictures and ſtatues were employed for the very ſame purpoſe. The mob, in proceſs of time, forgetting the emblematical character of thoſe brutes and vegetables, addreſſed their devotion immediately to them; and, of courſe, theſe became the ultimate objects of vulgar adoration.

After that theſe objects, animate or inanimate, were conſecrated as the viſible ſymbols of the deities, it ſoon became faſhionable to make uſe of their figures to repreſent thoſe deities to which they were conſecrated. This practice was the natural conſequence of the hieroglyphical ſtyle which univerſally prevailed among the ancient Egyptians. Hence Jupiter Ammon was repreſented under the figure of a ram, Apis under that of a cow, Oſiris of a bull, Pan of a goat, Thoth or Mercury of an ibis, Bubaſtis or Diana of a cat, &c. It was likewiſe a common practice among thoſe deluded people to dignify theſe objects, by giving them the names of thoſe deities which they repreſented. By this mode of dignifying theſe ſacred emblems, the veneration of the rabble was conſiderably enhanced, and the ardour of their devotion inflamed in proportion. From theſe two ſources, we think, are derived the fabulous transformations of the gods, ſo generally celebrated in the Egyptian mythology, and from it imported into Greece and Italy. In conſequence of this practice, their mythological ſyſtem was rendered at once enormous and unintelligible.

Their Thoth, or Mercury Triſmegiſtus, was, in our opinion, the inventor of this unhappy ſyſtem. This perſonage, according to the Egyptians, was the original author of letters, geometry, aſtronomy, muſic, architecture, in a word, of all the elegant and uſeful arts, and of all the branches of ſcience and philoſophy. He it was who firſt diſcovered the analogy between the divine affections, influences, appearances, operations, and the correſponding properties, qualities, and inſtinct, of certain animals, and the propriety of dedicating particular kinds of vegetables to the ſervice of particular deities. The prieſts, whoſe province it was to expound the myſteries of that allegorical hieroglyphical religion, gradually loſt all knowledge of the primary import of the ſymbolical characters. To ſupply this defect, and at the ſame time to veil their own ignorance, the ſacerdotal inſtructors had recourſe to fable and fiction. They heaped fable upon fable, till their religion became an accumulated chaos of mythological abſurdities. See the article EGYPT, vol. vi. p. 370 & ſeq.

The elements of *Phœnician* mythology have been preſerved by Euſebius Præp. Evang. ſub. init. In the large extract which that learned father has copied from Philo Biblius's tranſlation of Sanchoniathon's Hiſtory of Phœnicia, we are furniſhed with ſeveral articles of mythology. Some of theſe throw conſiderable light on various paſſages of the ſacred hiſtory; and all of them are ſtrictly connected with the mythology of the Greeks and Romans. There we have preſerved a brief but entertaining detail of the fabulous adventures of Uranus, Cronus, Dagon, Thoth or Mercury, probably the ſame with the Egyptian hero of that name. Here we find *Muth* or Pluto, *Æphceſtus* or Vulcan, Æſculapius, Nereus, *Poſcedon* or Neptune, &c. *Aſtarte*, or Venus Urania, makes a conſpicuous figure in the catalogue of Phœnician worthies; Pallas or Minerva is planted on the territory of Attica; in a word, all the branches of the family of the Titans, who in after-ages figured in the rubric of the Greeks, are brought upon the ſtage, and their exploits and adventures briefly detailed. By comparing this fragment with the mythology of the Atlantidæ and that of the Cretans preſerved by Diodorus, lib. v. we think there is good reaſon to conclude, that the family of the Titans, the ſeveral branches of which ſeem to have been both the authors and objects of a great part of the Grecian idolatry, originally emigrated from Phœnicia. This conjecture will receive additional ſtrength, when it is conſidered, that almoſt all their names recorded in the fabulous records of Greece, may be eaſily traced up to a Phœnician origin.

In the 5th volume of the Aſiatic Reſearches, there is a paper, by Capt. Francis Wilford, "On the Names of the Cabirian Deities," whoſe worſhip has generally been ſuppoſed to have originated in Phœnicia; (ſee CABIRI, vol. iii. p. 572.) which we ſhall here preſent to the reader.

In the *Adhuta Coſa* we find the following legends which have an obvious relation to the deities worſhipped in the myſteries of Samothrace: "In *Patala* (or the infernal regions) reſides the ſovereign queen of the *Nagas*, (large ſnakes or dragons:) ſhe is beautiful, and her name is *Aſyoruca*. There, in a cave, ſhe performed *tapaſya* with ſuch rigorous auſterity, that fire ſprang from her body, and formed numerous *agni-tiraths* (places of ſacred fire) in Patala. Theſe fires, forcing their way through the earth, waters, and mountains, formed various openings, or mouths, called from thence the *juala-muc'hi*, or flaming mouths. By Samudr, (Oceanus,) a daughter was born unto her, called *Rama-devi*. She is moſt beautiful; ſhe is *Lacſhmi*; and her name is *Aſyotcerſha*. Like a jewel, ſhe remains concealed in the ocean.

"The *Dharma-Raja*, or King of Juſtice, has two countenances: one is mild, and full of benevolence; thoſe alone who abound with virtue ſee it. He holds a court of juſtice, where are many aſſiſtants, among whom are many juſt and pious kings: *Chitragupta* acts as chief ſecretary. Theſe holy men determine what is *dharma* and *adharma*, juſt and unjuſt. Dharma Raja's ſervant is called *Carmala*: he brings the righteous on celeſtial cars, which go of themſelves, whenever holy men are to be brought in, according to the directions of the *Dharma-Raja*, who is the ſovereign of the Pitris. This is called his *divine countenance*, and the righteous alone do ſee it. His other countenance, or form, is called *Yama*: this the wicked alone can ſee: it has large teeth, and a monſtrous body. Yama is the lord of Patala; there he orders ſome to be beaten, ſome to be cut to pieces, ſome to be devoured by monſters, &c. His ſervant is called *Caſhmala*, who, with ropes round their necks, drags the wicked over rugged paths, and throws them headlong into hell. He is unmerciful, and *hard* is his heart: every body trembles at the ſight of him."

According to Mnaſeas, as cited by the ſcholiaſt of Apollonius Rhodius, the names of the Cabirian Gods were *Axieros*, or Ceres, or the earth; *Axiocerſa*, or Proſerpine; *Axiocerſos*, or Pluto; to whom they add a fourth, called *Caſmillus*, the ſame with the infernal Mercury.

Axieros is obviouſly derived from Aſyoruca, or rather from *Aſyoru*, or *Aſyorus*; for ſuch is the primitive form; which ſignifies literally, "ſhe whoſe face is moſt beautiful." *Axiocerſa* is derived from *Aſyotcerſa*, a word of the ſame import with the former, and which was the ſacred name of Proſerpine. This is obviouſly derived from the Sanſcrit *Praſarparni*, or "ſhe who is ſurrounded by large ſnakes and dragons." Nonnus repreſents her as ſurrounded by two enormous ſnakes who conſtantly watched over her. She was raviſhed by Jupiter in the ſhape of an enormous dragon. She was generally ſuppoſed to be his daughter; but the Arcadians, according to Pauſanius, inſiſted that ſhe was the daughter of Ceres and Neptune; with whom the ancient mythologiſts often confound Oceanus. As ſhe is declared, in the ſacred books of the Hindoos, to be the ſame with *Lacſhmi*, her conſort, of courſe, is *Viſhnu*, who rules, according to the Puranas, in the weſt, and alſo during the greateſt part of the night. In this ſenſe Viſhnu is the *Dis* of the weſtern mythologiſts, the *Black Jupiter* of Statius; for Viſhnu is repreſented of a black, or dark azure, complexion: Pluto, or *Yama*, is but a form of Viſhnu. The titles of *Dis*, or *Ades*, appear to me to be derived from *Adi*, or *Adin*, one of the names of Viſhnu. When Cicero ſays, *Terrena autem vis omnes atque natura, Diti patri dedicata eſt*; that is to ſay, "Nature, and the powers or energy of the earth, are under the direction of *Dis*;" this has no relation to the judge of departed ſouls, but ſolely belongs to Viſhnu. *Axiocerſos*, in Sanſcrit *Aſyotcerſa*, was Pluto, or Dis, and was meant for Viſhnu. Viſhnu is always repreſented as extremely beautiful; but I never found Aſyotcerſa among any of his titles. *Caſhmalas* is obviouſly the Caſmillus of the weſtern mythologiſts.

The appellation of *Cabiri*, as a title of theſe deities, is unknown to the Hindoos; and, I believe, by the Cabirian gods, we are to underſtand, the gods worſhipped by a nation, tribe, or ſociety of men, called *Cabires*. The Cuveras, or *Cuberas* as it is generally pronounced, are a tribe of inferior deities, poſſeſſed of immenſe riches, and who are acquainted with all places, under or above ground, abounding with precious metals and gems. Their hiſtory, in the Puranas, begins with the firſt Menu. They are repreſented with yellow eyes, like the Pingacſhas, and perhaps may be the ſame people; certain it is, the Pingacſhas worſhipped the Cabirian gods. Diodorus Siculus ſays, that the invention of fire, and the working of mines, were attributed to them; and we find a Cabirus repreſented with a hammer in his hand.

We agree with Herodotus, that a conſiderable part of the idolatry of *Greece* may have been borrowed from the Egyptians; at the ſame time, we imagine it highly probable, that the idolatry of the Egyptians and Phœnicians was, in its original conſtitution, nearly the ſame. Both ſyſtems were Sabiiſm, or the worſhip of the hoſt of heaven. The Pelaſgi, according to Herodotus, learned the names of the gods from the Egyptians; but in this conjecture he is certainly warped by his partiality for that people. Had thoſe names been imported from Egypt, they would no doubt have betrayed their Egyptian original; whereas, every etymologiſt will be convinced that they are all of Phœnician extraction.

The adventures of Jupiter, Juno, Mercury, Apollo, Diana, Mars, Minerva or Pallas, Venus, Bacchus, Ceres, Proſerpine, Pluto, Neptune, and the other deſcendants and coadjutors of the ambitious family of the Titans, furniſh by far the greateſt part of the mythology of Greece. They left Phœnicia, we think, about the age of Moſes; they ſettled in Crete, a large and fertile iſland;

from this region they made their way into Greece, which, according to the moſt authentic accounts, was at that time inhabited by a race of ſavages. The arts and inventions which they communicated to the natives; the myſteries of religion which they inculcated; the laws, cuſtoms, polity, and good order, which they eſtabliſhed; in ſhort, the bleſſings of humanity, and civilization, which they everywhere diſſeminated; in proceſs of time inſpired the unpoliſhed inhabitants with a kind of divine admiration. Thoſe ambitious mortals improved this admiration into divine homage and adoration. The greater part of that worſhip, which had been formerly addreſſed to the luminaries of heaven, was now transferred to thoſe illuſtrious perſonages. They claimed and obtained divine honours from the deluded rabble of enthuſiaſtic Greeks. Hence ſprung an inexhauſtible fund of the moſt inconſiſtent and irreconcilable fictions.

The foibles and frailties of the deified mortals were tranſmitted to poſterity, incorporated as it were with the pompous attributes of ſupreme divinity. Hence the heterogeneous mixture of the mighty and the mean which checquers the characters of the Iliad and Odyſſey. The Greeks adopted the oriental fables, the import of which they did not underſtand. Theſe they accommodated to heroes and illuſtrious perſonages who had figured in their own country in the earlieſt periods. The labours of Hercules originated in Egypt, and evidently relate to the annual progreſs of the ſun in the zodiac, though the vainglorious Greeks accommodated them to a hero of their own, the reputed ſon of Jupiter and Alcmena. The expedition of Oſiris they borrowed from the Egyptians, and transferred to their Bacchus, the ſon of Jupiter and Semele the daughter of Cadmus. The transformation and wanderings of Io are evidently tranſcribed from the Egyptian romance of the travels of Iſis in queſt of the body of Oſiris, or of the Phœnician Aſtarte, drawn from Sanchoniathon. *Io* is in reality the Egyptian name of the Moon, and *Aſtarte* was the name of the ſame planet among the Phœnicians. Both theſe fables are allegorical repreſentations of the anomalies of the lunar planet, or perhaps of the progreſs of the worſhip of that planet in different parts of the world. The fable of the conflagration occaſioned by Phaeton is clearly of oriental extraction, and alludes to an exceſſive drought which in the early periods of time ſcorched Ethiopia and the adjacent countries. The fabulous adventures of Perſeus are ſaid to have happened in the ſame regions, and are allegorical repreſentations of the influence of the ſolar luminary; for the original Perſeus was the ſun. The rape of Proſerpine and the wanderings of Ceres; the Eleuſinian myſteries; the orgia or ſacred rites of Bacchus; the rites and worſhip of the Cabiri; were imported from Egypt and Phœnicia, but ſtrangely garbled and disfigured by the hierophants of Greece. The *gigantomachia*, or war between the gods and the giants, and all the fabulous events and varieties of that war, form an exact counterpart to the battles of the Peri and Dives, celebrated in the romantic annals of Perſia.

But the popular ſuperſtitions of the Greeks and Romans differed in one important particular from the erroneous ſyſtems of faith prevalent amongſt other civilized nations: *they were not embodied in any work which claimed divine origin.* The Vedas are ſuppoſed by their followers to contain the words of Brahma; and Vyaſa, who arranged them in their preſent form, to have acted under the influence of immediate inſpiration. To Thoth (the genius of the planet Mercury) the works held ſacred by the Egyptians and Phœnicians were aſcribed by thoſe nations. The theology of the Aſſyrians was revealed by a divinity in the form of a fiſh, who correſponds with the Matſya avatara (or piſciform god) of the Hindoos. The Zendaveſta, as the fire-worſhippers ſuppoſe, was revealed by Ormuſd to Zaratuſht, in a cave of the mountain Alborj; and Mahomet profeſſed only to publiſh the doctrines imparted to him by the angel Gabriel. That the Greeks poſſeſſed no ſuch embodied ſyſtem of faith, is a fact no leſs certain than it is eaſily accounted for. The Egyptians and the Pelaſgi brought their reſpective dogmata into Greece; but the works which promulgated them were confined to the ſacerdotal claſs, who were too wiſe to embark in theſe dangerous adventures; and the languages in which they were compoſed ſoon became unknown to the deſcendants of the firſt ſettlers. This circumſtance appears to afford a plauſible explanation of a fact, from which we are inclined to deduce ſome important conſequences, which have ſometimes been aſcribed to the nature of polytheiſm itſelf. The facility with which new gods were introduced and new rites adopted by the ancients, may, we think, be imputed in a great meaſure to the want of a conſecrated and embodied ſyſtem, which, while it enjoined the belief of certain doctrines, virtually or expreſsly excluded all others.

The learned Bryant, in the preface to his "Analyſis of Ancient Mythology," rejects as fabulous the ſuppoſed heroes of the firſt ages in every country. No ſuch conqueſts, he ſays, were ever achieved, as are aſcribed to Oſiris, Dionuſus, and Seſoſtris. The hiſtories of Hercules and Perſeus are equally void of truth. Cadmus, as this writer aſſerts, never brought letters into Greece, and no ſuch perſon ever exiſted as the Grecians have deſcribed. Ninus and Semiramis are, in his opinion, as ideal as Seſoſtris and Oſiris. There never were ſuch expeditions undertaken, or conqueſts made, as are attributed to theſe princes; nor were any ſuch empires conſtituted as are ſuppoſed to have been eſtabliſhed by them. He makes as little account of the hiſtories of Saturn, Janus, Pelops, Atlas, Dardanus, Minos of Crete, and Zoroaſter of Bactria. With reſpect to Greece, our author gives credit to very few events which were antecedent to the Olympiads; nor does he give the leaſt aſſent to the ſtory of Phryxus, and the golden fleece; he denies that there were any ſuch perſons as the Grecian Argonauts, and he rejects the expedition of Jaſon to Colchis as a fable.

A conſiderable part of the mythology of the Greeks ſprung from their ignorance of the oriental languages. They diſdained to apply themſelves to the ſtudy of languages ſpoken by people whom, in the pride of their heart, they ſtigmatized with the epithet of *barbarians*. This averſion to every foreign dialect was highly detrimental to their progreſs in the ſciences. The ſame neglect or averſion has, we imagine, proved an irreparable injury to the republic of letters in all ſucceeding ages. The *aoids*, or ſtrolling bards, laid hold on thoſe oriental legends, which they ſophiſticated with their own additions and improvements, in order to accommodate them to the popular taſte. Theſe wonderful tales figured in their rhapſodical compoſitions, and were greedily ſwallowed down by the credulous vulgar. Thoſe fictions, as they rolled down, were conſtantly augmented with freſh materials, till in proceſs of time their original import was either forgotten or buried in impenetrable darkneſs. A multitude of theſe Heſiod has collected in his Theogonia, or Generation of the Gods, which unhappily became the religious creed of the illiterate part of the Greeks. Indeed, *fable* was ſo cloſely interwoven with the religion of that airy volatile people, that it ſeems to have contaminated not only their religious and moral, but even their political, tenets.

Simple and unornamented truth, addreſſed merely to the underſtanding, is ſeldom ſufficiently intereſting and impreſſive to engage the attention of mankind. Philoſophers, hiſtorians, and poets, have therefore recurred, in all ages of the world, to thoſe embelliſhments which the imagination ſupplies, and which are adapted to excite, and call forth into exerciſe, the feelings and paſſions of the human frame. Hence they have been led to uſe forms and modes of expreſſion that have been ſuggeſted to them, either by ſenſible objects, or by occurrences that are rare and uncommon, and that ſerve to excite admiration, and to impart amuſement and pleaſure. *Fables* are compoſitions of this kind: they are more eaſily underſtood, more likely to command attention and to impreſs the mind, and better fitted for conviction and perſuaſion, than abſtract truth; and therefore they have been more generally adopted, eſpecially in the earlier periods of time, and in a leſs cultivated ſtate of ſociety, than mere reaſoning. Among the orientals, whoſe climate and diſpoſition were peculiarly favourable to it, this practice very much prevailed; and of courſe their mythology has been diſtinguiſhed by its boldneſs and extravagance. Some other circumſtances contributed to the firſt riſe, and ſubſequent diffuſion, of mythology. The inhabitants of the eaſtern nations were much addicted to the perſonification of inanimate objects, and abſtract ideas; and this propenſity would naturally lead them to the uſe of fable and allegory. Amongſt them hieroglyphics and enigmatical modes of expreſſion were very common; and in the adoption of theſe they nearly approximated to fiction and fable. Among ingenious and learned writers, we find a conſiderable difference of opinion as to the beſt method of explaining thoſe fables that are the ſubject of this article, or ſuch as relate to the pagan gods, and the rites of their worſhip. The Platonic philoſophers pretended that theſe fables were mere allegories, concealing great myſteries, none of which would appear either abſurd or licentious when duly developed. Plato himſelf ſeems to have originally framed this ſyſtem. Other learned perſons, at a later period, among whom we may reckon Kircher, recurred for the inveſtigation of the true meaning of theſe fables to the hieroglyphics, or ſacred language, of the Egyptians; but it is unfortunate for his hypotheſis, that the fables which require explanation are not all of Egyptian origin. The celebrated Bochart thought that moſt of the fables might be explained by the equivocal words of the ancient Phœnician language; the fables, however, were not all invented by the Phœnicians. Others refer all the fables to ſcripture miſunderſtood, or to corrupted traditions; but many of theſe fables abound with circumſtances that have no manner of connection with the facts recorded in the ſacred books. The ſyſtem of thoſe who reduce fables to ancient hiſtory, though diſfigured by the poets, who were the firſt hiſtorians, ſerves to explain a great number of fables, though it is not practicable to reduce all to hiſtory; ſince ſome fables are no more than pure allegories. Nevertheleſs, this ſyſtem appears to M. Banier, under ſome reſtrictions, to be the moſt rational and moſt ſatisfactory; provided that we do not attempt to explain all the circumſtances of every fable; and, if we do explain them, we muſt take them from poets of the greateſt antiquity, ſuch as Homer and Heſiod, who have given them in a more ſimple ſtate, together with a more natural deſcription of the facts to which they refer, and without thoſe ornaments that were ſuperadded to them in after-ages, either to make them more venerable, becauſe they were a part of religion, or more ſurpriſing, becauſe it is natural for mankind to delight in the marvellous. We may here obſerve, that moſt of the Greek fables are obtained from Egypt and Phœnicia. The fables are interwoven with religion, and were, indeed, the foundation on which it was reared; it was fable that introduced a multiplicity of gods, which they ſubſtituted in the room of the true one; ſo that the Greeks, by learning the religion of the Egyptians, learned their fables likewiſe.

This was the origin, then, of that philoſophy, or rather that religion, which ſo long ſubſiſted among the people; a confuſed mixture of truths and falſehoods, of venerable traditions and agreeable fictions; a ſyſtem that flatters the ſenſes, and offends the underſtanding; which breathes only pleaſure, while it teaches and applauds virtue; and of which it may be proper to trace a ſlight ſketch, as it ſtrongly marks the character of the age that gave it birth.

What power called forth the univerſe from chaos? The infinite Being, the pure light, the ſource of life. Let us give it the moſt amiable of all its titles; it is love itſelf; that love whoſe preſence reſtores harmony to all things, and from whom both men and gods derive their origin. Theſe intelligent beings diſputed the empire of the world; but, overthrown in tremendous conflicts, men were for ever ſubjected to their vanquiſhers. The race of immortals multiplied like that of men. Saturn, iſſuing from the commerce of Heaven and Earth, had three ſons, who divided the ſovereignty of the univerſe. Jupiter reigns in Heaven, Neptune over the ſea, Pluto in the infernal regions, and all three over the earth; all three are ſurrounded by a multitude of deities, entruſted with the execution of their commands. Jupiter is the moſt powerful of the gods, for he hurls the thunder: his court is the moſt ſplendid of all; it is the abode of eternal light, and muſt be the ſeat of happineſs, ſince every earthly good proceeds from heaven.

The divinities of the ocean, and of the infernal ſhades, are implored in certain places and under certain circumſtances; the celeſtial gods every-where, and at every moment of life. They ſurpaſs the others in power, for they dwell above us; whilſt the former are either beſide us, or beneath our feet. The gods diſpenſe to men life, health, riches, wiſdom, and valour. We accuſe them as the authors of our ſufferings; they reproach us with being wretched from our own faults. Pluto is odious to mortals, becauſe he is inflexible. The other gods permit themſelves to be moved by our prayers, and eſpecially by our ſacrifices, the odour of which is to them a delicious perfume. If they have ſenſes like ourſelves, they muſt have the ſame paſſions. Beauty makes on them the ſame impreſſion as on us. We have often ſeen them ſeeking on earth for pleaſures, rendered more poignant by their forgetting for a time their exalted nature, and aſſuming the veil of myſtery.

By this extravagant combination of ideas, the Greeks had no intention to degrade the divinities they adored. Accuſtomed as they were to judge of all animated beings by themſelves, they aſcribed their weakneſſes to the gods, and their ſentiments to animals, without imagining that they debaſed the former, or elevated the latter. When they wiſhed to form an idea of the happineſs of heaven, and the attention paid by the immortals to the government of the univerſe, they caſt their eyes around them, and ſaid; "On earth, nations are happy when they paſs their days in feſtivals; a ſovereign, when he aſſembles at his table the princes and princeſſes who reign over the adjacent countries; when youthful ſlaves, perfumed with eſſences, pour out wine in over-flowing goblets, and ſkilful fingers harmoniouſly accord their voices with the lyre." Thus, in the frequent banquets of the inhabitants of heaven, youth and beauty, in the perſon of Hebe, diſtribute nectar and ambroſia; the vaulted roofs of Olympus re-echo with the ſongs of Apollo and the Muſes, and joy ſparkles in every eye. Sometimes Jupiter aſſembles the immortals around his throne; and deliberates with them on the affairs of earth, as a ſovereign diſcuſſes thoſe of his ſtates with the nobles of his kingdom. The gods deliver their different opinions, which they ſupport with warmth, till Jupiter pronounces his final deciſion, and the reſt ſubmit in ſilence.

The gods, inveſted with his authority, communicate motion to the univerſe, and are the authors of the phænomena which aſtoniſh mortals. Every morning a youthful goddeſs opens the gates of the Eaſt, and diffuſes refreſhing coolneſs through the air, while ſhe ſcatters flowers over the fields, and ſtrews rubies in the path of the Sun. At this ſignal the Earth awakes, and prepares to receive the god, who daily beſtows on her new life. He appears, with a magnificence and ſplendour ſuited to the ſovereign of the ſkies; his car, conducted by the Hours, flies and penetrates the immenſity of ſpace, filling it with radiance and genial warmth. No ſooner does he reach the palace of the ſovereign of the ſeas, than Night, who cloſely and inceſſantly follows him, extends her gloomy veil, and hangs the celeſtial dome with innumerable fires. Then riſes another car, whoſe mild and conſoling light invites ſuſceptible hearts to meditation. It is conducted by a goddeſs. She is coming in ſilence to receive the tender homage of Endymion. That arch which ſhines with ſuch rich colours, and extends from one ſide of the horizon to the other, is formed by the luminous footſteps of Iris, who is bearing the commands of Juno to the earth. Delightful breezes and horrid tempeſts are cauſed by genii now ſporting in the air, now ſtruggling with each other, to produce a commotion in the waves. At the foot of yonder eminence is a grotto, the aſylum of coolneſs and of peace. There a beneficent nymph pours forth, from her inexhauſtible urn, the ſtream that fertilizes the adjacent plain; there ſhe liſtens to the vows of the youthful beauty, who comes to contemplate her charms in the fleeting waters. If we enter that gloomy wood, it is neither the ſilence nor the ſolitude that occupies the mind: we are in the haunts of the Dryads and the Sylvans; and the ſecret awe we feel is the effect of the divine majeſty.

To whatever ſide we turn our ſteps, we are in the preſence of the gods; we diſcover them within us and without; they have divided the empire of our ſouls, and direct our inclinations. Some preſide over war and the arts of peace; others inſpire the love of wiſdom or of pleaſure; all of them cheriſh juſtice and protect virtue. Thirty thouſand divinities, diſperſed around us, continually watch over our thoughts and actions. When we act juſtly, heaven prolongs our days, and increaſes our happineſs; but puniſhes us when we do evil. On the commiſſion of crimes, Nemeſis and the black Furies iſſue, with horrid roarings, from the depths of hell; and, gliding into the heart of the guilty mortal, torment him day and night with piercing and funereal ſhrieks. Theſe ſhrieks are remorſe of conſcience. If the wicked man, before his death, neglects to appeaſe the avenging powers by holy ceremonies, the Furies, adhering to his ſoul as to their prey, drag it into the gulfs of Tartarus. For the Greeks univerſally believed the immortality of the ſoul. The following was their doctrine, derived from the Egyptians, concerning that eſſence of which we know ſo little: The *ſpiritual ſoul*, that is, the mind or intellectual faculty, is enveloped in a *ſenſitive ſoul*, which is only a luminous and ſubtle ſpecies of matter, the faithful image of the body, on which it is moulded, and whoſe reſemblance and dimenſions it for ever continues to retain. Theſe two ſouls are ſtrictly united during life, but are ſeparated by death; and, whilſt the ſpiritual ſoul aſcends to heaven, the other takes its flight, under the conduct of Mercury, to the extremities of the earth, where are the infernal regions, the throne of Pluto, and the tribunal of Minos. Abandoned by the whole world, and with nothing on which to rely for ſupport but its good actions, the ſoul appears before this dread tribunal, hears its ſentence, and is admitted into the Elyſian Fields or plunged into Tartarus.

The Greeks, who had founded the happineſs of their gods only on ſenſual enjoyments, were unable to imagine any other delights for the Elyſian Fields, but a delicious temperature and a profound yet uniform tranquillity: feeble advantages, which did not prevent virtuous ſouls from ſighing for the light of the day, and regretting their paſſions and their pleaſures. Tartarus is the abode of lamentation and deſpair: the guilty are there conſigned to dreadful torments; their entrails are gnawed by cruel vultures; they are whirled round upon the axles of burning wheels. There Tantalus every moment expires with hunger and with thirſt in the midſt of a refreſhing ſtream, and beneath trees laden with fruit: there the daughters of Danaüs are condemned to fill a veſſel from which the water is continually eſcaping; and Siſyphus to fix a rock on the ſummit of a mountain: he toils to roll it up, and it immediately falls back of itſelf, when he is on the point of accompliſhing his taſk. Inſupportable wants, ever aggravated by the preſence of the objects fitted to gratify them, labour perpetually the ſame, and for ever unſucceſsful. What puniſhments! The imagination that invented them had exhauſted the utmoſt refinements of cruelty to provide chaſtiſements for guilt; whilſt it offered no other recompence to virtue but an imperfect felicity, and that too poiſoned by regret. Was it believed more ſalutary to guide men by the fear of puniſhment than by the allurements of pleaſure? or rather, was it eaſier to multiply the images of miſery than thoſe of happineſs?

This rude ſyſtem of religion taught a ſmall number of dogmas eſſential to the tranquillity of ſociety. The exiſtence of the gods, the immortality of the ſoul, rewards for virtue, puniſhments for vice. It preſcribed ceremonies which might contribute to maintain theſe truths, in its feſtivals and myſteries; it preſented civil government with powerful means whereby to profit by the ignorance and credulity of the people, in its oracles, and the arts of augury and divination; it left every man, in fine, at liberty to adopt ſuch ancient traditions as he thought proper, and continually to load with new inventions the hiſtory and genealogy of the gods; ſo that the imagination, free to create facts, and to vary by prodigies thoſe which were already known, never ceaſed to embelliſh its details by the marvellous: that ornament ſo frigid in the eye of reaſon, but ſo full of charms for youthful minds and infant notions. The narrative of the traveller to his admiring hoſts, of the father of a family to his liſtening children, of the bard admitted to the entertainments of princes, were wrought up in the intrigue, and conducted to the cataſtrophe, by the intervention of the gods; and the ſyſtem of religion inſenſibly became a ſyſtem of poetry and fiction. At the ſame time, the erroneous ideas, which prevailed reſpecting natural philoſophy, enriched languages with a multitude of images. The habit of confounding motion with life, and life with ſentiment; the facility of connecting certain relations ſubſiſting between objects, made men, in converſation, attribute to the moſt inſenſible beings a ſoul, or properties wholly foreign to their nature. The ſword was ſaid to *thirſt* after the blood of the enemy; the dart to *fly*, impatient to deſtroy. *Wings* were aſcribed to every thing that cleaves the air; to lightning, to the winds, to arrows, to the ſound of the voice. Aurora had *roſy fingers;* the Sun, *golden treſſes;* and Thetis, *ſilver feet.* Such metaphors were admired, eſpecially for their novelty; and the language of Greece, like that of all nations in their infancy, became poetical. *Anacharſis in Greece.*

The foundation of all religion is a belief in the exiſtence of ſupernatural beings with power to affect our happineſs; and the popular religion is this ſentiment, exhibiting itſelf in outward acts, in ſupplications, thankſgivings, and ſacrifices: but, where the human mind has received any improvement, there is formed, diſtinct from this ſimple ſpecies of religion, one of a more elevated character, the excluſive poſſeſſion of the prieſt, of the philoſopher, or of him who has been initiated into the myſteries. Theſe ſpecies uſually remain diſtinct, but ſeparated by the broadeſt line where an hereditary caſte of prieſts has exiſted. They cannot, however, be wholly without reciprocal influence even in this caſe: but they will retain their ſeparate character the more pertinaciouſly, in proportion as the exiſtence of this wall of ſeparation prevents the prieſt and the people from coaleſcing. Among the Greeks, no ſacerdotal caſte exiſted, nor even a ſacerdotal order, very diſtinctly marked: but together with their popular religion they had alſo a ſecret doctrine of the myſteries; and we muſt obſerve the peculiar qualities of each before we can form a general eſtimate of the effects of their religion.

Our inveſtigations reſpecting the divinities of the Eaſt always carry us back to this principle, that their primary import was the repreſentation of the objects and powers of nature. They may have been in the firſt inſtance the material parts of the univerſe, the ſun, moon, and ſtars, the earth, and the ſea; or perſonifications of natural powers, as a creating, a preſerving, a deſtroying, principle; or, which is the moſt common caſe, the two have been united, and the parts of the material univerſe have been worſhipped as manifeſtations and inſtruments of theſe ſeveral principles. The analyſis of the Ægyptian, Indian, Perſian, Phrygian, and Phœnician, theologies, always bring us back to this idea, whatever difficulties there may be in the interpretation of particular portions. Theſe powers of nature are almoſt always perſonified in the human form, from a principle in our minds which it is difficult to reſiſt, and which is indeed connected with the very imperfection of our intellectual faculties. Still, among all the divinities of the Eaſt, this human form was merely an acceſſory, the neceſſary medium for giving a ſenſible repreſentation to an abſtract idea; and therefore all theſe nations ſcrupled not to vary from and disfigure the human form, when they thought that by ſo doing they could make their ſymbol more ſtriking or more expreſſive. The Indian gave his gods twenty arms, the Phrygian furniſhed his Diana with as many breaſts, and the Egyptian placed the heads of animals on human bodies; neglecting in all theſe inſtances the propriety of the emblem conſidered in itſelf, in order to give greater diſtinctneſs to its ſymbolical import. As the Greeks received moſt if not all of their divinities from ſtrangers, and eſpecially from the Eaſt, it was natural that they ſhould adopt theſe ſymbolical forms; and the higher we trace their mythology, the more ſtrongly do we find their gods partaking of this character. It cannot eſcape obſervation in Heſiod, and it even diſcovers itſelf in the Homeric mythology. That Heſiod's Jupiter is the æther, his Juno the atmoſphere, and his Phœbus-Apollo the ſun, is plain from ſome of his narratives concerning them: yet it is not leſs certain that this ſymbolical meaning is by no means the predominant one; that his Jupiter is chiefly characterized as the ruler of Gods and men, and his Juno as the queen of Olympus. It is the peculiarity of the popular religion of Greece, that it conſtantly dropped more and more of the ſymbolical repreſentations, and ſubſtituted in their place a ſyſtem of gods partaking the qualities and actuated by the paſſions and motives of men. *Heeren's Ideas on the Nations of the Ancient World;* 1815.

The mythology of the NORTHERN NATIONS, i. e. of the Norwegians, Danes, Swedes, Icelanders, &c. is uncommonly curious and entertaining. The Edda and Voluſpa contain a complete collection of fables which have not the ſmalleſt affinity with thoſe of the Greeks and Romans. They are wholly of an oriental complexion, and ſeem almoſt congenial with the tales of the Perſians above deſcribed. The Edda was compiled in Iceland in the 13th century. It is a kind of ſyſtem of the Scandinavian mythology: and has been reckoned, and we believe juſtly, a commentary on the Voluſpa, which was the Bible of the northern nations. Odin or Othin, Woden or Waden, was the ſupreme divinity of thoſe people. His exploits and adventures furniſh the far greateſt part of their mythological creed. That hero is ſuppoſed to have emigrated from the Eaſt; but from what country or at what period is not certainly known. His achievements are magnified beyond all credibility. He is repreſented as the god of battles, and as ſlaughtering thouſands at a blow. His palace is called *Valhal:* it is ſituated in the city of Midgard, where, according to the fable, the ſouls of heroes who had bravely fallen in battle enjoy ſupreme felicity. They ſpend the day in mimic hunting-matches, or imaginary combats. At night they aſſemble in the palace of Valhalla, where they feaſt on the moſt delicious viands, dreſſed and ſerved up by the *Valkyriæ*, virgins adorned with celeſtial charms, and fluſhed with the bloom of everlaſting youth. They ſolace themſelves with drinking mead out of the ſkulls of their enemies whom they killed in their days of nature. Mead, it ſeems, was the nectar of the Scandinavian heroes.

We have mentioned Odin and Woden as one and the ſame perſonage. But the teſt which Charlemagne impoſed on the conquered Saxons, when he compelled them, under pain of death, to undergo baptiſm, has been put on record, and runs thus: *Ech forſacho Diabolæ, ende Thunaer, ende Vuoden, ende Soxen Oto, ende allem them unholdun the hirar genotes ſind;* "I forſake the Devil, and Thor, and Woden, and the Saxon Odin, and all the unhallowed ones who are their comrades." From this formulary of renunciation it reſults plainly, that the prophet Odin is a different perſonage from the god Woden, and was ſo conſidered by his moſt zealous votaries.

Sleepner, the horſe of Odin, is celebrated along with his maſter. Hela, the hell of the Scandinavians, affords a variety of fables equally ſhocking and heterogeneous. Loke, the evil genus or devil of the northern people, nearly reſembles the Typhon of the Egyptians. Signa or Sinna is the conſort of Loke: from this name the Engliſh word *ſin* is derived. The giants Weymur, Ferbanter, Belupher, and Hellunda, perform a variety of exploits, and are exhibited in the moſt frightful attitudes. One would be tempted to imagine that they perform the exact counterpart of the giants of the Greek and Roman mythologiſts. Inſtead of glancing at theſe ridiculous and unintereſting fables, which is all that the limits preſcribed us would permit, we ſhall take the liberty to lay before our readers a brief account of the contents of the Voluſpa, which is indeed the text of the Scandinavian mythology.

The word *Voluſpa* imports, "the Prophecy of Vola or Fola." This was perhaps a general name for the prophetic ladies of the north, as Sibyl was appropriated to women endowed with the like faculty in the ſouth. Certain it is, that the ancients generally connected madneſs with the prophetic faculty. Of this we have two celebrated examples: the one in Lycophron's Alexandra, and the other in the Sibyl of the Roman poet. The word *vola* ſignifies "mad or fooliſh;" whence the Engliſh words *fool, fooliſh, folly.* *Spa*, the latter part of the compoſition, ſignifies "to propheſy," and is ſtill current among the common people of Scotland in the word *Spae*, which has nearly the ſame ſignification.

The Voluſpa conſiſts of between 200 and 300 lines. The propheteſs, having impoſed ſilence on all intelligent beings, declares that ſhe is about to reveal the works of the Father of Nature, the actions and operations of the gods, which no mortal ever knew before herſelf. She begins with a deſcription of the chaos; and then proceeds to the formation of the world, the creation of the different ſpecies of its inhabitants, giants, men, and dwarfs. She then explains the employments of the fairies or deſtinies, whom the northern people call *nornies;* the functions of the deities, their moſt memorable adventures, their diſputes with Loke, and the vengeance that enſued. She at laſt concludes with a long and indeed animated deſcription of the final ſtate of the univerſe, and its diſſolution by a general conflagration. In this cataſtrophe, Odin and all the rabble of the pagan divinities, are to be confounded in the general ruin, no more to appear on the ſtage of the univerſe. Out of the ruins of the former world, according to the Voluſpa, a new one ſhall ſpring up, arrayed in all the bloom of celeſtial beauty. Such is the doctrine exhibited in the fabulous Voluſpa. So congenial are ſome of the details therein delivered, eſpecially thoſe relating to the final diſſolution of the preſent ſyſtem, and the ſucceſſion of a new heaven and a new earth, that we find ourſelves ſtrongly inclined to ſuſpect, that the original fabricator of the work was a ſemi-pagan writer, much of the ſame complexion with the authors of the Sibylline oracles, and of ſome other apocryphal pieces which appeared in the world during the firſt ages of Chriſtianity.

The following enumeration of the ſuperior and inferior gods of the old *Courland Mythology*, is from the 5th vol. of Pallas's Nordiſche Beytrage. It is very little known in England; as the articles are not contained in Mallet's Northern Antiquities:

Antrimpus, the god of the ſea.

Auſkuts, the god of health and ſickneſs.—*Sobarri* were the offerings which, during times of epidemic diſeaſes, were offered to Auſkuts.

Auſtrama Semme, the land where the ſun riſes; which, with reſpect to Courland, was Ruſſia.

Behrſtuhki, a kind of malevolent demons, or ſpirits.

Blukku-wakkers, the eve of the new year, or more properly *the Log* which was then burnt, ſimilar to the cuſtom which ſtill exiſts in many parts of England.

Brechkina. See that word, vol. iii.

Brunjotais, the heaven's drummer.

Burwis. See that word, vol. iii.

Deews, the Supreme Deity. This name alſo was applied to the god of death (Wels).—*Deewa Denas*, the day of God, and *Welle Denas*, the day of death, were ſynonymous terms. This deity was repreſented as having many children, and a very numerous houſehold. In the ſongs of the ancient bards we often meet with *Deewa Dehli*, the ſons of this god; *Deewa Sirgi*, the horſes of this god; *Deewu Wehrſi*, the oxen of this god; *Deewa Putni*, his birds, &c.

Dehla, the goddeſs of infants, whoſe eſpecial province was to protect them while they ſlept.

Diſa, or *Diſcha*, the goddeſs of fruits, from whom they expected a bleſſing on the whole of their domeſtic economy.

Drebbkuls, the god of the earth, cauſing earthquakes.

Gardehts, the god of winds, the protector and prime object of worſhip with the fiſhermen.

Johd, a kind of ghoſt or goblin which haunts woods or groves.—*Johdi Kaujaks* are ignes fatui: they are eſteemed the ſouls of the ſoldiers who fall in battle.

Jumals, the God of heaven.

Juppis, the devil.

Kannu Rauges, magicians who pretended to foretell future events by diſſolving ſalt in a pitcher of beer.

Kehms, apparitions of the dead.

Kriwe, the prieſts of the ancient idolatrous Courlanders and Livonians. They performed their worſhip under the ſhade of the largeſt oaks. They probably came firſt from Ruſſia; for the Courlanders to this day call that country *Krihws*.

Kuma, *Koma*, *Kaums*, or *Kaims*, the god of feaſts. The words ſignify, in the old Courland dialect, "one neighbour who receives another as his gueſt." This circumſtance ſeems to indicate that he was not the Comus of the Romans.

Kurſemi, or *Kurſumi*, were feſtivals kept in ſpring.

Labbdarris, a ſet of people who, by virtue of their bleſſing and impoſition of hands, pretended to cure the diſeaſes of man or beaſt.

Laima, the goddeſs of fortune, who was believed to extend a ſheet at the birth of infants on which were indicated the misfortunes that were to befall them.

Laima Mahnina was the mother of Laima.

Lauma, the goddeſs of the earth, was the principal object of the worſhip of young girls. In honour of her they ceaſed to ſpin on Friday evening. She was ſuppoſed to preſide over rain and hail. In their provincial dialect, *Lauma* ſtill ſignifies a witch.

Leemneks, the god of agriculture and domeſtic fowls: he was called alſo *Mahjas Kungs*. In harveſt they ſacrificed young cattle and fowls to him.

Leetoos, or *Leetowens*, the incubus of maidens. She was ſuppoſed able to enter through a key-hole.

Lihgo, the god of pleaſure, whoſe feſtival was celebrated by moſt of the northern nations on Midſummer-day with bonfires.

Liktens, fate or predeſtination—*Likſla*, evil fortune.

Lulkis, a kind of tutelar ſpirit.

Mahjas Rungs, the penates, or houſehold gods.

Mahni, malignant ſpirits which lead men aſtray.

Markopols, the god of riches and thrift, or prudent economy.

Mathe, the goddeſs of gardens.—*Juhras Mathe*, goddeſs of the ſea.—*Lauka Mathe*, goddeſs of fields.—*Miſcha Mathe*, goddeſs of woods.—*Pakku Mathe*, goddeſs of flowers.—*Uggungs Mathe*, goddeſs of fire.—*Uhdens Mathe*, goddeſs of water.—*Wehja Mathe*, goddeſs of winds.

Mehnes, the Moon. The old Courlanders repreſented the Moon as a god, whoſe wife was the Sun, and the Stars as their iſſue. The Moon not being faithful to his ſpouſe, ſhe cleaves his face with a ſharp ſword, and thus they accounted for the various phaſes.

Meſcha Deews, the god of woods.—*Meſcha Tews*, ſatyrs.—*Meſcha Wihrs* were alſo a kind of ſatyrs.—*Meſcha Laukis*, in the provincial dialect, ſtill ſignifies a "ſtealer of wild beaſts."

Meſhlu Baba, the goddeſs of filth, dung, &c. was uſually found in gardens.

Milſenu Kauli, giant's bones.—*Milſu Kappi*, giant's graves.

Nelobbajs, i. e. the Evil One; a name of the Devil, as it was eſteemed a kind of impiety to mention his real name.

Okku Peernis, the god of winds and ſtorms; ſo called by the inhabitants of the ſea-coaſt of Courland and Livonia.

Pechnu Mahtes, the goddeſs of milk.

Pekkols, the god of darkneſs and of infernal ſpirits.

Pelwihks, the god of rivers and lakes.

Pergruhbis, the god of ſpring and of verdure. A feſtival was celebrated in honour of him on the 23d of April.

Perkuhnis, the god of thunder and lightning. He was greatly reverenced by the ancient Lithuanians and Sclavonians, and called alſo *Debbes*.

Pihkols, the god of mountains.

Pilnitir, god of riches and plenty.

Pimpolis, a kind of oracle which conſiſted of a ball of wax ſuſpended on a thread; the oſcillations were ſuppoſed to portend good or evil fortune. All kinds of augury are called in the provincial dialect *Peſteli*.

Potrimpur, the god of ſprings.

Puhkis, a dragon which diſtributed plenty. He was propitiated by offering him a red hen.

Puſchkeitis, the god of meadows.

Raggana, a ſorcereſs which rides upon a goat through the air, ſometimes in the ſhape of a cat, at others in that of a magpie.

Sapni, dreams, which were and ſtill are much regarded in this country.

Saule, the Sun, a *female* divinity, ſuppoſed to be married to the Moon. In their old ſongs, the daughters of the Sun *(Saules Maitas)* are often mentioned.

Semlika, the offerings for the ſpirits of deceaſed relations.

Semme Mathe, the goddeſs and governeſs of the earth.

Semnecks, the god of fields and meadows. In their modern dialect, a huſbandman is ſtill called *Semnecks*.

Sihgenoti, inferior prieſts, who, under the inſpection of the Kruve, had the care of their ſacred fires, &c.

Sihlneeki, an augur who propheſied from the flight or ſong of birds.

Silhe, the wren, the appearance of which was regarded as a fortunate omen.

Skahde, a nymph of the north ſea.

Swagsnes, children of the ſun and moon.

Swehtas Meitas, holy damſels, attendants of *Semme*. They would nightly finiſh the work of their lovers.

Swehti Wahrdi were ſacred forms of oaths.

Trimpus, the Bacchus of the ancient Courlanders.

Uhper, the owl, a bird of ill omen.

Uhſinſch, the god of bees.

Waidels were monks ſubſervient to the *Kriwe*.

Wazzajs Tehws, the Old Father; his reſidence was in heaven, from whence he inſpected the earth, and obſerved the actions of men.

Weizgaut, the god of lovers.

Welli, feaſts in honour of the dead: they generally were held in October for a week.

Wels, the god of the dead.

Wilkals were lunatics, the lycanthropi of the ancients.

Wurſcheiti, prieſts employed in the offerings made to Pergruhb.

The *Greenlanders* believe in a Superior Being, and the immortality of the ſoul. This Being, whom they call *Torngarſuk*, is, according to their deſcription, rather evil than good. He cannot be eternal, as he is ſaid to have a great grandmother, a terrible woman, who rules over the ſea-animals, often ſummons them to her, and thus deprives the inhabitants of their ſupport. Neither is he conſidered as the creator of the world; for the world, they think, aroſe of itſelf, and the firſt Greenlanders grew out of the ground. Some make Torngarſuk a ſpirit; others ſay, he is like a beaſt; others, that he reſembles a man. Some affirm that he is immortal; others, that a certain noiſe can kill him. His abode is very deep in the earth, where living is agreeable, and proviſions abundant. So different are their ideas of this being; but they neither love nor fear him; nor do they adore him. When they are in health, their fiſhery ſucceſsful, and they have nothing to trouble them in other reſpects, Torngarſuk is quite indifferent to them. Only when they are ill or unhappy, or the ſea-animals leave the coaſt, they have recourſe, not to Torngarſuk, but to their *Angekok*, who is in connexion with him. The Angekok then aſks his advice, and brings the anſwer.

They believe in the immortality of the ſoul, and that its ſtate, after death, is better than the preſent, and happier for them all; for, according to their ideas, they will be all happy then, without diſtinction. They indeed believe that there are two places of abode after death, one in heaven, the other under the earth, but both happy; they, however, conſider the ſubterranean abode as the happieſt, where only thoſe come who have ſuffered much diſtreſs in this world, or have done great ſervices to their fellow-creatures: the ſouls of all the others come into heaven. The ſoul is, indeed, of the nature of a ſpirit; but it has ſomething material about it; ſomething delicate and ſoft, which may be felt. It may become ſick; and, in this caſe, the Angekok can take away the ſick part, and put ſomething healthy in its room; it may be loſt, and then he can give a new one. The northern lights are the ſouls of the deceaſed, playing at ball in heaven.

The Sun and Moon were Greenlanders, and brother and ſiſter. The ſiſter, the Sun, was extremely beautiful; and her brother, who had an illicit paſſion for her, purſued her every-where. In order to eſcape from him, ſhe fled to heaven, where he ſtill follows her. He is, beſides, a great rogue; and women cannot be too much on their guard againſt him. When the full moon ſhines upon the water, the girls dare not drink of it, for fear of becoming pregnant.

Air, earth, water, and fire, have each their ſpirits, who exerciſe a certain ſway, each in his own ſphere. Care muſt be taken not to make them angry. Apparitions and ghoſts are believed in here, as they are every-where. For this reaſon, they bind the legs of the dead, while they are ſtill pliable, up to the hams, and carry them, in winter, out of a window, or, in ſummer, out of the back part of the tent, that their ghoſts may not return. They tear out and devour the hearts of thoſe whom they kill as ſorcerers: the fear that the ſpirit of the perſon killed ſhould haunt them, is the true cauſe of this. Greenlanders are often drowned in the chaſe of ſeals; and then their ſpirits appear after death. The rocks, alſo, have their ſpirits, which are very dangerous, as they even come down into the houſes by night and ſteal proviſions. If it is true, as they relate, that individual Greenlanders now and then, from deſpair, leave ſociety for ever and dwell among the rocks, it is no wonder if they viſit the houſes, eſpecially in winter-nights, to find there ſomething to prolong their wretched exiſtence. Even ſome Greenlanders do not look on theſe as ſpirits, but as unfortunate perſons, who, by being inſulated from mankind, have become ſavage and formidable. *Journal of Hans Egede Saabye.*

In AMERICA, the only mythological countries muſt be Mexico and Peru. The other parts of that large continent were originally inhabited by ſavages, moſt of them as remote from religion as from civilization. The two vaſt empires of Mexico and Peru had exiſted about four hundred years only before the Spaniſh invaſion. In neither of them was the uſe of letters underſtood; and of courſe the ancient opinions of the natives relating to the origin of the univerſe, the changes which ſucceeded, and every other monument of antiquity, were obliterated and loſt. Clavigero has indeed enumerated a vaſt canaille of ſanguinary gods worſhipped by the Mexicans; but produces nothing either entertaining or intereſting with reſpect to their mythology. The information to be derived from any other quarter is little to be depended upon. It paſſes through the hands of bigotted miſſionaries or other eccleſiaſtics, who were ſo deeply tinctured with fanaticiſm, that they viewed every action, every ſentiment, every cuſtom, every religious opinion and ceremony, of thoſe half-civilized people, through a falſe medium. They often imagined they diſcovered reſemblances and analogies between the rites of thoſe ſavages and the dogmas of Chriſtianity, which no-where exiſted but in their own heated imaginations.

The only remarkable piece of mythology in the annals of the Peruvians, is the pretended extraction of Manco Capec, the firſt inca of Peru, and of Mama Ocolla, his conſort. Theſe two illuſtrious perſonages appeared firſt on the banks of the Lake Titiaca. They were perſons of a majeſtic ſtature, and clothed in decent garments. They declared themſelves to be the children of the Sun, ſent by their beneficent parent, who beheld with pity the miſeries of the human race, to inſtruct and reclaim them. Thus we find theſe two legiſlators availed themſelves of a pretence which had often been employed in more civilized regions to the very ſame purpoſes. The idolatry of Peru was gentle and beneficent, that of Mexico gloomy and ſanguinary. Hence we may ſee, that every mode of ſuperſtition, where a divine revelation is not concerned, borrows its complexion from the characters of its profeſſors.

MY'THOPLASM, *ſ.* [from the Gr. *μυθος*, a fable, and *πλασσω*, to frame.] A narration or fable.

MY'THRAS. See MITHRAS.

MYTILE'NE. See METELEN, vol. XV.

MYT'ILUS, *ſ.* the MUSCLE, or MUSSEL, in helminthology, a genus of teſtaceous worms. Generic Characters—Animal allied to an aſcidia: ſhell bivalve, rough, generally fixed by a byſſus or beard of ſilky filaments; hinge moſtly without teeth, with generally a ſubulate excavated longitudinal line. There are ſixty-five ſpecies; ſome of which are valuable as producing the true mother-of-pearl, others as food. They are ſeparated into three diſtinct families or diviſions.

I. Paraſitical; affixed as it were by claws.

1. Mytilus criſta-galli, or cock's-comb muſcle: ſhell plaited, ſpinous; both lips rough. It inhabits the Indian Ocean and the Red Sea; and is affixed to the Gorgonia. The ſhell is of a purple-violet, pale cinnamon, or bay, rough with raiſed dots; within of a honey-colour; nearly equivalve, and cloſed with from five to ten oblique or ſtraight acute plaits; at the hinge it is triangular. A repreſentation of this ſpecies has been given under the article CONCHOLOGY, on Plate XVI. fig. 3.

2. Mytilus hyotis: ſhell plaited and imbricate, with broad compreſſed ſcales; both lips ſmooth. This ſpecies inhabits the ocean; on beds of coral; the ſhell is of a

dirty-greeniſh-yellow, lamellate, the plaits curved here and there, and beſet with hollow grooved nuclei.

3. Mytilus frons: ſhell plaited, ſmoothiſh; one lip rough. It inhabits the American Ocean, on coral-beds; the ſhell is reddiſh, bluiſh, or brown; generally oval, with the margin plaited on each ſide, and denticulate; the lower valve glabrous, and grooved in the middle; the upper valve rough, with raiſed dots at the margin, and an elevated rib in the middle.

II. Flat or compreſſed into a flattened form, and ſlightly eared.

4. Mytilus margaritiferus, the pearl muſcle: ſhell flattened, nearly orbicular, with a tranſverſe baſe, imbricate, with toothed tunics. It is found in the American and Indian Seas; is about eight inches long, and ſtill broader than it is long. The inſide is beautifully poliſhed, produces the true mother-of-pearl, and frequently the moſt valuable pearls; the outſide is ſometimes ſea-green, or cheſnut, or bloom-colour, with white rays: when the outer coat is removed, it has the ſame perlaceous luſtre in the inſide: the younger ſhells have ears as long as the ſhell of that diviſion of the genus Oſtrea called *ſcallops*.

The animal is faſtened to the upper and lower ſhells by two white flat pieces of muſcular ſubſtance, which are called by Houttuin *ears*, and extend about two inches from the thick part of the body, growing gradually thinner. The extremity of each ear lies looſe, and is ſurrounded by a double brown fringed line. Theſe lie almoſt the third of an inch from the outer part of the ſhell, and are continually moved by the animal. Next to theſe, above and below, are ſituated two other double fringed movable ſubſtances, like the branchiæ of a fiſh. Theſe ears and fringes are joined to a cylindrical piece of fleſh of the ſize of a man's thumb, which is harder and of a more muſcular nature than the reſt of the body. It lies about the centre of the ſhells, and is firmly attached to the middle of each. This, in fact, is that part of the pearl-fiſh which ſerves to open and ſhut the ſhells. Where this column is faſtened, we find on the fleſh deep impreſſions; and on the ſhell various nodes of round or oblong forms, like imperfect pearls. Between this part and the hinge lies the principal body of the animal, ſeparated from the reſt, and ſhaped like a bag. The mouth is near the hinge of the ſhell, enveloped in a veil, and has a double flap or lip on each ſide; from thence we obſerve the œſophagus deſcending like a thread to the ſtomach. Cloſe to the mouth there is a curved browniſh tongue, half an inch in length, with an obtuſe point; on the concave ſide of this deſcends a furrow, which the animal opens and ſhuts, and probably uſes to convey food to its mouth. Near its middle are two bluiſh ſpots, which ſeem to be the eyes. In a pretty deep hole, near the baſe of the tongue, lies the beard, *byſſus*, faſtened by two fleſhy roots, and conſiſting of almoſt a hundred fibres, each an inch long, of a dark green colour, with a metallic luſtre; they are undivided, parallel, and flattened. In general, the beard is more than three quarters of an inch without the cleft, or *rima;* but, if the animal is diſturbed, it contracts it conſiderably. The top of each of theſe threads terminates in a circular gland, or head, like the ſtigma of many plants. With this byſſus they faſten themſelves to rocks, corals, and other ſolid bodies; by it the young pearl-fiſh cling to the old ones, and with it the animal procures its food, by extending and contracting it at pleaſure. Small ſhell-fiſh, on which they partly live, are often found clinging to the former. The ſtomach lies cloſe to the root of the beard, and has, on its lower ſide, a protracted obtuſe point. Above the ſtomach are two ſmall red bodies, like lungs; and from the ſtomach goes a long channel or gut, which takes a circuit round the muſcular column abovementioned, and ends in the anus, which lies oppoſite to the mouth, and is covered with a ſmall thin leaf, like a flap. The natives pretend to diſtinguiſh the ſexes by the appearance of the ſhell; the large flat ones they call males; and thoſe that are thick, concave, and vaulted, they call females, or *pedoo-chippy*.

It is remarkable that ſome of theſe animals are as red as blood, and that the inſide of the ſhell is of the ſame colour, with the uſual pearly luſtre; the divers attribute this redneſs to the ſickneſs of the pearl-fiſh, though it is moſt probable that they had it from their firſt exiſtence. In the ſhade they will live twenty-four hours after being taken out of the water. This animal is eaten by the lower claſs of Indians, either freſh in their curries, or cured by drying; in which ſtate they are exported to the coaſt.

The above particulars are collected from an "Account of the Pearl-fiſhery in the Gulf of Menar, 1797; by H. Le Beck, Eſq." in the Aſiatic Reſearches, vol. v. p. 393. For the method of fiſhing pearls, and the previous ceremonies, ſee the article MANAR, vol. xiv. p. 255.

The formation of pearls has puzzled both ancient and modern naturaliſts, and given occaſion to a great number of hypotheſes, many of them wild and extravagant enough. But M. Reaumur, in a very curious piece on the ſubject of the formation both of the ſhells and pearls, (Mem. of the French Academy, anno 1717,) obſerves, that pearls are formed like ſtones in animals; as thoſe, e. g. in the bladder, kidneys, &c. and that they are apparently the effects of a diſeaſe of the fiſh. In fact, they are all formed of a juice extravaſated out of ſome broken veſſels, and detained and fixed among the membranes. To evince the poſſibility of this, he ſhows that the ſhells of ſea-fiſh, as well as thoſe of ſnails, &c. are wholly formed of a glutinous ſtony matter, oozing out of the body of the animal. Now it is no wonder that an animal, which has veſſels wherein circulates a ſufficient quantity of ſtony juice to build, thicken, and extend, a ſhell, ſhould have enough to form ſtones alſo, in caſe the juice, deſtined for the growth of the ſhell, ſhall chance to overflow, and burſt forth in any cavity of the body, or among the membranes. To confirm this ſyſtem, he obſerves, that the inner ſurface of the common pearl-muſcle, found on the coaſts of Provence, is of a pearl or mother-of-pearl colour, from one part of its extent, which he determines, to another; after which it becomes reddiſh. Now there are pearls of two colours found in the ſhell; and the colours of the pearls are preciſely the ſame with thoſe of the ſhell; nay, more, each kind of coloured pearl is found in the correſponding coloured part of the ſhell; which ſhows, that, in the ſame place wherein the tranſpiration of a certain juice had formed, and would have continued to form, a coat or layer of ſhell of a certain colour, the veſſels which conveyed that juice being broken, there is formed a little maſs or collection of the juice, which, hardening, becomes a pearl of the ſame colour with the part of the ſhell to which it correſponds. Add to this, that the ſilver or pearl-coloured part of the ſhell is formed of ſtrata, or layers, over one another, like an onion; and the reddiſh part of little cylindrical ſhort fibres applied againſt one another. The pearls of the two colours have alſo this difference of texture; not but they are both compoſed of concentric layers; but thoſe of the reddiſh pearls are much leſs ſenſible; and, beſides, they have threads, which, like radii, proceed from their centre to their circumference. Theſe circumſtances ſeem effectually to determine the formation of pearls, and to eſtabliſh this ſyſtem beyond contradiction.

The extravaſations above-mentioned may be cauſed by heterogeneous bodies, ſuch as ſand, coming in with the food, which the animal, to prevent diſagreeable friction, covers with its glutinous matter, and which, as it is ſucceſſively ſecreted, forms many regular lamellæ, in the manner of the coats of an onion, or like different ſtrata of bezoars, only much thinner; this is probable; for, if we cut through the centre of a pearl, we often find a foreign particle, which ought to be conſidered as the nucleus, or primary cauſe of its formation. The looſe pearls may originally have been produced within the body, and on their increaſe may have ſeparated and fallen to the ſhells, ſeem to be produced by ſimilar extravaſation, into the cavity of the ſhell. Thoſe compact ones, fixed occaſioned by the friction of ſome roughneſs on the inſide of the ſhell. Theſe and the pearl-like nodes have a different aſpect from the pearls, and are of a darker and bluer colour. In one of the former we found a pretty large true oval pearl, of a very clear water, while the node itſelf was of a dark-bluiſh colour. The yellow or gold-coloured pearl is the moſt eſteemed by the natives: ſome have a bright red luſtre; others are grey or blackiſh, without any ſhining appearance, and of no value. Sometimes, when the grey lamella of a pearl is taken off, under it is found a beautiful genuine one; but it oftener happens that, after having ſeparated the firſt coat, you find a worthleſs impure pearl. We tried ſeveral of them, taking one lamella off after another, and found clear and impure by turns: and in an impure pearl we met with one of a clear water, though in the centre of all we found a foreign particle. The largeſt and moſt perfect pearl which we ſaw during our ſtay at Condatchy, was about the ſize of a ſmall piſtol-bullet, though we have been told that ſince our departure many others of the ſame ſize have been found. The ſpotted and irregular ones are ſold cheap, and are chiefly uſed by the native phyſicians as an ingredient in their medicines.

We may judge with greater or leſs probability by the appearance of the pearl-ſhells, whether they contain pearls or not. Thoſe that have a thick calcareous cruſt upon them, to which zoophytes of various kinds are faſtened, have arrived at their full growth, and commonly contain the beſt pearls; but thoſe that appear ſmooth, contain either none, or only ſmall ones.

The art of forcing ſhell-fiſh to produce pearls was known, in the firſt centuries of the Chriſtian era, to the inhabitants of the coaſts of the Red Sea, as we are told by the philoſopher Apollonius, (Philoſtrat. in Vita Apollon. lib. iii. c. 57.) who thought that circumſtance worthy of particular notice. The Indians dived into the ſea, after they had rendered it calm, and perhaps clearer, by pouring oil into it. They then enticed the fiſh by means of ſome bait to open their ſhells; and, having pricked them with a ſharp-pointed inſtrument, received the liquor that flowed from them, in ſmall holes made in an iron veſſel, in which they hardened into real pearls. Olearius ſays, that this account is to be found in no other author; but it has at leaſt been copied by Tzetzes, whoſe words may in ſome meaſure ſerve as an explanation. (Tzetzes Variorum, lib. ii.) We are as yet too little acquainted with ſhell-fiſh to be able to determine, with certainty, how much truth there really may be in this relation; but we have great reaſon to conjecture from it, that the people who lived on the borders of the Red Sea were then acquainted with the method of forcing ſhell-fiſh to produce pearls; and, as the arts in general of the ancient Indians have been preſerved without much variation, the proceſs employed by the Chineſe at preſent, to cauſe a certain kind of muſcles to form pearls, ſeems to confirm the account given by Philoſtratus. In the beginning of the ſummer, at the time when the muſcles repair to the ſurface of the water and open their ſhells, five or ſix ſmall beads, made of mother-of-pearl, and ſtrung on a thread, are thrown into each of them. At the end of a year, when the muſcles are drawn up and opened, the beads are found covered with a pearly cruſt, in ſuch a manner, that they have a perfect reſemblance to real pearls. The truth of this information cannot be doubted, though ſome experiments made in Bohemia for the ſame purpoſe were not attended with ſucceſs. It has been confirmed by various perſons; and it is very probable, that ſome operations and ſecrets, without which the proceſs would prove fruitleſs even in China, may be unknown to the Europeans. Beſides, many obſervations are known, which ſeem to ſhow the poſſibility of ſuch an effect being produced. Profeſſor Fabricius ſays, that he ſaw in the poſſeſſion of ſir Joſeph Banks, at London, large chamæ, brought from China, in which there were ſeveral bits of iron wire, incruſted with a ſubſtance of a perfect pearly nature. Theſe bits of wire, he ſaid, had been ſharp; and it appeared as if the muſcles, to ſecure themſelves againſt the points of the wire, had covered them with this ſubſtance, by which means they had been rendered blunt. May not therefore the proceſs employed by the ancients be ſtill practiſed? and may not theſe bits of wire have been the ſame as thoſe ſpikes uſed by the people in the neighbourhood of the Red Sea for pricking muſcles, and which perhaps ſlipped from the hands of the Chineſe workmen, and remained in the animals? See Mya, p. 428.

The invention therefore of Linnæus cannot be called altogether new. That great man informed the king and council in the year 1761, that he had diſcovered an art by which muſcles might be made to produce pearls, and he offered to diſcloſe the method for the benefit of the kingdom. This however was not done; but he diſpoſed of his ſecret to one Bagge, a merchant at Gottenburg, for the ſum of eighteen thouſand copper dollars, which make about five hundred ducats. In the year 1780, the heirs of this merchant wiſhed to ſell to the higheſt bidder the ſealed-up receipt; but whether the paper was purchaſed, or who bought it, we do not know; for profeſſor Retzius at Lund, of whom we enquired reſpecting it, could not inform us. Dr. Stover, in his Life of Linnæus, vol. i. p. 360, ſays that the manuſcript containing this ſecret is in the poſſeſſion of Dr. J. E. Smith, in England. In the year 1763, it was ſaid in the German newſpapers, that Linnæus was ennobled on account of this diſcovery, and that he bore a pearl in his coat of arms; but both theſe aſſertions are falſe, though profeſſor Fabricius conjectures that the firſt may be true. Linnæus received his patent of nobility, which, together with his arms, we have ſeen, in the year 1756, conſequently long before he ſaid any thing reſpecting that diſcovery, of which the patent does not make the leaſt mention. What in his arms has been taken for a pearl, is an egg, by which Mr. Tilas, whoſe buſineſs it then was to blazon the arms of ennobled families, meant to repreſent all nature, after the manner of the ancient Egyptians. The arms are divided into three fields, each of which, by the colour which forms the ground, expreſſes one of the kingdoms of Nature; the red ſignifying the animal, and the green the vegetable, &c. Over the helmet, by way of creſt, is placed the Linnæa plant; that beautiful little moth, the Phalæna linneella, ſhining with its ſilvery colours, is diſplayed around the border inſtead of feſtoons; and below is the following motto, "Famam extendere factis." Linnæus once ſhowed us, among his collection of ſhells, a ſmall box filled with pearls, and ſaid, "*Hos uniones confeci artificio meo; ſunt tantum quinque annorum, et tamen tam magni.* Theſe pearls I made by my art, and though ſo large, they are only five years old." They were depoſited on the Mya margaritiferæ, from which moſt of the Swediſh pearls are procured; and the ſon, who was however not acquainted with his father's ſecret, ſaid the experiments were made only on this kind of muſcle, though Linnæus himſelf aſſured us that they would ſucceed on all kinds. See the article Linnæus, vol. xii. p. 756.

That pearls are produced when the ſhells have been pierced or injured in a certain manner, is highly probable, and has been in modern times often remarked. It appears alſo, that the animal has the power of ſometimes filling up ſuch openings with a calcareous ſubſtance, which it depoſits in them. This ſubſtance aſſumes the figure of the orifice, and the animal particles it contains give it its brightneſs and luſtre. Pearl-fiſhers have long known that muſcles, the ſhells of which are rough and irregular, or which exhibit marks of violence, commonly contain pearls, though they are found alſo in others in which the ſame appearances are not obſerved. We are perfectly aware alſo, that experiments which ſome have made by piercing the ſhells of muſcles, have been unſucceſsful; but this does not prove that it is impoſſible to procure pearls in that manner. Thoſe who made them did not perhaps pierce the proper part of the ſhell; perhaps they made the orifice ſo large that it weakened the animal; and they may not have choſen the propereſt ſeaſon of the year. The ſtrongeſt objection, however, which can be made on this ſubject, is the undeniable truth, that *the proper valuable pearls are not found adhering to the ſhell, but in the body only;* and that therefore *thoſe calcareous balls which fill up holes, cannot be perfect pearls.* But from the words of Linnæus above quoted, we are led to conjecture, that he only made a hole in the ſhell without piercing it quite through. Linnæus alſo may have done ſome injury to the animal itſelf, when it opened its ſhell. It appears by the Tranſactions of the Swediſh Academy, that ſome have been of opinion that ſhell-fiſh might be made to produce pearls by a particular kind of nouriſhment; and Liſter thinks that theſe excreſcences would be more abundant, were the muſcles placed in water impregnated with calcareous matter; but the younger Linnæus ſeems certain that his father employed none of theſe methods. *Beckmann's Hiſt. of inventions,* vol. ii.

The perfections of pearls, whether round, in form of pears or olives, or irregular, conſiſts chiefly in the luſtre and clearneſs of the colour, which jewellers call the *water.* There are ſome whoſe water is white, which are thoſe moſt eſteemed in Europe; the waters of others border on the yellow, which ſome Indians and Arabs prefer to the white; others are of a lead colour; others border on black; and others are quite black. They are all liable to change with wearing: in eighty or a hundred years they uſually become of little value, eſpecially the white ones, which often turn yellow, and ſpoil in forty or fifty years' time. The difference of colours, doubtleſs, ariſes from the different parts of the muſcle in which they are formed. When the ſeed happens to be thrown into the meſentery or liver, or the parts correſponding thereto, it is no wonder if the impurities of the blood change the natural white. The oriental pearls are the fineſt, on account of their largeneſs, colour, and beauty, being of a ſilver white; whereas the occidental pearls ſeldom exceed the colour of milk.

In Europe pearls are ſold by the carat-weight, the carat containing four grains. In Aſia, the weights uſed for pearls are different in different ſtates. The value of pearls increaſes as the ſquare of their weight; thus, the price of a pearl of one carat being ſettled at 8s. to find the price of a pearl weighing ſix carats; firſt, find the ſquare of 6, viz. 36; which multiplied by 8, gives 288 ſhillings, or 14l. 8s. the price required.

Pearls, F. Bouhours obſerves, have this advantage over precious ſtones dug out of rocks, &c. that the latter owe their luſtre to the induſtry of men; nature only, as it were, hews them out, and leaves the finiſhing of them to art; but the former are born with that beautiful water which gives them their value. They are found perfectly poliſhed in the abyſſes of the ſea; and Nature has put the laſt hand to them before they are ſeparated from their mother.

Pearls have been uſed as ornaments from the earlieſt ages. In the time of Job, pearls were accounted to be of great value. *Job,* ch. xxviii. v. 18.

Pearls of unuſual figures, i. e. neither round nor in the pear-form, are called *baroguas,* and ours *Scotch pearls:* thoſe of unuſual ſizes are called *parangons;* ſuch as were that of Cleopatra, valued by Pliny at centies HS, or 80,000l. ſterling; that brought in 1574 to Philip II. of the ſize of a pigeon's egg, valued at 14,400 ducats; that of the emperor Rudolph, mentioned by Boetius, called *la peregrina,* or "the incomparable," of the ſhape of a pear, and weighing thirty carats; and that mentioned by Tavernier, in the hands of the emperor of Perſia, in 1633, bought of an Arab for 32,000 tomans, which, at 3l. 9s. the toman, amounts to 110,400l. ſterling.

That pearls are calcareous is inferred from Cleopatra's having been able to diſſolve hers in vinegar, and by theſe means to gain a wager from her lover, as we are told by Pliny and Macrobius. She muſt, however, have employed ſtronger vinegar than that which we uſe for our tables, as the pearls, on account of their hardneſs and their natural enamel, cannot be eaſily diſſolved by a weak acid. Cleopatra, perhaps, broke and pounded the pearls; and it is probable that ſhe afterwards diluted the vinegar with water, that ſhe might be able to drink it; though diſſolved calx deſtroys acids, and renders them imperceptible to the tongue. We are told that the diſſipated Clodius gave to each of his gueſts a pearl diſſolved in vinegar to drink; "Ut experiretur in gloria palati," ſays Pliny, "quid ſaperent margaritæ; atque ut mirè placuere, ne ſolus hoc ſciret, ſingulos uniones convivis abſorbendos dedit." Horace (lib. ii. ſat. 3.) ſays the ſame. Caligula, alſo, "Margaritas pretioſiſſimas aceto liquefactas ſorbebat." Suet. cap. 37. That pearls are ſoluble in vinegar is remarked in Pauſanias, l. viii. c. 18. and Vitruvius, l. viii. c. 3.

Mr. Bruce mentions a muſcle found in the ſalt-ſprings of the Nubian deſert; in many of which he found thoſe excreſcences which might be called pearls, but all of them ill formed, foul, and of a bad colour, though of the ſame conſiſtence, and lodged in the ſame part of the body, as thoſe in the ſea. "The muſcle, too, (ſays our author,) is in every reſpect ſimilar, I think larger. The outer ſkin or covering of it is of a vivid green. Upon removing this, which is the epidermis, what next appears is a beautiful pink without gloſs, and ſeemingly of a calcareous nature. Below this, the mother-of-pearl, which is undermoſt, is a white without luſtre, partaking much of the blue and very little of the red; and this is all the difference I obſerved between it and the pearl-bearing muſcle of the Red Sea."

In Scotland, eſpecially to the northward, in all rivers running from lakes, there are found muſcles that have pearls of more than ordinary merit, though ſeldom of large ſize. They were formerly tolerably cheap; but lately, the wearing of real pearls coming into faſhion, thoſe of Scotland have increaſed in price greatly beyond their value, and ſuperior often to the price of oriental ones when bought in the eaſt. The reaſon of this is a demand from London, where they are actually employed in work, and ſold as oriental. But the excellency of all glaſs or paſte manufactory, it is likely, will keep the price of this article, and the demand for it, within bounds, when every lady has it in her power to wear in her ears, for the price of ſixpence, a pearl as beautiful in colour, more elegant in form, lighter and eaſier to carry, and as much bigger as ſhe pleaſes, than the famous ones of Cleopatra and Servilia. In Scotland, as well as in the eaſt, the ſmooth and perfect ſhell rarely produces a pearl; the crooked and diſtorted ſhell ſeldom wants one.

The mother-of-pearl manufactory is brought to the greateſt perfection at Jeruſalem. The moſt beautiful ſhell of this kind is that of the *peninin* already mentioned; but it is too brittle to be employed in any large pieces of workmanſhip; whence that kind named *dora* is moſt uſually employed; and great quantities of this are daily brought from the Red Sea to Jeruſalem. Of theſe, all the fine works, the crucifixes, the wafer-boxes, and the beads, are made, which are ſent to the Spaniſh dominions in the New World, and produce a return incomparably greater than the ſtaple of the greateſt manufactory in the Old.

Very little is known of the natural hiſtory of the pearl-fiſh. Mr. Bruce ſays, that, as far as he has obſerved, they are all ſtuck upright in the mud by an extremity; the muſcle by one end, the pinna by the ſmall ſharp point, and the third by the hinge or ſquare part which projects from the round. "In ſhallow and clear ſtreams (ſays Mr. Bruce), I have ſeen ſmall furrows or tracks upon the ſandy bottom, by which you could trace the muſcle from its laſt ſtation; and theſe not ſtraight, but deviating into traverſes and triangles, like the courſe of a ſhip in a contrary wind laid down upon a map, probably in purſuit of food. The general belief is, that the muſcle is conſtantly ſtationary in a ſtate of repoſe, and cannot transfer itſelf from place to place. This is a vulgar prejudice, and one of thoſe facts that are miſtaken for want of ſufficient pains or opportunity to make more critical obſervations. Others, finding the firſt opinion a falſe one, and that they are endowed with power of changing place like other animals, have, upon the ſame foundation, gone into the contrary extreme, ſo far as to attribute ſwiftneſs to them, a property ſurely inconſiſtent with their being fixed to rocks. Pliny and Solinus ſay that the muſcles have leaders, and go in flocks; and that their leader is endowed with great cunning to protect himſelf and his flock from the fiſhers; and that, when he is taken, the others fall an eaſy prey. This, however, we may juſtly look upon to be a fable; ſome of the moſt accurate obſervers having diſcovered the motion of the muſcle, which indeed is wonderful, and that they lie in beds, which is not at all ſo, have added the reſt, to make their hiſtory complete." Our author informs us, that the muſcles found in the ſalt-ſprings of Nubia likewiſe travel far from home, and are ſometimes ſurpriſed, by the ceaſing of the rains, at a greater diſtance from their beds than they have ſtrength and moiſture to carry them. He aſſures us, that none of the pearl-fiſh are eatable; and that they are the only fiſh he ſaw in the Red Sea that cannot be eaten.

Pearls have been reckoned of ſome uſe in medicine; but they were only the ſmalleſt ſort, called *ſeeds of pearls*, that were uſed. The quality required was, that they ſhould be white, clear, and tranſparent; and truly oriental. They ſerved to make cordial potions, formerly much valued, but now fallen from their ancient reputation; and ſcarcely ordered by any but charlatans. The ladies alſo uſe certain preparations of pearls, *as they are made to believe*, for their complexions: ſuch as the whites of pearls; flowers, eſſences, ſpirits, tinctures, &c. of pearl; but they are all apparently deceits.

5. Mytilus unguis: ſhell longitudinally ſtriate, pellucid, and ſlightly eared. This ſpecies inhabits the Mediterranean; the ſhell is thin and hyaline, with very fine perpendicular ſtriæ, about the ſize of a man's nail: ſome perſons imagine that this is a ſpecies of OSTREA.

III. Ventricoſe or convex.

6. Mytilus lithophagus: ſhell cylindrical, rounded at both ends. It inhabits European, American, and Indian, ſeas: penetrating and eating away corals, rocks, and even the hardeſt marbles. It is about an inch broad, and three inches long, marked with arched tranſverſe ſtriæ; the ſhell is dark bay, with a greeniſh tint, but within it is opal-blue, ſilvery-white, or perlaceous. The European ſpecimens have a thin brittle ſhell; the Indian ones are ſofter, and nearly coriaceous.

7. Mytilus rugoſus: ſhell rhombic, brittle, rugged, and rounded at the ends. It inhabits the northern ſeas and lakes; and is uſually found lodged in great numbers in lime-ſtone, each in a ſeparate apartment, with apertures too ſmall for the ſhell to paſs through without breaking the ſtone. The ſhell is about the ſize of the laſt joint of a man's little finger; its colour is of a dirty grey, and within it is half blue and half white, marked with very ſmall longitudinal ſtriæ croſſing the tranſverſe wrinkles.

8. Mytilus bilocularis: ſhell blue-ſtriate, with vaulted knobs and a white diſſepiment or partition. It inhabits the Nicobar-iſlands, and is covered with a green ſkin.

9. Mytilus exuſtus: ſhell convex, one of the margins angular; the frontal extremity crenate. This ſpecies is found in the American Ocean, and in the Red Sea; it is about an inch and a half long, and has a hinge with four or five lateral teeth.

10. Mytilus barbatus: ſhell ſmoothiſh, ferruginous on the outſide, and bearded at the tip. It inhabits the Mediterranean Sea; is about three quarters of an inch long, and under the ſkin it is reddiſh-ferruginous, blue, or whitiſh.

11. Mytilus edulis, the common edible muſcle: ſhell ſmoothiſh, violet, the valves ſlightly recurved on the obtuſe ſide, and ſomewhat angular on the acute ſide; the beaks are pointed. It inhabits the European and Indian ſeas; is two or three inches long, but larger within the tropics, and ſmaller as we proceed northward. Found in large beds, and generally adhering to other bodies, by means of a long ſilky beard. See CONCHOLOGY, vol. v. p. 33.

That accurate and minute obſerver, Von Leeuwenhoek, made ſome curious enquiries into the interior conformation of both the ſea and river muſcle, with their mode of generation; and has particularly deſcribed the preſent ſpecies. With the permiſſion of Samuel Hoole, eſq. we avail ourſelves of his tranſlation, and of the figures which accompany it.

"Upon examining that part of the muſcle which is called the *beard*, I not only found it of a wonderful make, but the motion I ſaw in the ſmall component parts of it was ſo incredibly great, that I could not be ſatisfied with the ſpectacle; and it is not in the mind of man to conceive all the motions which I beheld within the compaſs of a grain of ſand. When I obſerved the large and ſtrong tendons or ſinews in the muſcle, which are fixed to the ſhell, and thoſe which lie in the ſame order and poſition as the ribs in a terreſtial animal, I thought that we cannot ſufficiently admire the wonderful make of this fiſh; and that, if we could obtain an inſight into all thoſe parts which we ſee in one of them, and could we aſſign their ſeveral uſes, and give them names, and alſo make drawings of them, I doubt not that we ſhould admire ſo elaborate and curious a work, beyond many others of nature's productions; and that thoſe perſons who now aſſert that ſhell-fiſhes (among which the muſcle is in leaſt eſtimation) are produced ſpontaneouſly, or of themſelves, would renounce their opinions, and embrace the truth, namely, that ſo perfect a creature cannot be produced from corruption, congealed water, or mud, but can only be generated by parents of its own ſpecies.

"I obſerved that every muſcle was provided with a kind of ſtring or ligament, which, at a little diſtance from the fiſh, was divided into eight, ten, twelve, fifteen, and even twenty, other ligaments of different lengths; and with theſe ligaments, I obſerved, that the muſcles faſtened themſelves to other muſcles, and alſo to pieces of ſhells, and to ſhell-fiſh of other ſpecies. I was deſirous to know how this faſtening was effected, and which I immediately diſcovered; for I ſaw, to my great ſurpriſe, that the extremity of every ligament was provided with a thin flat membrane or ſkin, of a roundiſh ſhape, which was as firmly fixed to the ſhell on which it was placed (the ligament being in the middle of it,) as if it were glued to the ſhell; and, when I endeavoured to pull off the ligament, I found, by ſeveral trials, that (though it was very ſtrong and tough, in proportion to its ſize) it would break before the flat thin membrane could be looſened. Hereupon I recollected, that when a boy, I had often amuſed myſelf with a play-thing which we called *een treck-leertje*; [that is, in Engliſh, "a pulling, or drawing-leather;" it is a common play-thing among boys in England, and is called by them *a ſucker*.] This is a ſmall round piece of leather, about two inches in diameter, having a ſmall hole in the middle, through which was drawn a packthread, with a knot at the end. This leather, being firſt ſoaked in water, was placed flat on a ſtone; and with this we could not only lift up the ſtone, but carry it to ſome diſtance. Now, upon the ſame principle as the ſtone adheres to the leather, partly by the preſſure of the atmoſphere, and partly becauſe no air or water can gain admittance between the ſtone and the leather, the like effect is produced in the coheſion or ſticking of the membrane I have been deſcribing.

"I have thought it proper to give a drawing of the ligament before-mentioned, and its ſeveral branches; and on the annexed Plate, at fig. 1, is ſhown a piece of it, which is cut off at A in the part which comes out of the ſhell; this, in fig. 2, is ſhown at B E of its natural ſize. In fig. 1, F, G, H, I, K, are ſeen the ramifications or branches, or rather a ſmall part of them; and at L M is ſhown one of the ſhort ligaments, with its membrane N O P. The ligament here appears on the upper ſide of the membrane, in like manner as if the latter were fixed to ſome other ſhell; and here are to be ſeen the many parts whereby the ligament is joined to the membrane, which latter alſo appears ſomewhat elevated at the place of joining. At Q R is repreſented another ligament; and at S T V its membrane, with the concave part of it appearing open, being in a contrary poſition to the former repreſentation. I have often ſeen this cavity reach into the ligament as far as M or R, but otherwiſe it is quite cloſe and compact. Each of theſe ligaments conſiſts of a great number of exceſſively-ſmall particles, which cannot be contemplated without the greateſt admiration, eſpecially when we recollect the power which the muſcle has of moving each of theſe ligaments, and alſo that the membrane muſt be placed quite ſmooth and flat upon the ſhell, to which it is fixed, in order to cauſe it firmly to adhere thereto. Now, if we farther conſider that muſcles, while in the ſea, always lie with that ſhell upwards which they open occaſionally, and that their ſhells (which are very thin) and their bodies together are but little heavier than the water wherein they live, and alſo that many of them at low ebb-tides are left deſtitute of water, at which times, in my opinion, much air muſt inſinuate itſelf between their ſhells, by which means they become lighter than the water; they would then be liable either with the ebb to be carried out into the deep, or by the flood to be thrown upon the land, and ſo would periſh. But provident Nature has taken care to preſerve them in this reſpect, by furniſhing them with a ligament, ſpreading into various branches, and at the end of each branch an organ, which I have named a *membrane*, by the help of which the muſcles can fix themſelves either to empty ſhells, or other ſubſtances, or to one another, by which means they are preſerved.

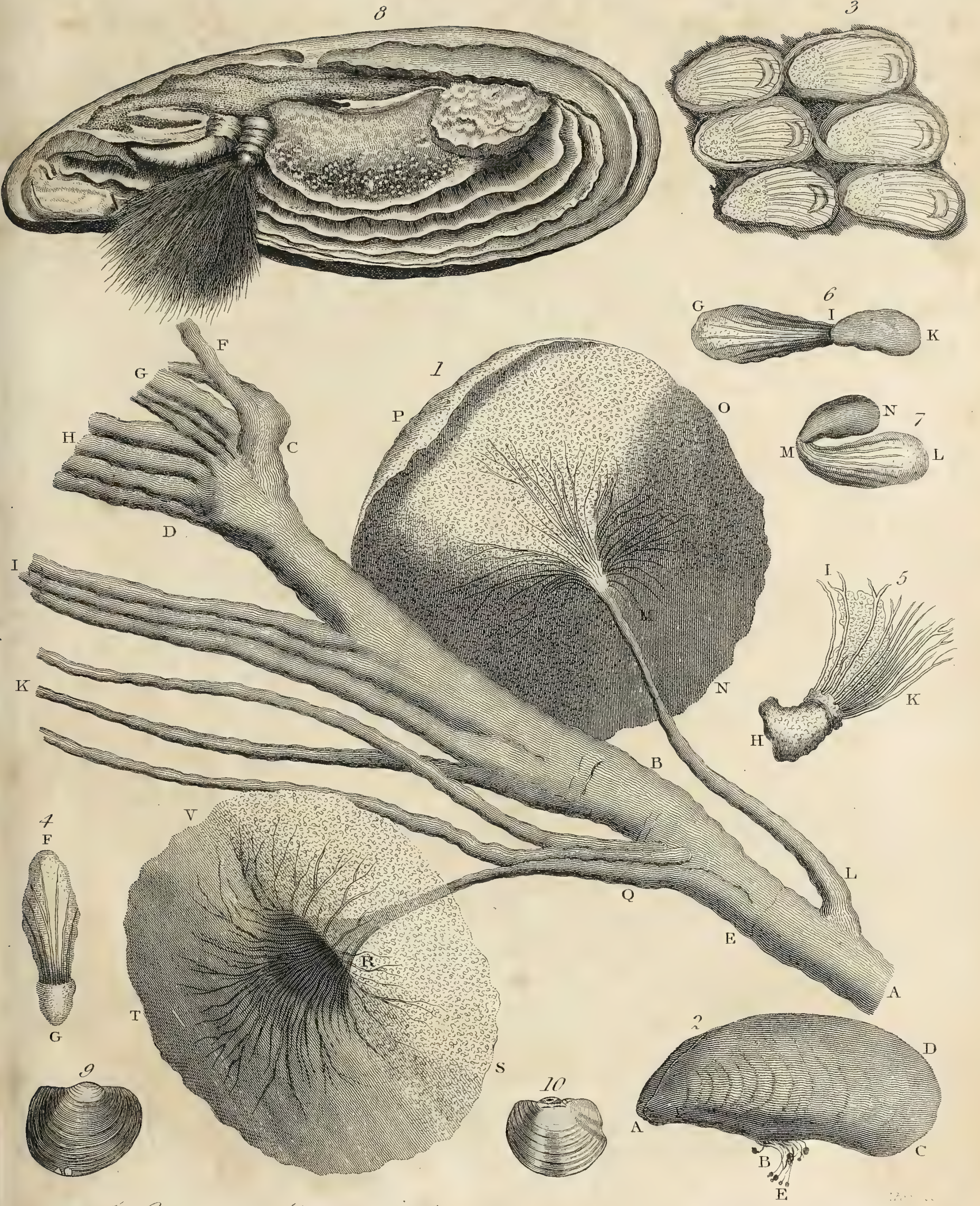
"But, as my principal deſign was to diſcover, as far as poſſible, the generation or procreation of theſe fiſh, I come now to that part of the ſubject. I obſerved that theſe muſcles, ſome in a greater and others in a leſs degree, had the outſides of their ſhells covered with a kind of ſubſtance, thinly ſpread upon the ſhell, and firmly adhering to it, or rather to the membrane which covered it. Obſerving this by the microſcope, I ſaw that the particles of which it conſiſted, were all of a ſimilar form, and alſo placed ſide by ſide, in regular order, and the membranes or ſkins of theſe particles, as it were, united, or cloſely joined together. I ſeparated a part of this ſubſtance from the ſhell; and, placing it before the microſcope, I found that all the regularly-diſpoſed particles were much longer than they were broad; alſo that one of their edges was roundiſh and thick, the other terminating in a point or edge; and moreover that in many of them one ſide was riſing, and the other flat; in a word, many of theſe particles, in ſhape, were very like a muſcle; and I not only thought that they were the eggs or ſpawn of the muſcle, but I alſo obſerved that, when I broke the ſtrong membranes incloſing them, ſeveral of the eggs, which were in ſhape like a muſcle, appeared lying ſingly and ſeparately on the outſide of that membrane; and, when I ſeparated theſe unformed muſcles ſingly, one from another, I imagined that I could ſee the membranes or tendons of which they were compoſed. I alſo ſaw the ſhells, membranes, or coverings, of ſeveral eggs which were empty, and which I ſaw, or, more properly ſpeaking, imagined, to be barren eggs. In other parts of this ſubſtance I ſaw eggs wherein I concluded that there were unformed muſcles, which concluſion I gathered from the multitude of veſſels which I ſaw, which veſſels conſtituted the ſhape or figure of a muſcle. Theſe eggs were not larger than a grain of common ſcowering-ſand. Moreover I obſerved, that the ſmall or taper ends of the ſhells were ſeldom or never covered with the ſpawn or eggs; the reaſon of which I took to be, that, at the time the muſcles emit their ſpawn, they lie with the flat and broad part, as ſhown at fig. 2, A, B, C, D, uppermoſt, and that part marked with the letter A next the ground, or bottom; for I have often obſerved, that, when muſcles have been cleaned and put into a veſſel of water, and a handful of ſalt thrown upon them, many will be ſoon found placed in the poſition I have mentioned; and, while they lie in this poſition, and the eggs are put forth from the part marked C D, there muſt neceſſarily be more eggs lodged near that ſpot than towards the farther end of the ſhell.

"Several of theſe muſcles I placed in my ſtudy, in two glaſſes of water, with ſome ſalt ſprinkled on them, in order to examine them daily, and ſee the progreſs of growth in the young ones; and, upon this occaſion, I could not ſufficiently admire the exact and regular order in which the eggs were in many places diſpoſed, juſt as if they had been ſo placed by men's hands; and from hence I was convinced that muſcles do not, like many other fiſhes, lay their eggs promiſcuouſly, but that they muſt be furniſhed with ſome kind of organ which they can project beyond the ſhell, and with it diſpoſe them ſo regularly. I have before ſaid, that I thought I ſaw a kind of ſinews or tendons in the eggs; and, upon further examination, I perceived ſixteen of theſe tendons, like ſtreaks, in the unformed muſcle, and among them I ſaw ſome ſtill ſmaller ſtreaks, from whence I concluded, that they were in fact veſſels to form the ſubſtance of the future ſhell, for they lay all in one direction, that is, from the ſmall end, ſpreading or diverging round about; and they were thickeſt at that part, and thinneſt at the extremities, ſpreading wider towards the broad and thin end of the ſhell. I cauſed a drawing to be made of a few of the eggs, in the order they lay on the parent ſhell, and as they appeared through the microſcope: this is ſhown at fig. 3, repreſenting ſix of them, in ſome of which it may be ſeen that one ſide is more curved than the other, and in which eggs may alſo be ſeen the ſinews, veſſels, or ſtreaks, I have mentioned.

"Upon conſidering that the lobſter and the ſhrimp carry their eggs about them until the young are perfectly formed, it ſeems probable to me, that this is alſo the caſe with the muſcle; for, otherwiſe, how could this ſpecies of fiſh be propagated? eſpecially if we conſider that they lay their eggs in the middle of winter, and generally in ſhallow waters, where the ſhore is muddy; and, if the eggs were not depoſited *on the ſhells*, they would be buried in the mud, with the common flux and reflux of the tide; not to mention that in ſtormy weather they would be carried out to ſea; but, while they are fixed to the ſhells of the parent, and theſe laſt adhering to ſolid ſubſtances on the ſhore, the eggs are, by this means, in great numbers preſerved; and theſe young muſcles, when come to ſuch a maturity as to be ſeparated from the ſhells, may, in windy weather, ſtrong tides or currents, be eaſily carried to other muddy ſhores on the coaſt, in places where for many years before no muſcles were to be found. I have made a rough calculation of the number of theſe eggs, and I compute that there are frequently more than two thouſand fixed to the ſhell of one muſcle; in fact, I have ſeen muſcles, each of which I judged had more than three thouſand on it. I have before ſaid, that the eggs of muſcles are the ſize of common ſcowering-ſand; but, as this is not of the ſame ſize in all countries, I compute that, to the beſt of my judgment, ſeven of theſe eggs, in breadth, are equal to the fifteenth part of an inch, conſequently the breadth of 105 eggs is equal to one inch; and I alſo compute, that 60 eggs, in length, make an inch; therefore a ſquare inch will contain 6,300; and, as each egg is no thicker than broad, 105 of them muſt lie one on another to make the thickneſs of an inch; the ſum total then of the eggs which will be contained within the ſpace of a cubic inch, is 661,500; and hundreds of ſuch eggs may

lie

MYTILUS



The Common Muscle, with its membrane, eggs, &c. magnified.

[illegible]

lie under ſhells, ſand, or mud, without being perceived, and yet muſcles may be produced from them.

“ Having taken ſome of the unformed muſcles out of the eggs, I cauſed a drawing to be made of their figure, as near as the engraver was able to imitate it: this is ſhown at fig. 4, F G, which repreſents ſuch an unformed muſcle, incloſed in its membrane or covering, in which the ſtreaks before-mentioned did not appear until the greateſt part of the moiſture thereof was evaporated. Fig. 5, H I K, ſhows another of them, the ſtreaks or veſſels in which, between I and K, appear ſeparated, or ſundered from each other; and this was done in the taking it out of the egg, being in that operation deprived of the ſurrounding membrane or ſkin. At the latter end of April, when I had finiſhed the preceding obſervations, I received a large jar full of muſcles out of Zealand; upon examination of which, I was much ſurpriſed to ſee that moſt of the ſhells were quite ſmooth and poliſhed, being not only deſtitute of eggs, but, for the moſt part, bare of the membrane which gives them a blackiſh colour, ſo that they now appeared of a lively blue; however, I found four or five with perfect eggs on them, and in them were young muſcles: ſome of theſe I took out of the eggs, and now plainly ſaw, that what I had at firſt taken for the unformed muſcle, was, in fact, only the ligament, or ſtring, whereby the young muſcle was nouriſhed. A drawing of the real ſhape, as it now appeared to me, is given at fig. 6, where G H I repreſents the ligaments of the unformed young muſcles, and I K the muſcle itſelf: another of them is repreſented at fig. 7, where L M ſhows the ſtrings or ligaments, and M N the muſcle; and this laſt figure, I think, exhibits the true form of the young muſcle, as it lies in the egg; and, from theſe laſt obſervations, it appears that the parts repreſented in fig. 4, at G, and in fig. 5, at H, were only the ſubſtance, or matter, from whence the muſcle would be formed, and which, at the time when that drawing was made, had not come to ſufficient perfection to render the parts diſtinguiſhable.

“ In the courſe of the laſt obſervations, I examined that hard and variegated, or marbly-coloured, part, lying in the middle of the muſcle, which ſome call the heart, and others take to be the tongue, of this fiſh; and when, upon opening the muſcle, I cut out this part, and placed it before the microſcope, I obſerved ſo tremulous or quivering a motion in the ſurface, as if millions of little living creatures were running about upon it; beſides another motion, which the part had to and fro. This part the muſcle can extend ſo far, that I think it will almoſt reach all over the ſhell, which made me think that, perhaps, by this organ, the eggs are placed on the ſhell in the regular order I have before deſcribed.”

12. Mytilus incurvatus: ſhell very crooked on one ſide near the beaks, then greatly dilated; within it is marked with a violet tinge. Found on the Angleſea coaſt: the ſhell is covered with a thick rough ſkin.

13. Mytilus pellucidus: ſhell oval, tranſparent, and very elegantly radiate lengthways with purple and blue. This, like the laſt, is found at Angleſea, in oyſter-beds; and is about two inches long.

14. Mytilus umbilicatus: ſhell contracted into a deep rugged cavity oppoſite the hinge, forming a deep hollow when the valves are cloſed. It is found at Angleſea, and is nearly five inches long; the ſhell is oval, reſembling the M. modiolus, deſcribed farther on; but it is diſtinguiſhed by the remarkable indentation near the beaks.

15. Mytilus curtus: ſhell ſhort, ventricoſe, obtuſe at the beaks, and of a dirty yellow. It is found at Weymouth.

16. Mytilus ungulatus: ſhell ſmooth and ſlightly curved; hind margin inflected; hinge terminal and two-toothed. Inhabits the Mediterranean and Cape of Good Hope.

β. There is a variety of this ſpecies found at New Zealand, that reſembles the M. edulis, but is full five inches long, and two inches and a half broad: the valves are very convex, reſembling the hoof of an ox.

17. Mytilus bidens: ſhell ſtriate, ſlightly curved, the hind margin inflected; the hinge terminal and two-toothed. Inhabits the Mediterranean, Ethiopic, Atlantic, and Magellanic, ſeas.

18. Mytilus modiolus: ſhell ſmooth and blackiſh, obtuſe at the ſmaller end, and rounded at the other, one ſide near the beaks is angular. Two varieties are noticed by Liſter. It inhabits the European, American, and Indian, ſeas, adhering to fuci and zoophytes; is ſix or ſeven inches long, and about half as broad; the fiſh is red or orange, and eatable. The lower ſhell, open, with the contained animal, of the natural ſize, is ſhown at fig. 8.

19. Mytilus cygneus: ſhell ovate, very brittle, and tranſverſely wrinkled; the anterior end compreſſed; the other rounded; the hinge lateral. Two varieties of this ſpecies are noticed by Liſter. It is frequently found in rivers and ponds; is about two or three inches broad, and three inches long; the ſhell is deep, and within it is white, opaque, and often rough, with ſmall pearls.

20. Mytilus anatinus, the duck-muſcle, or peat-muſcle: ſhell ovate, a little compreſſed, very brittle and ſemitranſparent, with a membranaceous margin; the beaks are decuticated. It inhabits the freſh waters of Great Britain, and of other parts of Europe; it is about five inches long, and half as broad. Ducks and crows are extremely fond of this ſpecies, and of the M. cygneus; and the crows, when the ſhell is too hard for their bills, fly up with it to a great height, drop the ſhell on a rock, and pick out the meat after the ſhell is thus broken. The following remarks of M. Leeuwenhoek ſeem to apply to this ſpecies, as to its power of loco-motion, which we have before noticed in the M. margaritifera.

“ I have obſerved, that, when our navigable canals here in Holland, or our ditches, are cleaned, a kind of large fiſh are taken from the bottom, named by us, *veen moſſelen*, or peat-muſcles. Of theſe I procured ſome, which were about three or four inches long, with very thin ſhells. A countryman, whom I ſaw collecting theſe ſhell-fiſh, told me they were to be found under the banks, and in the ſhallow parts of the ditches, or canals, among the leaves and twigs, or other litter; and, indeed, I have ſeen them taken in thoſe places; but, as I was certain that theſe ſhallow places were frozen to the bottom in the winter, which the ſhell-fiſh could not ſurvive, I was told that they had a power of moving from place to place. To ſatisfy myſelf in this reſpect, I made two experiments on theſe muſcles, of which I put ſix or eight into an earthen veſſel, with a flat bottom, and poured on them ſome of the ſame water in which they were taken: this veſſel I placed in my ſtudy, and I found that in a few hours time they had all changed their poſitions, and had approached nearer together than they were when firſt placed in the veſſel. And I obſerved that theſe muſcles, about the middle of their ſhells, thruſt out, through the opening, a fleſhy ſubſtance, or organ, about two-third parts the length of the ſhell: this part was about half an inch broad, and ſharp at the end; and, in order to move themſelves from place to place, they thruſt this organ under their ſhell, and, applying it with a quick motion to the bottom of the place where they lay, could by this means not only change their poſture, but turn themſelves upſide down.

“ At the end of the month of Auguſt, upon opening ſix of theſe muſcles, I found many eggs within them, which were ſo perfect, that I could diſtinguiſh the newly-formed ſhells, ſo that they were not ſo properly to be named eggs as unborn peat-muſcles. Two of the parent muſcles were ſo ſmall, that I judged they were not above a year old, whereas the others were, in my opinion, ſix, eight, or nine, years old; but the young muſcles were of the ſame ſize in all of them. In the beginning of September, I procured about fifty more of theſe muſcles, and, upon opening twelve of them, I found two, wherein the young ones ſeemed to be ſo perfect, that they would probably ſoon be excluded from the parent. I always found that the eggs were firſt formed in the fleſhy part of the muſcle; but, as they advanced in growth, they were moved to that part which is called the *beard;* and which, by the great number of the young muſcles contained therein, then ſwells in bulk.

"Some of theſe muſcles I opened in the preſence of the Engraver, in order that, as ſoon as I had taken ſome of the young ones out of their receptacle, he might make a drawing of them, for, were they ſuffered to ſtand but a few hours, their true figure would be loſt. The unborn muſcles being put into a glaſs tube, and placed before the microſcope, I ſaw with aſtoniſhment a moſt pleaſing ſpectacle; for every one of them, each in its particular membrane or covering, had a ſlow circumvolution, and that not for a ſhort ſpace of time, but ſuch turning round or rotatory motion was obſervable for three hours afterwards; and it was the more curious, becauſe the young muſcles, during the whole of their motion, conſtantly kept in the centre of their membranes, juſt as if one were to ſee a ſphere or globe revolving upon its axis. This uncommonly pleaſing ſpectacle was enjoyed by myſelf, my daughter, and the engraver, for three whole hours, and we thought it one of the moſt delightful that could be exhibited." We are ſorry we cannot make room on our plate for the accurate repreſentation of this ſpecies which Mr. Hoole has furniſhed. One peculiarity, however, we muſt not omit to notice; namely, that, inſtead of one ſtrong tendon, or ſinew, for the purpoſe of opening and ſhutting its ſhell, as in the ſalt-water muſcle and the oyſter; this freſh-water muſcle, on account of the length of its ſhell, has two, which are fixed near the extremity of the ſhell at each end, whereas, in thoſe that poſſeſs but one of theſe organs, its lies in the moſt favourable poſition, near the middle. *Hoole's Leeuwenhoek,* Part I.

21. Mytilis viridis: ſhell ſmooth, ovate, membranaceous, and pellucid, with a terminal hinge. It inhabits the Southern Ocean; the ſhell is green, very thin, and about the ſize of a man's nail.

22. Mytilus ruber: ſhell wrinkled, the valves oblique and dilated in front; margin of the hinge equalling the tip. It inhabits the Southern Ocean. The ſhell is red and convex, but very minute, with a ſhort compreſſed tooth in the hinge.

23. Mytilus albus: ſhell tranſverſely ſtriate; beaks gibbous; hinge lateral. It inhabits the ſhores of Chili. The ſhell is about ſix inches long and three and a half broad, covered with a blue ſkin, under which it is ſnowy, with a blue tinge; the fiſh is white, and very excellent food.

24. Mytilus ater: ſhell grooved and ſcaly behind. It inhabits Chili; ſhell rough; leſs than the laſt; dull-blue: the fiſh is black, and not eatable.

25. Mytilus diſcors: ſhell oval, horny, ſub-diaphanous; the extremities are ſtriate longitudinally, the middle tranſverſely. This ſpecies is found in the European and Southern oceans, affixed to rocks and other ſhells by its beard; the ſhell is ſmall, brittle, and ſemi-tranſparent; the fiſh is not eatable.

26. Mytilus hirundo: ſhell ſmooth; valves two-lobed. It inhabits the Indian, American, Mediterranean, and Atlantic, ſeas, in great varieties of ſize, thickneſs, form, colour, and markings; the ſhell is contracted at the baſe, with very fine and crowded tranſverſe wrinkles; within pearly. See CONCHOLOGY, Plate XVI. fig. 2.

27. Mytilus pholadis: ſhell oblong, more obtuſe on the fore-part, rough, with tranſverſe wrinkles. It inhabits the North Seas, and penetrates beds of coral and rocks, like the PHOLAS, which ſee. It is about one inch and a half long, and one and a quarter broad; the ends are not quite cloſed; the hinge is without teeth, or with a very ſmall one. See the article HELMINTHOLOGY, vol. ix. p. 355.

28. Mytilus ſtriatulus: ſhell very finely ſtriate; hinge terminal, one-toothed. It inhabits the Northern and Indian Seas; is one inch and a quarter long, and one and a half broad.

29. Mytilus vulgaris: ſhell flattiſh on one ſide, and inflected, with convergent incurved beaks; the hinge is one-toothed. In inhabits the American Ocean.

30. Mytilus plicatus: ſhell rhombic, tranſverſely ſtriate and wrinkled; beaks incurved. Inhabits the Nicobar-iſlands.

31. Mytilus niveus: ſhell ovate, ſubdiaphanous, with very fine longitudinal ſtriæ; margin acute; hinge two-toothed. Inhabits the Nicobar-iſlands; but is very rare.

32. Mytilus afer: ſhell nearly triangular, dilated before and flattiſh, gaping behind; beaks pointed, turned back; margin very acute. Inhabits the ſouthern parts of the Mediterranean, and the ſhores of Africa. It is four inches long and two broad; within ochraceous with irideſcent colours, without ſtraw-colour, mixed with greeniſh and yellowiſh, and marked with reddiſh lines and angles. Perhaps a variety of Mya perna.

33. Mytilus ſmaragdinus: ſhell nearly triangular, flattiſh; hinge two-toothed in one valve, and one-toothed in the other. Inhabits Tranquebar; green, and a little perlaceous within.

β. Inhabits Guinea; brown, with a green margin, and ſometimes a few ſpots on the diſk.

34. Mytilus verſicolor: ſhell nearly triangular, flattiſh; hinge one-toothed; margin glabrous, acute. Inhabits the ſhores of Guinea, and reſembles M. afer. It is three inches long, and above two broad; the ſhell covered with a brown ſkin, under which it is marked with crowded dull-green tranſverſe ſtriæ, and varied with violet, white, and cheſnut. Probably a variety of Mya perna.

35. Mytilus coralliophagus: ſhell carinate in the middle, and crenate at the margin, with an obtuſe knob. Inhabits the Indian and American Ocean, and perforates rocks like a Pholas. About three quarters of an inch long.

36. Mytilus lineatus: ſhell triangular and dilated outwards, with angular, decuſſate, and confluent, lines; hinge two-toothed. Shell minute; yellowiſh, with a mixture of green; within a little ſilvery.

37. Mytilus faba: ſhell oval, rufous, ſtriate, with a crenulate margin. Inhabits the ſeas of Greenland, ſticking to rocks by a bronzed byſſus, or beard; and is the food of the Anas hyemalis and hiſtrionica.

38. Mytilus fluviatilis: ſhell thin, ſlightly wedged, within reddiſh: beaks recurved and large. Inhabits freſh waters of Europe; reſembles M. anatinus, and is probably not a diſtinct ſpecies.

39. Mytilus fuſcus: ſhell ſmall, oblong, narrow, brown, with a very fine tranſverſe ſtriæ; one ſide emarginate, the other rounded; beaks prominent, curved.

40. Mytilus mammarius: ſhell broad, ſhort, and rounded behind; beaks conic, protuberant.

41. Mytilus Perſicus: ſhell broad, and covered with a rough rugged yellow coat. Inhabits the Perſian Sea: thrice as broad as it is long.

42. Mytilus pictus: ſhell broad, very ſmooth, flammeous or roſe-colour, with white bands; beaks obtuſe. Inhabits Portugal: thrice as broad as it is long.

43. Mytilus faſciatus: ſhell pellucid, ſhining; bluiſh, with a claret-colour and pale-red band. Inhabits Braſil; twice as broad as it is long.

44. Mytilus undatus: ſhell broad, and rounded at both ends; claret-colour, with undulate, bluiſh, and greeniſh, ſtriæ; margin ſerrate. Inhabits the Portugueſe Sea.

45. Mytilus purpureus: ſhell rounded behind; pale fleſh-colour, purple within; the margin denticulate. Inhabits the ſhores of Braſil.

46. Mytilus ſaxatilis: ſhell ear-ſhaped, with granulate wrinkles on the outer ſize, dilated and rounded. Inhabits Amboyna, ſticking to rocks; and is eaten by ducks and ſwine. Shorter and broader than the joint of a finger.

47. Mytilus argenteus: ſhell tranſverſely ſtriate, rounded at each end, brown, ſilvery within; beaks rounded.

48. Mytilus fulgidus: ſhell narrow, ſhining, bluſh-colour,

lour, with violet ſpots at the ſides; beaks rounded, dilated. Inhabits the ſeas of Magellan. Shines like mother-of-pearl.

49. Mytilus azureus: ſhell gibbous, azure, with yellowiſh ſtripes beneath; beaks obtuſe. Shell about an inch broad and three quarters long, narrowed at the lower margin.

50. Mytilus murinus: ſhell mouſe-colour, with violet ſpots, and a broad rounded roſy margin; beaks pointed, ſtraight. Inhabits Guinea.

51. Mytilus teſtaceus: ſhell long narrow, covered with a teſtaceous ſkin, under which it is ſhining ſilvery, varied with blue, red, yellow, and brown. Reſembles M. modiolus; but is larger, and far more beautiful.

52. Mytilus virgatus: ſhell dilated outwardly, greeniſh-yellow with roſy ſtripes; beaks obtuſe, curved.

53. Mytilus cordatus: ſhell oblong, very thin; white, with obſolete ſtriæ, with a heart-ſhaped gape behind. Inhabits the Indian and Southern Ocean; adhering to corals and marine ſubſtances.

54. Mytilus ſtagnalis: ſhell oval, flattiſh, and tranſverſely ribbed. Found in the Lake Schwanſea: reſembles M. cygneus; but is as much as eight inches broad and four and a half long, and is leſs convex; ſhell greeniſh, with darker rays, and yellowiſh-brown at the margin.

55. Mytilus zellenſis: ſhell oval convex, greeniſh-yellow; rounded behind, elongated and obtuſely pointed before; beaks obſolete. Inhabits ſtagnant waters of Germany; reſembles M. cygneus, but is ſeven inches broad and three long.

56. Mytilus roſeus: ſhell ſuborbicular, with fifteen triangular creſted grooves, and alternate triangular teeth. Inhabits Africa. Shell roſy, within white, purple at the margin; three inches broad, and a little ſhorter. Probably not of this genus.

57. Mytilus puniceus: ſhell gibbous, pointed, with fifteen grooves: margin toothed. Inhabits Africa. Shell fourteen lines long and about half as broad; under the fulvous ſkin violet or ſcarlet, ſometimes mixed with brown and green.

58. Mytilus niger: ſhell flat, thin, with very fine grooves, covered with a black ſkin, under which it is milky and finely poliſhed. Inhabits Africa. About an inch and a half long.

59. Mytilus lævigatus: ſhell flat, ſmooth, covered with a thick fulvous ſkin, under which it is roſy. Inhabits Africa. Two inches and a half long, and about half as wide.

60. Mytilus dubius: ſhell tranſverſely wrinkled, obtuſe at each end, fulvous, within margaritaceous; beaks obſolete; hinge without teeth. Inhabits freſh waters of Senegal; five inches broad, two long.

61. Mytilus polymorphus: ſhell five-celled; valves carinate, and flattiſh on the incumbent ſide; beaks obtuſe, and inflected backwards. Inhabits the Ruſſian ſea; about the ſize of a plumb-ſtone; and is found in freſh waters four times as large: adheres in maſſes to ſtones and marine ſubſtances.

62. Mytilus caniculatus: ſhell ſmoothiſh, cheſnut-brown, within parti-coloured; ſocket of the hinge caniculate. Inhabits New Zealand.

63. Mytilus roſtrum: ſhell oblong, thin, greeniſh, truncate; beaks ſharp and carinate; valves gaping at the end. Inhabits Amboyna. Whitiſh with a caſt of green; upper-ends very ſharp, forming a prominent keel; valves exactly ſimilar, but open at each extremity.

64. Mytilus camellii: ſhell oblong, thin, greeniſh, truncate; beaks ſharp and carinate; valves completely cloſed. Inhabits Japan; and reſembles the laſt, except in having the valves exactly cloſed.

65. Mytilus membranaceus: ſhell ſubrhombic, very brittle, the anterior margin angulated; it is ſubdiaphanous, ſomewhat convex, almoſt membranaceous; pearly within, and very ſmooth, delicately ſtriated; greeniſh without, the margin very ſtraight to the hinge, which is toothleſs. See fig. 9, 10. This has been called *membranaceus* on account of its extremely thin and ſlender texture, which forms its moſt obvious character. It is one inch long and broad. The contour approaches ſo nearly to that of Mya variabilis in its perfect ſtate, (ſee p. 429.) as to make it deſirable that they ſhould both be placed in the ſame genus, did not the hinges ſo materially differ. In fact, many of the Myæ and Mytili belong to one natural family; and there is often much difficulty in determining under which name a particular ſpecies ought to be placed; for Linnæus has not made the abſence of teeth an indiſpenſable character for a Mytilus, and ſome of that genus gape like the Myæ at one extremity. *Dr. Maton in Linn. Tranſ.* vol. x.

MY'TIS, *ſ.* A name uſed by ſome writers to expreſs the black juice found in the mouth of the Sepia, or cuttle-fiſh.

MY'TON, a village in the north riding of Yorkſhire, between Boroughbridge and Ten-Mile-Hill. Here the Swale river leaps into the Ure, as it were from a precipice.

MYU'RUS, *ſ.* [Greek.] With phyſicians, denotes a pulſe which is continually weakened by inſenſible degrees, ſo that the ſecond beat is fainter than the firſt, the third than the ſecond, &c. The word is compounded of μυς, mouſe, and ουρα, tail; the diminution of the pulſe being ſuppoſed like that of the thickneſs of the tail of that animal, which grows leſs from the root to the tip.

MY'US, in ancient geography, a town of Ionia, on the confines of Caria, founded by a Grecian colony. It was one of the twelve capital cities of Ionia, ſituate at the diſtance of about thirty ſtadia from the mouth of the Mæander. Artaxerxes, king of Perſia, gave it to Themiſtocles to maintain him in meat. Magneſia was to ſupport him in bread; and Lampſacus in wine. *C. Nep. in Themiſ.*

MYX'A, *ſ.* [Greek.] The mucous diſcharge from the noſe. The wick of a candle. The ſebeſten, or Aſſyrian plum. See CORDIA myxa, vol. v. p. 196.

MYX'INE. See GASTROBRANCHUS, vol. viii. p. 271.

N.

N IS a liquid conſonant, or ſemi-vowel; and the thirteenth letter of the Greek, Latin, Engliſh, &c. alphabets. The N is a naſal conſonant; its ſound is that of a *d*, paſſed through the noſe; ſo that, when the noſe is ſtopped by a cold, or the like, it is uſual to pronounce *d* for *n*. L'Abbé Dangeau obſerves, that in the French the *n* is frequently a mere naſal vowel, without any thing of the ſound of a conſonant in it. He calls it the Sclavonic vowel. The Hebrews call their N *Nun*, which ſignifies "child," as being ſuppoſed the offspring of M; partly on account of the reſemblance of ſound, and partly that of the figure. Thus from the *m*, by omitting the laſt column, is formed *n;* and thus from the capital N, by omitting the firſt column, is formed the Greek minuſcule ν. Hence, for *Biennius*, &c. the Latins frequently uſe *Bimus*, &c. and the ſame people convert the Greek ν at the end of a word into an *m;* as, φαρμακον, *pharmacum*, &c. See M.

N before *p*, *b*, and *m*, the Latins change into *m*, and frequently into *l* and *r*, as in *ludo, illudo;* in *rigo, irrigo*, &c. in which they agree with the Hebrews, who, in lieu of *nun*, frequently double the following conſonant; and the Greeks do the ſame, as when for *Manlius* they write Μαλλιος, &c. The Greeks, alſo, before κ, γ, χ, ν, changed the ν into γ; in which they were followed by the ancient Romans, who for *angulus* wrote *aggulus;* for *anceps*, *agceps*, &c. The Latins retrench the *n* from Greek nouns ending in ων; as, λεων, *leo*, δρακων, *draco*. On the contrary, the Greeks add it to the Latin ones ending in ο; as Κατων, Νερων, for *Cato*, *Nero*.

In Engliſh, N has an invariable ſound; as *no*, *name*, &c. After *m* it is almoſt loſt, as *condemn*, &c.

N, among the ancient Romans, was a numeral letter, ſignifying 900; according to the verſe in Baronius: "N quoque nongentos numero deſignat habendos." And when a line was ſtruck over it, $\overline{\text{N}}$, nine thouſand. But among the Greeks, N was the numeral for 50.

With the ancient lawyers, *N. L.* ſtood for *non liquet;* i. e. the cauſe is not clear enough to paſs ſentence upon. *N. P.* was uſed among the Romans for *notarius publicus*. *N. C.* for Nero Cæſar, or Nero Claudius. *N. B.* is uſed for *Nota bene*. In marine language, *N.* ſtands for north.

N° is uſed as an abbreviation of *numero*, number. N, on the French coins, denotes thoſe ſtruck at Montpelier.

NAAGRAM'MA, in ancient geography, a town of India, on the Ganges, placed by Ptolemy between Budæa and Camigera.

NAAGRAM'MUM, the metropolis of the iſland of Taprobana, which Ptolemy places in the interior of the country between Anurogrammum and Adiſamum.

NA'AM, *ſ.* [a law-term, from *nam*, Sax. to take.]—*Naam* is the attaching, or taking, the moveable goods of another man. *Termes de la Ley.*

NAA'MAN, a ſmall iſland in the Red Sea. Lat. 36. N. lon. 35. 50. E.

NAAMAN'S CREE'K, a river of Pennſylvania, which runs into the Delaware at Marcus Hook.

NAAMANIE'H, a town of the Arabian Irak, on the Tigris: eighteen miles north of Vaſit.

NAAR'DA, NEAR'DA, or NEHARDE'A, in ancient geography, a town ſituated on the confines of Meſopotamia and Babylonia; populous, and with a rich and extenſive territory, not eaſily to be attacked by an enemy, being ſurrounded on all ſides by the Euphrates and ſtrong walls. *Joſephus.* In the lower age the Jews had a celebrated ſchool there.

NAAR'DEN, or NAR'DEN, a ſeaport town of Holland, ſituated at the ſouth part of the Zuyder See, the capital of a ſmall country called Goyland, which includes Naarden, Muyden, and Weſep, with ſixteen villages. This city has undergone many misfortunes; it has been ſacked, burned, pillaged, and drowned by the ſea. It was firſt built in 996; and the remains of the ancient town may ſometimes be diſcovered when the ſea retires to a more than ordinary diſtance. It was rebuilt in the year 1355, by William duke of Bavaria, who beſtowed on it many privileges. It is of very great importance, being ſituated at the head of the canals of the province of Holland, of which it is conſidered the key, particularly of Amſterdam; the fortifications are handſome and regular, with double ditches. David de Burgundy, biſhop of Utrecht, having obtained a great victory over the Hollanders in 1481, ſurpriſed Naarden, by means of ſome ſoldiers diſguiſed like market-women; but, in a ſhort time afterwards, being beat in his turn, it was retaken; five years after that, it was burned down by a ſudden fire. In the year 1572, Frederic de Toledo, ſon of the duke of Alva, took it from the prince of Orange, and to puniſh the inhabitants for their revolt, commanded them to aſſemble in the market-place, and, after allowing them ſome time to prepare for death, he ordered them all to be maſſacred, without regard to age or ſex, contrary to his word given to the citizens; only a very few were ſpared, among whom was the learned Lambert Hortenſius: all the houſes were burned, the walls were raſed, and the dead bodies left expoſed without burial for three weeks. The cities of Malines and Zutphen were ſerved the ſame; which ſo enraged the people againſt the Spaniards, that it produced a general revolt, which ended in eſtabliſhing the independence of the United Provinces. Naarden is fourteen miles north of Utrecht, and eleven eaſt of Amſterdam. Lat. 52. 23. N. lon. 5. 2. E.

NAA'RN, a river of Auſtria, which runs into the Danube four miles above Grein.

NA'AS, a market and poſt town of Ireland, in the county of Kildare and province of Leinſter. It is the ſhire-town of that county, and alternately with Athy the aſſize-town. It gives title of Viſcount to the family of Burke. This place was anciently the reſidence of the kings of Leinſter. The name ſignifies "the Place of Elders;" for here the ſtates of that province aſſembled during the 6th, 7th, and 8th, centuries, after the Naaſteighan of Carmen had been anathematized by the Chriſtian clergy. On the arrival of the Engliſh it was fortified; many caſtles were erected, the ruins of which are partly viſible; and parliaments were held there. At the foot of the *rath* or mount, are the ruins of a houſe founded in 1484, for hermits of the order of St. Auguſtine. In the twelfth century the baron of Naas founded a priory dedicated to St. John the Baptiſt, for Auguſtinian regular canons. In the centre of this town the family of Euſtace erected a monaſtery for Dominican friars, dedicated to St. Euſtachius; and it appears that their poſſeſſions in Naas were granted them in the year 1355. This place was a ſtrong hold during the civil wars. Before the union Naas ſent two members to the Iriſh parliament. It is twenty-ſix miles north-weſt of Wicklow, and ſeventeen ſouth-weſt of Dublin. Lat. 53. 13. N. lon. 6. 42. W.

NA'AS, a town of Sweden, in Dalecarlia: thirty-four miles ſouth-weſt of Fahlun.

NAB, a river of Bavaria, which riſes from Mount Fichtelberg, in the principality of Bayreuth, and runs into the Danube four miles weſt of Ratiſbon.

To NAB, *v. a.* [*nappa*, Swed.] To catch unexpectedly; to ſeize without warning. Seldom uſed but in low language.—Old caſſock, we'll *nab* you. *Duke of Wharton.*

NAB, or NAP, *ſ.* The ſummit of a rock or mountain. *Ray and Groſe.*

NAB (Schwein), a river of Bavaria, which runs into the Nab at Weiden.

NAB (Wald), a river of Bavaria, which runs into the Nab two miles ſouth of Weiden.

NAB's BA'Y, a bay on the weſt part of Hudſon's Bay, north of Cape Eſquimaux.

NABAGA'NA, a river of Africa, which runs into the Indian Sea in lat. 29. 30. S.

NA'BAL, [Heb. mad, or fooliſh.] In ſcripture-hiſtory, a rich but churliſh man, of the tribe of Judah, and race of Caleb; he had numerous flocks, which had their paſture about Carmel, near Maon. David, in his exile, lurked in the neighbouring wilderneſs. He and his men, not only did no hurt to Nabal's flocks, but protected them from the Arabs and from wild beaſts, and aſſiſted the herdſmen in every thing they could. When Nabal held his ſhearing feaſt, David ſent to deſire a preſent of part of the proviſion. Nabal, in the moſt harſh and ſurly manner, told David's meſſengers that he knew better than to give his ſervants' proviſions to a contemptible fellow, who had run away from his maſter, and to his partiſans. Informed of this rudeneſs, David raſhly reſolved to put Nabal, and all that he had, to the ſword. Abigail, by her prudent behaviour, diſarmed David's rage, and won his affection. As ſoon as Nabal, her huſband, was ſober, ſhe told him into what danger his conduct had brought himſelf and family. The man was ſo terrified, that he fell ſick, and in ten days died; and, not long after, Abigail was eſpouſed to David. 1 *Sam.* xxv.

NA'BAL, a town of Africa, in the country of Tunis, ſituated on the ſouth ſide of the peninſula of Dackhul, in the bay of Hamamet. Dr. Shaw calls it a thriving and induſtrious town, much celebrated for its potteries. It ſtands about a mile from the ſea, and about a furlong to the weſt of the ancient Neapolis, which appears to have been a large city, excluſive of that part of it which was ſwallowed up by the ſea. Here is a great number of inſcriptions upon ſtones, ſix feet in length and three in breadth; but they are unfortunately defaced, or filled up with rubbiſh and mortar. It is ten miles north-eaſt of Hamamet, and thirty-two ſouth-ſouth-eaſt of Tunis. Lat. 36. 20. N. lon. 10. 45. E.

NABA'LIA, a ſmall iſland of Egypt, in Lake Menzaleh: three miles ſouth of Tennis.

NA'BAN, a town of Egypt, on the left bank of the Nile: five miles ſouth-ſouth-weſt of Beniſuef.

NA'BAN, a town of Arabia, in the province of Oman: 108 miles weſt of Julfar.

NA'BAN, or NABEND', a town of Perſia, in the province of Lariſtan, near the gulf: ſeventy miles weſt of Lar. Lat. 27. 30. N. lon. 52. 20. E.

NABA'RI, a town of Japan, in the iſland of Niphon: fifteen miles ſouth of Iga.

NABAZA'NES, an officer of Darius at the battle of Iſſus. He conſpired with Beſſus to murder his royal maſter, either to obtain the favour of Alexander, or to ſeize the kingdom. He was pardoned by Alexander.

NABATHÆ'A, a country of Arabia, of which the capital was called *Petra*. The word is often applied to any of the eaſtern countries of the world by the poets; and ſeems to be derived from Nabath, the ſon of Iſhmael.

NAB'BES (Thomas), a dramatic writer in the reign of Charles I. Langbaine ranks him as a third-rate poet; but Cibber will not admit him to above a fifth-rate degree of merit. Yet he appears to have been well eſteemed by his contemporaries, ſome of them having publicly profeſſed themſelves his friends, and ſir John Suckling having warmly patronized him. One degree of merit at leaſt he has a claim to; and that is, that his plays are truly and entirely his own, not having had recourſe to any preceding writer for aſſiſtance; on which account his deficiencies are certainly more pardonable, and the applauſe due to his beauties more truly his own, than that given to many other bards. This Langbaine, whoſe great reading enabled him very accurately to trace the plagiariſms of authors, ſeems to confirm, at the ſame time that he quotes the author's own aſſertion of it in his prologue to the comedy of Covent Garden, in theſe words:

He juſtifies that 'tis no borrow'd ſtrain
From the invention of another's brain;
Nor did he ſteal the fancy, &c.

The dramatic pieces extant of this author are the following: 1. Microcoſmus, a maſque, 4to. 1637. 2. Hannibal and Scipio, an hiſtorical tragedy, 1637. 3. Covent Garden, a comedy, 4to. 1638. 4. Spring's Glory, a maſque, 1638. 5. Preſentation on the Prince's Birth-Day, 1638. 6. Tottenham Court, a comedy, 4to. 1638; 12mo. 1718. 7. Entertainment on the Prince's Birth-Day, a maſque, 4to. 1639. 8. Unfortunate Mother, a tragedy, 1640. 9. The Bride, a comedy, 1640. Wood informs us, that Mr. Nabbes made a continuation of Knolles's Hiſtory of the Turks, from the year 1628 to the end of 1637, collected from the diſpatches of ſir Peter Wyche, ambaſſador at Conſtantinople, and others. He ſeems to have been ſecretary, or other domeſtic, to ſome nobleman or prelate, at or near Worceſter: partly hinted in his poem "On loſing his way in a foreſt, after he was intoxicated with drinking perry;" wherein he ſays, "I am a ſervant of my lord's." *Biographia Dramatica.*

NAB'BURG, a town of Bavaria, ſituated on the Nab: ten miles eaſt of Amberg, and twenty-nine north of Ratiſbon. Lat. 49. 27. N. lon. 12. 3. E.

NABE'A, *ſ.* in botany. See RHAMNUS.

NAB'GIN, or TUM'BO NA'MIN, a ſmall iſland in the Perſian Gulf: five miles ſouth-weſt of Tumbo.

NABHA'NA, a town of Africa, in the kingdom of Tunis: forty miles from Cairoan.

NA'BIS, a celebrated tyrant of Lacedæmon, who, in acts of cruelty and oppreſſion, ſurpaſſed Phalaris or Dionyſius. See the article GREECE, vol. viii. p. 956, 7.

NABLOU'S. See NAPLOUSE.

NA'BLUM, or NE'BEL. See MUSIC, p. 349.

NA'BOB, *ſ.* The name of a viceroy or governor of one of the provinces of the Mogul empire in India. Nabob, or more properly *navab*, is the plural of *naib*, "a deputy." Theſe deputies were appointed by the great mogul; but, as there is now no ſuch monarch, the nabobs may be accounted ſovereign princes, though they hold their power at the mercy of the Engliſh government.—Among the princes dependent on this nation in the ſouthern part of India, the moſt conſiderable at preſent is commonly known by the title of the *nabob* of Arcot. *Burke's Speech on the Nabob of Arcot's Debts.*—The word is now applied (not in commendation) to Europeans who have acquired great riches in the Eaſt Indies.—Leave riches to Clive the *nabob*. *Catch.*

NABOBGUN'GE, a town of Hindooſtan, in Bengal, on the left bank of the Ganges: twenty-five miles north of Moorſhedabad. Lat. 24. 34. N. lon. 87. 26. E.—A town of Hindooſtan, in Allahabad: ten miles eaſt of Jionpour.—A town of Hindooſtan, in Oude: twenty-five miles ſouth of Bahraitch.—A town of Hindooſtan, in Oude: forty-five ſouth-ſouth-eaſt of Bahraitch.

NABOBGUN'GE, a town of Bengal: fourteen miles eaſt of Purneah.—A town of Bengal: twenty-ſix miles ſouth of Purneah.—A town of Bengal: thirty-eight miles north of Dinagepour.—A town of Bengal: three miles ſouth-weſt of Bauleah.—A town of Bengal: eighteen miles weſt-ſouth-weſt of Silhet.—A town of Bengal: twenty-one miles eaſt of Midnapour.

NABOBSERASPOU'R, a town of Bengal: twenty-four miles north-eaſt of Calcutta.

NABO'JA, a town of New Mexico, in the province of Mayo: thirty-two miles north-eaſt of Santa Cruz.

NABONAS'SAR. The era of Nabonaſſar is famous: we know but little of the hiſtory of that prince; only that he was king of Babylon, and was called *Beleſus*; though ſome will have him the Baladan mentioned in Iſaiah xxxix. 1. and 2 Kings xx. 12. Some even conjecture that he was a Mede; and that he was ſet on the throne by the Babylonians upon their ſhaking off the government of the Medes. See CHRONOLOGY, vol. iv. p. 538.

NABOPOLAS'SAR, a prince of Babylon, united with Aſtyages againſt Syria, which country they conquered, and, having divided it between them, founded two kingdoms; that of the Medes under Aſtyages, and that of the Chaldeans under Nabopolaſſar, in the year B. C. 626. Nabopolaſſar died after a reign of twenty-one years.

NA'BOTH, [Heb. a ſpeech.] In ſcripture-hiſtory, an Iſraelite of the city of Jezreel. He had a fine garden, hard by Ahab's palace; Ahab required him either to ſell it to him, or to exchange it for another. Naboth, attentive to the divine law, which prohibited the alienation of inheritances without neceſſity, or to ſell them irredeemably, refuſed to ſell or exchange the inheritance of his fathers. Ahab having taken the refuſal extremely ill, Jezebel his wife bade him make himſelf eaſy, and ſhe would get him the vineyard. She wrote letters in Ahab's name, and ſealed them with his ring, requiring the magiſtrates of Jezreel to hold a faſt, or perhaps rather a general court, and to ſuborn two or three fellows to bear falſe witneſs againſt Naboth, that he had blaſphemed God and the king, and thus condemn, and put him to death. The abandoned magiſtrates directly executed her orders. Naboth was ſtoned to death as a blaſphemer, and Ahab took poſſeſſion of the vineyard; but the vengeance of Heaven purſued him and his family, for the covetouſneſs, hypocriſy, perjury, and murder, committed in this affair. 1 Kings xxi. 2 Kings ix.

Egg of NABOTH, in anatomy, a kind of ovary near the neck of the womb, diſcovered by Naboth, a profeſſor of medicine in the univerſity of Leipſic.

NAB'TE, a town of Arabia, in the province of Hedsjas: 100 miles weſt-north-weſt of Medina.

NABUCHODONO'SOR, NABOCOLASSAR, or NEBUCHADNEZZAR II. ſurnamed the Great, king of Babylon, was the ſon of Nabopolaſſar. He was taken by his father as partner in his kingdom about B.C. 606, and ſent by him at the head of an army againſt the Egyptians and revolted Syrians. He gained a complete victory over the former; and thence entering Judæa, took Jeruſalem, rifled the Temple, and threw king Jehoiakim into fetters. He however releaſed him; and, conſtituting him a kind of tributary viceroy over Judæa, purſued his ſucceſs againſt Pharaoh-Necho king of Egypt. He was re-called to Babylon by the death of his father, whom he ſucceeded as ſole monarch of the Babylonian empire, B.C. 604. Having made an alliance with Cyaxares king of Media, whoſe daughter he married, he joined that prince in the ſiege of Nineveh, which city was taken, and an end put to the Aſſyrian empire.

Jehoiakim in the mean time having ſhaken off the Babylonian yoke, an army was ſent to reduce him to ſubjection, which laid waſte the country, and, ſeizing the king, put him to death. He was ſucceeded by his ſon Jehoiachin, againſt whom Nebuchadnezzar marched in perſon. Becoming maſter of Jeruſalem, he ſent Jehoiachin captive to Babylon, together with a vaſt number of his people of all ranks; and, after pillaging the temple and palace, he raiſed to the throne of Judah *Mattaniah*, whoſe name he changed to *Zedekiah*, exacting from him an oath of allegiance. It is to be obſerved, that ſome writers do not admit the ſucceſſion of a ſon of Jehoiakim, but carry on his reign to the acceſſion of Zedekiah.

A confederacy was ſoon after planned between ſeveral petty princes, whom Nabocolaſſar had ſubdued, for the purpoſe of aſſerting their independence; and Zedekiah was induced to liſten to their propoſals. At length he broke out into open revolt, relying on their ſupport, and on that of Pharoah-Hophra, or Apries, king of Egypt. The Babylonians thereupon again entered Judæa, ſeized upon all the fortreſſes, and laid cloſe ſiege to Jeruſalem. Apries marched to its relief; and Nabocolaſſar, breaking up the ſiege, advanced to meet him. The Egyptian king, either beaten or intimidated, returned to his own country; and this diſappointment prevented any of the other confederates from riſing. The king of Babylon was therefore permitted to reſume the ſiege of Jeruſalem unmoleſted; and, after a long reſiſtance, it fell under his power B.C. 587. In revenge for its frequent revolts, he burned the city to the ground, raſed its fortifications, and carried all its inhabitants into captivity, except a few whom he left to cultivate the land under a governor of his own. See the article JERUSALEM, vol. x. p. 779.

It was probably ſome time after this ſucceſs, that, in gratitude for ſuppoſed divine aſſiſtance, and inflamed by the pride of conqueſt, he ſet up that golden image of the god Bel in the plain of Dura, for the univerſal adoration of his ſubjects, which is mentioned in the book of Daniel, and which produced the miraculous interpoſition in favour of the three Hebrew youths who nobly refuſed to pollute themſelves with idolatrous worſhip.

In the twenty-ſecond year of his reign this potent prince again croſſed the Euphrates on an expedition againſt the nations to the weſt. He laid ſiege to Tyre, which underwent a blockade of thirteen years, at the end of which it was deſerted by its inhabitants, who removed with their moſt valuable effects to a neighbouring iſland. In the mean time his detachments ſubdued ſeveral of the ſurrounding cities and diſtricts; and made an incurſion into Judæa to revenge upon the few remaining people the death of their governor Gedaliah. From Tyre he marched into Egypt, which was then in great confuſion from a civil war between Apries and Amaſis. His tranſactions there are but obſcurely recorded; but it ſeems that he laid waſte a great part of the country, and carried off a rich booty, with numerous captives. Returning to Babylon, he undertook vaſt works to augment the magnificence of that famous capital; and is ſaid to have built the walls of the city, the Temple of Belus, and a new palace with the celebrated hanging gardens; and to have embanked the river, and dug canals and artificial lakes. See the article BABYLON, vol. ii. But in the height of his grandeur and proſperity, as he was pronouncing *Is not this great Babylon that I have built for the houſe of the kingdom, by the might of my power, and for the honour of my majeſty?* an affliction fell upon him, which is myſteriouſly deſcribed in the book of Daniel, as being driven from the ſociety of men, dwelling with the beaſts of the field, eating graſs like an ox, and being wet with the dew of heaven. By thoſe who do not underſtand the text literally, it is ſuppoſed that he was deprived of his underſtanding, and was ſequeſtered in ſome ſolitude, probably in great neglect, whilſt his ſon, Evil-Merodach, adminiſtered the government. In this ſtate he continued ſeven years, when, reſuming the diadem, he confined his ſon for miſ-government. He was brought to a deep ſenſe of religion by his ſufferings; and, having occupied the throne about a year longer, he died B.C. 562, after a reign of forty-three years alone, and nearly two as partner with his father. In the 5th year of his reign happened that eclipſe of the ſun mentioned by Ptolemy, which is the ſureſt foundation of the chronology of this period.

NAB'UNAL (Elias de), a French cardinal, held in great eſteem as a divine by his contemporaries, flouriſhed in the fourteenth century, and took his ſurname from the place of his nativity in the province of Perigord. He embraced the religious life in the order of friars minors, became ſucceſſively archbiſhop of Nicoſia, and patriarch of Jeruſalem. In the year 1342, pope Clement VI. promoted him to the dignity of cardinal-prieſt, with the title of St. Vital. He died at Avignon in 1367. He was the author of 1. A Latin Commentary on the Four Books of Sentences of Peter Lombard. 2. A Commentary on the Apocalypſe. 3. A Treatiſe concerning the contemplative Life. 4. Sermons, explanatory of various paſſages in the Evangeliſts. *Gen. Biog.*

NABU'STA, a town of Hindooſtan, in Oude: twelve miles north-north-weſt of Currah.

NA'CA, a town of Japan, on the eaſt coaſt of the iſland of Ximo. Lat. 32. 12. N. lon. 132. 6. E.

NACABA', a town of Japan, on the ſouth-eaſt coaſt of the iſland of Niphon: forty miles eaſt of Awa.

NACACHEZ', a town of Louiſiana, on the Red River. Lat. 32. 29. N. lon. 93. 26. W.

NACA'IRE, *ſ.* An inſtrument of muſic, which, though often mentioned by the old poets both of France and England, it is not certain whether it was an inſtrument of percuſſion, or a wind-inſtrument. In the Roman d'Alexandre, it is ſaid,

Chaſcun a porté trompe ou vielle atemprée,
Nacaires et tabors de grande renomée.

Du Cange deſcribes *nacara* to be a kind of brazen drum uſed in cavalry, yet Chaucer names it in the company of military wind-inſtruments:

Pipes, tromps, *nakeres,* and clariounes,
That in the bataille blowen blody ſounes.

NACAME'RI, a town of New Navarre: 190 miles ſouth of Caſa Grande.

NACAN'TA, a town of Japan, in the iſland of Niphon: twenty miles north of Mogani.

NA'ÇAS, a river of Mexico, which croſſes New Biſcay, and joins the Saucedo to form the Palmas.

NA'CATS, a town of Japan, in the iſland of Ximo: forty miles ſouth-eaſt of Kokura.

NACHE, *ſ.* See Natch.

NACHE'GO, a lake of South-America, in the province of Quito: ſixty miles ſouth of Franciſco de Borja.

NACH'ELO, or Nak'elo, a ſeaport town of Perſia, in the province of Farſiſtan, on the north coaſt of the Perſian Gulf, inhabited by Arabs who are independent of the crown of Perſia. Their chief employment is fiſhing for pearls. It is 170 miles ſouth of Schiras. Lat. 27. N. lon. 53. 20. E.

NACHITOCH'ES, a French ſettlement of Louiſiana, on the Red River, about 140 leagues north-weſt of New Orleans; of ſmall extent, but tolerably populous. Its inhabitants, like thoſe of Louiſiana, are lively, well-formed in their perſons, and inured to fatigue. They often aſcend their rivers with their families to the diſtance of four or five hundred leagues, and ſpend on theſe painful expeditions eighteen or twenty months. Hunting the bear is one of their favourite purſuits, which is chiefly practiſed in the winter-ſeaſon, when this animal is particularly fat, and in condition to furniſh a large quantity of oil. Lat. 32. 11. N. lon. 93. 46. W.

NA'CHO, a river of Mexico, which runs into the bay of Honduras in lat. 15. 38. N. lon. 89. 20. W.

NA'CHO, Na'co, or Puer'to de Caval'los, a town of Mexico, in the province of Honduras: one hundred miles weſt-north-weſt of Comayagua, and thirty north of Gracias a Dios. Lat. 15. N. lon. 89. 36. W.

NA'CHOD, a town of Bohemia, in the circle of Konigingratz: fifteen miles north-eaſt of Konigingratz. Lat. 53. 18. N. lon. 15. 57. E.

NACH'SHAB, or Na'ſaph, a town of Bukharia: twenty-five miles ſouth-weſt of Samarcand.

NACIBE'A, *ſ.* in botany. See Manet'tia.

NACK'ELO, or Nak'lo, a town of Sileſia, in the principality of Oppeln: ten miles ſouth-eaſt of Oppeln.

NACKTIGA'EL, an iſland in the gulf of Tonquin, about ſixteen miles in circumference. Lat. 20. N. lon. 107. 42. E.

NACLAN'THUS, or Nacchian'te (James), a learned Italian prelate in the ſixteenth century, was a native of Florence, who took the eccleſiaſtical habit among the Dominican monks. He filled the theological chair in a houſe belonging to his order at Rome, with ſuch reputation, that pope Paul III. thought proper to raiſe him to the epiſcopal rank. He was one of the prelates who took part in the deliberations of the Council of Trent; and died in the year 1569. His works were held in eſteem by the Catholics, and ſome of them were particularly valued by the advocates for the high claims of the papal power. They conſiſt of, 1. Enarratio in Epiſtolam ad Epheſios. 2. Interpretatio Epiſtolæ ad Romanos. 3. Medulla ſacræ Scripturæ. 4. De Papæ et Concilii Poteſſtate. 5. De Maximo Pontificatu, Maximoque Sacerdotio Chriſti; and other theological treatiſes; which were collected together, and publiſhed at Venice in 1557, in two volumes, folio. *Gen. Biog.*

NACON'GO, a river of Africa, which runs into the Atlantic in lat. 5. 15. S.

NACO'RI, a town of New Mexico, in the province of Sonora: fifty miles ſouth-eaſt of Pitquin.

NACO'RI, a town of New Navarre: 250 miles ſouth-ſouth-eaſt of Caſa Grande.

NACOSA'RI, a town of New Navarre 180 miles ſouth-ſouth-eaſt of Caſa Grande.

NACOU', a town of China, of the third rank, in Se-tchuen: thirteen miles ſouth-weſt of Tche-li-leou.

NA'CRE, *ſ.* in conchology and helminthology. See Pinna.

NA'CRI, an iſland in the Grecian Archipelago, about ſix miles in circumference: five miles eaſt-ſouth-eaſt of Patino.

NACSIVAN', Naxivan, or Nacshivan, a town of Aſia, in Perſian Armenia, ſuppoſed to have been the ancient Artaxata, and one of the largeſt cities of the Eaſt. It was ruined by Abbas I. who removed the inhabitants into the interior parts of Perſia: it began inſenſibly to recover, and, in the laſt century, contained 2000 houſes; but it once contained 40,000. In it are ſome conſiderable bazars, caravanſeras, public baths, and other buildings, more uſeful than magnificent. It is eighty-five miles ſouth-eaſt of Erivan, and 230 eaſt of Erzerum. Lat. 39. 20. N. lon. 45. 25. E.

NACZ, a town of Lithuania, in the palatinate of Wilna: twenty miles north-weſt of Lida.

NACZCHRADETZ', a town of Bohemia, in the circle of Kaurzim: ten miles ſouth of Beneſchow.

NACZIKOW'KA, a town of Poland, in the palatinate of Braclaw: thirty-ſix miles weſt of Braclaw.

NA'DAB, [Heb. a prince.] Son of Aaron and brother of Abihu. Offering incenſe with ſtrange or common fire, and not with that which had been miraculouſly lighted up upon the altar of burnt offerings, he was ſlain by the Lord, together with his brother. *Lev.* x. 12.

NA'DAB, king of Iſrael, ſucceeded his father Jeroboam on the throne, in the year of the world 3051, 954 B.C. During his ſhort reign of leſs than two years, he imitated his father's vices and idolatry, and ſpeedily received the puniſhment which his crimes deſerved; for, having advanced with an army to beſiege Gibbethon, a fortreſs belonging to the Philiſtines, Baaſha, one of his generals, a perſon of the tribe of Iſſachar, formed a conſpiracy againſt him, and put him to death; after which, Baaſha ſeized upon the kingdom, and deſtroyed the whole race of Jeroboam, according to the prediction of the prophet Ahijah. 1 *Kings* xiv. xv.

NA'DAB, *ſ.* The ſovereign pontiff, or high prieſt, of the Perſians, whoſe dignity is the ſame as that of the mufti among the Turks; with this difference only, that the nadab may diveſt himſelf of his eccleſiaſtical office, and paſs to a civil employment, which the mufti is not allowed to do.

The nadab takes place next after the *atmath dulet,* or prime miniſter; he has two judges under him, called the *ſcheik* and the *caſi,* who decide all religious matters, grant divorces, and are preſent at contracts and public acts; and theſe have deputies in all the cities of the kingdom.

NADAGONG', a town of Hindooſtan, in the circar of Ellichpour: nine miles eaſt of Omrautty.

NADAMU'R, a town of Hindooſtan, in Cochin: thirty-ſix miles eaſt of Cochin.

NADAN-FOE'RE HO'TUN, a town of Chineſe Tartary. Lat. 42. 50. N. lon. 126. 26. E.

NADAR'ZYN, a town of the duchy of Warſaw: ten miles ſouth of Warſaw.

NADAST', a town of Hungary: eighteen miles eaſt of Ziget.

NAD'DER, a river of England, which riſes in Dorſetſhire, and joins the Willy at Wilton.

NA'DEC, a town of the kingdom of Burmah, on the Ava: thirty-five miles weſt of Ava.

NADEEG'SDA, the moſt ſoutherly of the Kurile-iſlands, in the Ruſſian charts.

NA'DEN, a town of Perſia, in the province of Kerman: fifty-three miles eaſt of Kabis.

NA'DENTAL, a town of Sweden, in the government of Abo: ſeven miles weſt of Abo.

NA'DER. See NARWA.

NADERBAR', a circar of Hindooſtan, in Candeiſh, lying on each ſide of the Taptee; north of Baglana, and eaſt of Guzerat.—Alſo, a town of Hindooſtan, which gives name to the circar: 152 miles north-weſt of Aurungabad, and fifty-five eaſt of Surat.

NA'DERSPACH, a river of Auſtria, which runs into the Bielach about three miles north-eaſt of Frankenfels.

NADGONG', a town of Hindooſtan, in Goondwanah: ten miles north of Nagpour.

NADHE'A, a town of Perſia, in the province of Kerman: eighty miles north-north-eaſt of Sirgian.

NA'DIM, a river of Ruſſia, which riſes in Lake Toromlar, and runs into the gulf of Obſkaia in lat. 66. 25. N. lon. 73. 44. E.

NADIM'SKOI, a town of Ruſſia, in the gulf of Obſkaia, and government of Tobolſk: 148 miles eaſt of Obdorſkoi, 524 north-north-eaſt of Tobolſk. Lat 66. N. lon. 68. 26. E.

NA'DIN, a fortreſs of Dalmatia, ſituated on a mountain. It now belongs to Italy.

NA'DIR, a town of Egypt, ſituated on the weſt branch of the Nile: twenty-eight miles north-north-weſt of Cairo.

NA'DIR, ſ. [Arabic.] The point under foot, directly oppoſite to the zenith:

As far as four bright ſigns comprize,
The diſtant zenith from the *nadir* lies. *Creech.*

NA'DIR SHA'H, i. e. the Wonderful King, otherwiſe called KOULI-KHAN, King of PERSIA. See that article; alſo HINDOOSTAN, vol. x. p. 65–7.

NADO'NE, a town of Hindooſtan, in the country of Lahore, on the Beya: thirty miles ſouth-eaſt of Nagorkote.

NA'DOR, a town of Africa, ſituated in the ſouth-weſt part of Algiers, inhabited by Arabians: eighty miles ſouth-eaſt of Oran.

NADOU'T, a town of Hindooſtan, in Guzerat: ſixteen miles ſouth of Champaneer.

NADRA'MA, a town of Africa, in the country of Biledulgerid: forty-five miles ſouth of Beni Mezzab.

NAD'SAR, a mountain of Thibet. Lat. 27. 26. N. lon. 87. 29. E.

NA'DUM, a town of Hindooſtan, in Cochin: thirty miles eaſt of Cranganore.

NAE'DT, a river of France, which runs into the Moſelle two miles below Alcken.

NAE'FELS, a town of Swiſſerland, in the canton of Glaris. In the year 1388, a celebrated victory was gained near this place by the inhabitants of this canton, over the Auſtrians. Only about 350 troops of Glaris, aſſiſted by fewer than 50 Switzers, withſtood 15,000 Auſtrians; and, after a terrible ſlaughter, compelled them to retire. In memory of which glorious tranſaction, a chapel was built on the ſpot, which was rebuilt in the year 1779. The inhabitants are Roman Catholics. It is four miles north of Glaris.

NÆMAS'PORA, ſ. in botany, a genus of the claſs cryptogamia, order fungi. In Albertini's Conſpectus Fungorum, it is called a genus of the firſt claſs, angiocarpi (with vaſcular fruit), and in the firſt order, ſclerocarpi (or hard fruit). There are four ſpecies, in two diviſions.

I. Spheroidal. 1. Næmaſpora chryſoſperma; with gold-coloured ſeed. It generally viſits the bark of poplar and alder trees; and often haunts the putrid relics of the vine's knotty branches, when they lie ſcattered and ſevered from the main ſtem of the plant. Like the reſt of the genus to which it belongs, it proves perennial; and, fond of damp and rainy weather, puts out its luxuriant curls in all directions and ſhapes.

2. Næmaſpora leucoſperma; with white ſeed. Diſdaining to ſeek for ſofter beds, this hardy tribe ſeems to delight on the ſurface of the cloſeſt-grained timber-wood; and is often met with on the elm, maple, &c. in the country (Upper Luſatia) where Albertini made his obſervations.

II. Amorphous; of no determined ſhape. 3. Næmaſpora crocea; yellow. This ſpecies is eſpecially fond of the birch; the branches of which are laviſhly loaded with the individuals of this yellow family. This fungus appears late in autumn.

4. Næmaſpora populina. This is a ſort of tuberous fungus, or puff; large, thick, wrought in ligneous fibres; ſoftiſh, and of a dark-green complexion. Its curling filaments are numerous and long; and its choiceſt abode the fallen limbs of decayed poplars. April gives it birth.

NÆ'NIA, the goddeſs of funerals at ancient Rome, whoſe temple was without the gates of the city. The ſongs which were ſung at funerals were alſo called *nænia.* They were generally filled with the praiſes of the deceaſed; but ſometimes they were ſo unmeaning and improper, that the word became proverbial to ſignify nonſenſe.

NÆVE, ſ. [*nævus*, Lat.] A ſpot. This is one of the words which Dryden has been blamed for uſing, and is ſuppoſed to have introduced into our language. It is certainly a bad word; yet probably was in uſe before his employment of it; at leaſt it was a favourite expreſſion of his contemporary Aubrey. *Todd's Johnſon.*—So many ſpots, like *næves* on Venus' ſoil. *Dryden on the Death of Lord Haſtings.*—I am ſorry ſo great a wit ſhould have ſuch a *næve. Aubrey of Chillingworth.*—He was a tall, handſome, and bold, man; but his *næve* was, that he was damnably proud. *Id. of Sir W. Raleigh.*

NÆ'VIUS (Cneius), an ancient Roman poet and hiſtorian, was a native of Campania, and ſerved in the army in the firſt Punic war. Of this war he wrote a hiſtory in Saturnian verſe, with all the rudeneſs of thoſe illiterate times, but yet, according to Cicero, perſpicuouſly; and he adds that Ennius, who alludes to the work contemptuouſly, borrowed much from it. Nævius was likewiſe the ſecond Roman who brought dramatic compoſitions on the ſtage. His firſt comedy was acted B. C. 235, or, according to another authority, in 228. It appears to have given offence to ſome of the leading men at Rome; for Plautus, in his Miles Glorioſus, hints at his being confined in priſon. He was finally obliged to quit Rome through the enmity of the patrician family of Metelli; and died at Utica, B. C. 203. A highly laudatory epitaph on him is extant, ſaid to have been written by himſelf. Of the works of this poet only ſome inconſiderable fragments, preſerved by grammarians, have reached modern times. *Gen. Biog.*

There was another NÆVIUS, a famous augur in the reign of Tarquin, who, to convince the king and the Romans of his preternatural power, cut a flint with a razor, and turned the ridicule of the populace to admiration. Tarquin rewarded his merit by erecting him a ſtatue in the comitium, which was ſtill in being in the age of Auguſtus. The razor and flint were buried near it under an altar, and it was uſual among the Romans to make witneſſes in civil cauſes ſwear near it. This miraculous event of cutting a flint with a razor, though believed by ſome writers, is treated as fabulous and improbable by Cicero, who himſelf had been augur.

NÆ'VUS MATER'NUS, one of thoſe little ſpots, excreſcences, or ſwellings, with which many children are born. There are two kinds; viz. ſmall red tumours, which gradually increaſe to a large ſize; and brown flat marks, not riſing in the leaſt above the ſurface of the ſkin. Mr. Latta ſays, he once ſaw in a child two years old, a tumour of this kind weighing fourteen ounces, which, at the time of birth, was only equal in ſize to a large bean, and which, for a year afterwards, did not enlarge much; but then grew to the magnitude already ſpecified. The other ſpecies, or ſuch as riſe but little above the ſkin, are of various forms, and have been compared with cherries, grapes, &c. and have all been ſuppoſed to ariſe from ſome impreſſion made on the mind of the mother during pregnancy, or at the time of conception.

Thoſe *nævi materni* which are mere ſpots, or marks, give no inconvenience, and of courſe do not require the interference of ſurgery. But ſuch as elevate themſelves above the ſurface of the body, increaſe in ſize, and ſeem likely to become troubleſome, ſhould be entirely removed with a knife. Many of them ſeem to conſiſt of a congeries of dilated veſſels, and, after they have acquired a certain ſize, are apt to burſt, and bleed profuſely. Mr. John Bell has named this kind of diſeaſe *aneuriſm by anaſtomoſis.* The diſeaſe originates from ſome accidental cauſe; is marked by a perpetual throbbing; grows ſlowly, but uncontroulably; and is rather irritated than checked by compreſſion. The throbbing is at firſt indiſtinct, but, when the tumour is perfectly formed, the pulſation is very manifeſt. Every exertion makes the throbbing more evident. The occaſional turgid ſtates of the tumour produce ſacs of blood in the cellular ſubſtance, or dilated veins; and theſe ſacs form little tender, livid, very thin, points, which burſt from time to time, and then, like other aneuriſms, this one bleeds ſo profuſely, as to induce extreme weakneſs. The tumour is a congeries of active veſſels; and the cellular ſubſtance, through which theſe veſſels are expanded, reſembles, as Mr. John Bell deſcribes, the gills of a turkey-cock, or the ſubſtance of the placenta, ſpleen, or womb. The irritated and inceſſant action of the arteries fills the cells with blood, and from theſe cells it is re-abſorbed by the veins. The ſize of the ſwelling is increaſed by exerciſe, drinking, emotions of the mind, and by all cauſes which accelerate the circulation.

Mr. Bell ſtates, that all attempts to obliterate the diſeaſe with cauſtics, after a ſimple inciſion, have proved unſucceſsful, nor does the interrupting of particular veſſels, which lead to it, affect the tumour; the whole group of veſſels muſt be extirpated. *John Bell's Principles of Surgery,* vol. i.

Mr. Abernethy cured a nævus maternus upon a child's arm by means of preſſure with a bandage. A tumour of the ſame nature, ſituated in the orbit, and cauſing a diſplacement of the eye, violent headachs, &c. was cured by tying the carotid artery of the ſame ſide. *Medico-chirurg. Tranſ.* vol. ii.

NAFF, *ſ.* A kind of tufted ſea-bird. *Johnſon;* but we know not on what authority, nor what bird is meant.

NAF'FORD, a village in Worceſterſhire, near Eckington; it is a ſmall pariſh, and without a church: north of Bredon-hill.

NAF'TA, a town of Africa, in Biledulgerid.

NAFTONIAN', an iſland in the Caſpian Sea, in the gulf of Balkan. Lat. 40. 45. N.

NAFWEL'SIO, a town of Sweden, in the province of Smaland: thirty-three miles ſouth-eaſt of Jonkioping.

NAG, *ſ.* [*negge,* Belg. *naek,* Germ. from *hnegga,* Icel. to neigh.] A ſmall horſe. A horſe, in familiar language.—A hungry lion would fain have been dealing with good horſe-fleſh; but the *nag* would be too fleet. *L'Eſtrange.*

Thy *nags,* the leaneſt things alive,
So very hard thou lov'ſt to drive. *Prior.*

A paramour: in contempt.—Your ribauld *nag* of Egypt hoiſts ſails, and flies. *Shakeſpeare's Ant. and Cleop.*

NAG's HEAD', a cape on the ſouth end of the weſt coaſt of the iſland of St. Chriſtopher. Lat. 17. 20. N. lon. 63. 33. W.

NA'GA, a town of Japan, in the iſland of Ximo: five miles north of Nangaſaki.

NAGACOI'L, a town of Hindooſtan, in the circar of Guntoor: twenty miles north-north-eaſt of Junaconda.

NAGA'I, an iſland in the North Pacific Ocean, near the weſt coaſt of North America; ſo named by the Ruſſians. Lat. 55. 10. N. lon. 199. 14. E.

NAGAIBATZKAI'A, a fort of Ruſſia, in the government of Upha, on the Ik: thirty-two miles north-eaſt of Bugulma.

NAGALAVERAM', a town of Hindooſtan in Madura: thirty-two miles eaſt of Coilpetta.

NAGAM', *ſ.* in botany. See HERITIERA.

NAGAMU'-VAL'LI. See BAUHINIA.

NAGAMUNGALUM', a town of Hindooſtan in Myſore: twenty-three miles north of Seringapatam. Lat. 12. 59. N. lon. 76. 40. E.

NA'GAR, a town of Hindooſtan, in Mewat: twenty miles eaſt of Cottilah.

NAGA'RA, *ſ.* [Indian.] A drum made from a hollow cylinder of teek-wood, and the ends covered with goat-ſkin: it is ſuſpended from the left ſhoulder to the right ſide, and beat with a ſtick made of teek-wood. *James's Mil. Dict.*

NAGA'RA, a town of European Turkey, in the province of Romania, near the Straits: ten miles ſouth-weſt of Gallipoli.

NAG'ARITZ, a town of Thibet: forty-two miles ſouth of Laſſa.

NAGASSA'RIUM, *ſ.* in botany. See MESUA.

NA'GATCH, a town of Hindooſtan, in Marawar: nine miles north-north-weſt of Ramanadporum.

NAGAVSKAI'A, a town of Ruſſia, in the country of the Coſacs, on the Don: 148 miles eaſt-north-eaſt of Azoph.

NA'GAZ, or NAG'HZ, a town of Candahar, near the river Cowmull. This town was completely repaired or rebuilt by Timur Bec: fifty-eight miles eaſt-ſouth-eaſt of Ghizni, and eighty-five ſouth-eaſt of Cabul. Lat. 33. 16. N. lon. 69. 31. E.

NA'GED, a town of Perſia, in the province of Farſiſtan: twenty-ſeven miles ſouth-ſouth-weſt of Schiras.

NAGEI'A, or NA'GI, *ſ.* in botany. See MYRICA.

NA'GELSTADT, or NE'GELSTETT, a town of Saxony, in Thuringia: three miles eaſt of Langen Salza.

NAG'EMAL, a town of Hindooſtan, in Myſore: thirty miles north-north-weſt of Seringapatam.

NAG'ERA. See NAJARA.

NAGERAN', a town of Arabia, in the province of Yemen: ten miles north-weſt of Saade.

NAGERIL'LA, or AGLERA, a river of Spain, in Old Caſtile, which runs into the Ebro ſix miles north of Calzada.

NAG'GERA, a town of Hindooſtan, in Oude: forty miles weſt of Kairabad.

NAG'GERY, a town of Hindooſtan, in the Carnatic: ten miles ſouth-eaſt of Bomrauzepollam.

NAGGUR', *ſ.* The principal drum in Aſiatic armies, commonly allowed to perſons of high dignity.

NAGGUR', a fort of the kingdom of Candahar: ſeventy miles weſt of Ghizni, and 140 eaſt-north-eaſt of Candahar.

NAGGUR', a town of Hindooſtan, in Oude: ſixteen miles north of Lucknow.

NAG'HAS, *ſ.* in botany. See MESUA.

NAGI'AH, a fortreſs of Arabia, in the province of Hadramaut: 180 miles ſouth-weſt of Amanzirifden.

NAGJUREE', a river of Hindooſtan, which runs into the Manzorah ten miles ſouth of Darore.

NAG'LES, mountains of Ireland, in the county of Cork: thirteen miles north of Cork.

NAGLIA'NO, a town of France, in the department of the Tanaro: four miles north of Alba, and thirteen eaſt of Carmagnola.

NA'GO, a ſmall iſland in the gulf of Bothnia, near the ſouth-weſt coaſt of Finland. Lat. 60. 22. N.

NAGO'DIN, a town of European Turkey, in Servia: ſixteen miles weſt-north-weſt of Widdin.

NAGO'ES, a tribe of Whidah negroes, on the Slave-coaſt of Africa, whoſe language, though underſtood by the Papaws, or Whidah negroes, differs in many particulars from the Whidaw language.

NAGO'JA, a town of Japan, in the iſland of Niphon: eighty miles eaſt of Meaco.

NA'GOLD, a town of Wurtemberg, ſituated on a river of the ſame name, in the Black Foreſt. This place anciently belonged to the counts of Hohenberg, who are now extinct. In the year 1736, a medicinal ſpring was diſcovered here. It is twenty-two miles ſouth-weſt of Stuttgart, and ſixteen north-eaſt of Freudenſtatt. Lat. 48. 30. N. lon. 8. 47. E.

NAGO'NE, a town of Hindooſtan, in Bundelcund: twenty-ſix miles ſouth-eaſt of Pannah.

NAGOORDILL', a town of Hindooſtan: ten miles ſouth-eaſt of Travancore.

NAGORBUS'SY, a town of Hindooſtan, in Bahar: ſixteen miles ſouth of Durbungah.

NAG'ORCOTE, or KO'TE KAN'GRAH, a fortreſs and celebrated pagoda of Hindooſtan, in the country of Lahore. This pagoda, which was immenſely rich, was, in 1360, plundered by Feroſe III. It is eighty-ſix miles north-eaſt of Lahore, and 250 north-weſt of Delhi. Lat. 32. 20. N. lon. 75. 48. E.

NAGO'RE, a town of Bengal, and capital of the circar of Birboom; called in ſome maps *Birboom*: one hundred miles north-weſt of Calcutta, and 150 ſouth-eaſt of Patna. Lat. 23. 57. N. lon. 87. 26. E.

NAGO'RE, a circar of Hindooſtan, in the country of Agimere; bounded on the north by the ſubah of Delhi and Moultan; on the eaſt by Mewar and Jyenagur; on the ſouth by the circars of Agimere and Joodpour; and on the weſt by the circar of Bickaneer.

NAGO'RE, a town of Hindooſtan, and capital of the above circar: forty-two miles north-weſt of Agimere, and 180 ſouth-weſt of Delhi. Lat. 27. 9. N. lon. 74. 48. E.

NAGO'RE, a town of Hindooſtan, in the Carnatic: five miles north of Negapatam, and fifteen ſouth of Tranquebar.

NAGORPA'L, a town of Hindooſtan, in Lahore: twenty-ſeven miles north-north-eaſt of Jallindar.

NAGOR'SKOI, a town of Ruſſia, in the government of Tobolſk, on the Oby: ninety-two miles ſouth-ſouth-eaſt of Berezov.

NAGOW'RA, a town of Hindooſtan, in Oude: thirty-five miles ſouth of Nidjibabad.

NAGPOU'R, a circar of Hindooſtan, bounded on the north by Toree and Ramgur; on the ſouth by Silhee and Tomar, on the eaſt by Oriſſa; and on the weſt by Oriſſa, and the circars of Chuta and Palamow; about forty miles long, and thirty broad. *Doeſa* is the capital.

NAGPOU'R, a town of Hindooſtan, and capital of the circar of Goondwana, in the ſubah of Berar. It is a city of modern date, large and populous, but meanly built, and only defended by a citadel. The country round is fertile, and well cultivated. It is 465 miles ſouth of Delhi, and 488 weſt of Calcutta. Lat. 21. 10. N. lon. 79. 45. E.

This town is now in poſſeſſion of the Britiſh, in conſequence of ſome recent diſputes between the Eaſt-India Company and the rajah of Berar, which chieftain was raiſed to the ſovereignty by Britiſh interference, and to the excluſion of a candidate protected by Scindia. In conſequence of ſome hoſtile diſpoſitions in that ſtate, two engagements have taken place. The firſt, between Col. Scott and the troops of Berar, was long, obſtinate, and bloody: it laſted from the evening of the 26th of November, 1817, to twelve o'clock on the following day; and, although the enemy was repulſed, and ſix of his guns captured, it was not until, of Col. Scott's ſmall force, 14 officers and 349 privates were left among the killed and wounded. We are not enabled, by any paſſage of the Gazette, to explain the cauſes of hoſtility between Col. Scott and the troops of the rajah of Berar. On the 25th of November, Col. Scott took a poſition which commanded Nagpour, at the requiſition of Mr. Jenkins, the reſident; but he does not inform us what were the provocations to this march. It is plain, however, that the Berar troops were neither beaten nor diſpirited in the action with that officer, ſince, on the 16th of December following, they encountered the army commanded by Gen. Doveton, in a battle of much greater importance. General Doveton appeared before Nagpour on the 12th of December. The reſident then announced to the rajah the conditions on which the company would grant him peace. On the 16th, information was received, that the rajah had complied with our demands, and might be looked for immediately in the Britiſh camp. He came accordingly, ſurrendering his perſon and his guns, and ſending an agent to his own officers to enforce his orders. But, on the advance of the Britiſh army to have them carried into execution, the town fired on our columns, and attacked us with a formidable body of troops. Our attempt to ſtorm, being made on the 24th of December, was completely repulſed by the Arabs and other troops in the ſervice of the rajah, who killed and wounded above 300 of our men, including 104 Europeans and 10 officers. On the 30th of December the Arab garriſon evacuated the city on certain conditions, when it was forthwith occupied by the Britiſh troops. Thus it would appear that the rajah's army oppoſed the Britiſh, after orders had been ſent them by their chief to ſubmit; but, whether this was done in defiance of thoſe orders, or by connivance, it is impoſſible for us to ſay. But, as we are in poſſeſſion of the town of Nagpour, and have the rajah in cuſtody, we are in no danger from that quarter; and it is now underſtood, that military poſſeſſion will be taken by Great Britain of the whole of the dominions of the rajah of Berar; and that the government of that extenſive country will be adminiſtered pretty much as the affairs of MYSORE (ſee that article, p. 465.) have been conducted ſince the death of Tippoo; namely, by inveſting a Britiſh reſident with all the real authority, and leaving, or placing, a nominal ſovereign on the throne.

In an action againſt Holkar, on the 21ſt of December, (with victory on our ſide,) we loſt 30 officers and 700 men. But the laſt news from India, received about the 30th of May, (1818,) informs us, that a treaty of peace has been concluded with Holkar, and that the war againſt the Pindarries is going on ſucceſsfully. As Holkar is the chief of the Mahratta powers, we may hope that a peace with him will ſoon be followed by accommodations with the reſt. This Holkar is the ſon and ſucceſſor of Jeſſwunt Rao Holkar, of whom our laſt mention is made under the article HINDOOSTAN, vol. x. p. 114. He died at Bhanpoorah on the 27th of October, 1811.

NAG'RAÇUT, a town of India, the capital of a kingdom of the ſame name in the dominions of the Great Mogul, with a rich temple, to which the Indians go in pilgrimage. It is ſeated on the river Ravi. Lat. 33. 12. N. lon. 78. 10. E.

NAGRAGIN'SKOI, a town of Ruſſia, in the government of Tobolſk, on the Konda: 176 miles north of Tobolſk.

NAGREE', a town of Hindooſtan, in the circar of Chandail: thirty-two miles eaſt of Makoonda.

NAGRO'TAH, a town of Hindooſtan, in Lahore: twenty-two miles north of Jummoo.

NAGUALA'PA, or ST. PE'DRO, a river of Mexico, which paſſes by Colima, in the province of Mechoacan, and runs into the Pacific Ocean in lat. 19. 30. N.

NAGUARA'CHI, a town of New Mexico, in the province of Hiaqui: 140 miles eaſt-north-eaſt of Riochico.

NAGUREE', or HINDUWEE', *ſ.* A writing-character uſed in Bengal, &c. it has thirty letters, and is that in which the Hindooſtanee was written before the Mahometans introduced the Perſian character.

NAGURKE'ARY, a town of Bengal: thirty-eight miles ſouth-ſouth-eaſt of Curruckdeah. Lat. 23. 53. N. lon. 86. 36. E.

NA'GY BAN'JA, a town of Hungary. This is a metal-town, and one of the royal free towns. Their gold and ſilver mine-works are of great produce, and the money coined here is diſtinguiſhed by the mark N. B. It is thirty miles north of Zatmar.

NA'GY CAR'OLY, a town of Hungary, with a caſtle: twelve miles ſouth-weſt of Zatmar.

NA'GY FA'LU, a town of Hungary, near the Theyſs: three miles eaſt-ſouth-eaſt of Tokay.—A town of Hungary: ſixteen miles eaſt-north-eaſt of St. Job.

NA'GY KET'SKY, a town of Hungary: eight miles north-eaſt of Gros Wardein.

NA'GY MYHA'LA, a town of Hungary: eighteen miles weſt-ſouth-weſt of Ungvar.

NA'GY SKO'LOS, a town of Hungary: twelve miles eaſt-ſouth-eaſt of Munkacz.

NA'HANT, a bay of the ſtate of Maſſachuſetts: three miles north of Boſton.

NA'HANT PO'INT, a cape on the north-eaſt ſide of Boſton Harbour: nine miles north-eaſt of Boſton.

NAHANTIK', a bay of the ſtate of Connecticut: three miles weſt of the mouth of the Thames.

NAHAR' el BER'D, a river of Syria, anciently *Eleutherus*, which runs into the Mediterranean nine miles north of Tripoli.

NA'HAR LYK', a town of Poland, in the palatinate of Kiev: twenty-four miles eaſt of Bialacerkiew.

NA'HAR MA'LEK, a town of the Arabian Irak, near the Euphrates. Lat. 31. 20. N. lon. 45. 30. E.

NAHARVA'LI, or Naharva'les, a people of Germany, who had a conſecrated grove, whoſe prieſt was dreſſed like a woman. The Romans believed that the gods worſhipped in this grove were Caſtor and Pollux, as they were both brothers, and both young. *Tacit. de Mor. Germ.* 45.

NA'HE, a river of France, which riſes near Baldenau, in the department of the Sarte, paſſes by Kirn, Sobernheim, Creutznach, &c. and runs into the Rhine at Bingen.

NA'HEL, or Ma'ham, a town of Arabia, in the province of Oman: fifty miles north-north-weſt of Oman. Lat. 24. 20. N.

MA'HEL, a town of Egypt: ſixteen miles ſouth-eaſt of Cairo.

NAHI'A, a town of Perſia, in the province of Kerman; ſaid to be of great antiquity: ſeventy miles ſouth of Sirgian, and one hundred north-north-eaſt of Gamron.

NA'HIL, a river of Africa, which riſes in the deſert of Barca, and runs into the Mediterranean in lat. 32. 10. N. lon. 40. 10. E.

NAHR AA'SI. See Orontes.

NAHR el AN'TAR, a town of the Arabian Irak, on the Euphrates, the reſidence of an Arabian ſheik: five miles north of Corna.

NAHR ELTEMASIE'H, or River of Crocodiles, a river of Syria, in which ſome crocodiles of the ſmaller kind are found; it runs into the Mediterranean ſix miles ſouth of Tortoſa.

NAHR GIBE'RE, a river of Syria, which runs into the Mediterranean four miles ſouth of Latakia.

NAHR I'BRAHIM, a river of Paleſtine, which runs into the Mediterranean about ſix miles from Gibelet. This is the ancient *Adonis*.

NAHR el KEL'B, a river of Syria, which divides the pachalic of Tripoli from that of Acre, and runs into the Mediterranean thirty-ſix miles ſouth of Tripoli.

NAHR MAL'KA, a canal between the Tigris at Al Modain and the Euphrates at Meſayeb.

NAHR el MECHAT'TE, a river of Paleſtine, which runs into the Mediterranean three miles north of Caifa. The banks are very ſandy, and the mouth is ſometimes choked up when the winds blow ſtrong, at which time the waters overflow, and form a lake dangerous for travellers to croſs, as there is no bridge. The Engliſh interpreter was drowned here, with his horſe, in 1761.

NAHR SA'LEH, the ancient bed of the Euphrates: twenty miles ſouth of Baſſora.

NAHR TE'RI, a town of Perſia, in the province of Chuſiſtan: twenty miles ſouth-eaſt of Ahuaz.

NAH'RAIM, a town of Aſiatic Turkey, in the province of Diarbekir, on the Khabur: forty miles north-eaſt of Kerkiſieh.

NAH'TE. See Niehte.

NAHUA'PO, a town of Peru, in the audience of Quito: forty-five miles weſt of St. Joachim de Omaguas.

NA'HUM, the ſeventh of the minor Hebrew prophets according to their order in the Hebrew Bible, though probably the fifth in order of time. He gives himſelf the ſurname of *the Elkoſhite*, which St. Jerome, in the preface to his comment on this prophet, derives from *Elkegai*, a village in Galilee, and the ſuppoſed place of his birth or reſidence. With reſpect to the time when he delivered his prophecy, very different opinions have been entertained both by the ancients and moderns. Joſephus places him in the reign of Jotham, and ſays that his predictions came to paſs a hundred and fifteen years afterwards. According to our beſt chronologers, this date would bring us to the year in which Samaria was taken, or 721 B. C. St. Jerome, Theodoret, and Theophylact, agree in ſuppoſing that he propheſied under the reign of Hezekiah or Manaſſeh. The late primate of Ireland concurs in opinion with thoſe who think that Nahum uttered this prophecy in the reign of Hezekiah, and not long after the ſubverſion of the kingdom of Iſrael by Salmanazar, or between the years 720 and 698 B.C. which hypotheſis carries with it great appearance of probability. The ſubject of this prophecy is the deſtruction of Nineveh. It opens by ſetting forth the juſtice and power of God, tempered by lenity and goodneſs; and then ſuddenly addreſſes to the Aſſyrians a prediction of their perplexity and overthrow, the merited puniſhment of their deviſing evil againſt the true God. In the next place it contains a proclamation of ſpeedy freedom to Judah from the galling Aſſyrian yoke, and the deſtruction of the Aſſyrian idols; after which Nineveh is called upon to prepare for the approach of her enemies, as inſtruments in the hands of Jehovah; and the military array and muſter of the Medes and Babylonians, their rapid approach to the city, the proceſs of the ſiege, the capture of the place, &c. are deſcribed in the true ſpirit of eaſtern poetry. The prophet afterwards denounces a woe againſt Nineveh for her perfidy, violence, and idolatry; deſcribes the number of her chariots and cavalry, her burniſhed arms, and the unrelenting ſlaughter which ſhe ſpread around; pronounces that all her preparations for defence, her numbers, her opulence, her multitudes of chief men, would prove of no avail; foretels that her tributary nations would deſert her in the day of her diſtreſs; and concludes with announcing the triumphs of others over her, on account of her extenſive oppreſſions. This ſhort view of the ſubject of this prophetical book is taken from biſhop Newcome; and biſhop Lowth ſays, "None of the minor prophets ſeem to equal Nahum, in boldneſs, ardour, and ſublimity. His prophecy, too, forms a regular and perfect poem; the exordium is not merely magnificent, it is truly majeſtic; the preparation for the deſtruction of Nineveh, and the deſcription of its downfal and deſolation, are expreſſed in the moſt vivid colours, and are bold and luminous in the higheſt degree."

NAHUNKEAG', a ſmall iſland in the river Kennebeck: forty miles from the coaſt.

NA'I-CORO'NA, *ſ.* in botany. See Dolichos.

NA'JAC, a town of France, in the department of the Aveiron, on the Aveiron. In the year 1672, a copper-mine was diſcovered in the neighbourhood. It is nine miles ſouth of Villefranche, and fifteen weſt of Sauve Terre.

NA'IAD, *ſ.* [*naias*, Lat.] A water nymph:

What though nor fabled dryad haunt their grove,
Nor *naiads* near their fountains rove. *Shenſtone.*

The naiades generally inhabited the country, and reſorted to the woods or meadows near the ſtream over which they preſided, whence the name. They are repreſented as young and beautiful virgins, often leaning upon an urn, from which flows a ſtream of water. Ægle was the faireſt of the naiades, according to Virgil. They were held in great veneration among the ancients, and often ſacrifices of goats and lambs were offered to them, with libations of wine, honey, and oil. Sometimes they received only offerings of milk, fruit, and flowers.

NA'IANT, *adj.* in heraldry. See vol. ix. p. 423.

NAJA'RA, a town of Spain, in Old Caſtile, containing three churches and three convents: thirty-ſix miles eaſt of Burgos, and thirty-two weſt of Calahorra. Lat. 42. 20. N. lon. 2. 45. W. The battle of Najara (1367) is famous in the hiſtory of SPAIN. See that article; and ENGLAND, vol. vi. p. 601.

NA'IAS, *ſ.* [ſo named by Linnæus, from the *naiads*, or water-nymphs, becauſe it grows floating in clear ſtreams.] In botany, a genus of the claſs monoecia, order monandria, natural order inundatæ, *Linn.* (naïades, *Juſſ.* hydrocharides, *Brown.*) Generic Characters—Male. Calyx: perianthium of one leaf, tubular, abrupt at the baſe, tapering upwards, divided into two reflexed, oblong, revolute, ſegments. Corolla: of one petal; tube ſlender, much longer than the calyx; limb bell-ſhaped, in four equal, lanceolate, revolute, ſegments. Stamina: filament uſually wanting; anthers ſolitary, oblong, erect. Female. Calyx and corolla: none. Piſtillum: germen oblong, taper-pointed; ſtyle awl-ſhaped, ſhort; ſtigmas two or three, undivided, acute, permanent. Pericarpium: capſule elliptic-oblong, of one cell, not burſting, crowned with the ſtyle. Seed: ſolitary, inverted, oblong.—*Eſſential Character.* Male: calyx ſhealth-like, cloven; corolla of one petal, four-cleft; anther nearly ſeſſile. Female: calyx and corolla wanting; ſtigma two or three, undivided; capſule with one ſeed.

1. Naias marina, or marine naias: leaves oppoſite or ternate, erect, linear, deeply toothed. Native of lakes and ditches, eſpecially near the ſea, in Italy; and in the freſh waters of Germany, Swiſſerland, &c. In the ſea itſelf on the coaſt of Sweden. Mr. Menzies gathered it in O-wy-hee, and Commerſon in the Iſle of Bourbon. The whole plant floats under water, having the ſlender branched ſtem and narrow pellucid leaves of a Potamogeton. The latter grow two or three together, ſeſſile or ſomewhat ſheathing, at each joint; and are from an inch to an inch and a half long, linear, with very ſharp teeth or ſerratures, and very deep intermediate ſinuſes. Flowers axillary, ſeſſile, ſolitary, minute. Capſule elliptical, not a quarter of an inch long, ſingle-ſeeded.

The above was the only ſpecies known to Linnæus. He originally conſidered it as monoecious, but was induced, by the obſervations of Bernard de Juſſieu, to remove the genus to dioecia, which, however, every other perſon has found to be a miſtake. The remaining ſpecies are the Caulinia of Willdenow.

2. Naias minor, or ſmaller naias: leaves oppoſite or ternate, linear-awl-ſhaped, recurved, rigid, with triangular ſpinous teeth. Native of lakes and ditches in Italy, France, and Germany. We have alſo ſpecimens gathered in Swiſſerland by M. du Cros; but Haller knew it not; the former, which is his N° 556, ſtanding on the authority of Lachenal alone, who found it near Baſil. This ſpecies is much ſmaller than the preceding, and, as Willdenow obſerves, remarkably brittle. Capſule of a more ſlender figure.

3. Naias Indica, or Indian naias: leaves oppoſite or ternate, linear-awl-ſhaped, wavy, erect; the younger ones with briſtly teeth; ſtipules fringed. Native of pools at Tranquebar, in the Eaſt Indies, where ſpecimens, in fruit, were gathered in 1799, by the Rev. Dr. Rottler. This has much the aſpect of ſome of the moſt narrow-leaved pond-weeds; but the leaves are furniſhed with very fine briſtly deciduous teeth, ſo as to ſeem a miniature reſemblance of Fucus aculeatus, nor are there any intermediate ſinuſes. The membranous ſtipules, attached to the baſe of each leaf, are bearded, or fringed at the ſummit. Capſule not half the ſize of the former, elliptical.

4. Naias tenuifolia, or fine-leaved naias: leaves oppoſite, linear-awl-ſhaped, with briſtly teeth; ſtipules fringed; calyx of the male flowers entire at one ſide; antheræ ſtalked, of one cell. Found near Port Jackſon, as well as in the tropical part of New Holland, by Mr. R. Brown, who doubts whether it be truly diſtinct from the third ſpecies.

5. Naias ſtriata, or ſtriated naias: leaves oppoſite or alternate, linear-awl-ſhaped, with briſtly teeth; ſtipules abrupt, toothed; capſule longitudinally ſtriate. Gathered in the ditches of Lombardy in 1787. The habit of this is very near N. Indica; nor do we find much diſtinction in the leaves. The ſtipules are rather toothed than fringed, and the capſule is marked with numerous longitudinal ribs, which, added to the difference of their native countries, induces us to ſeparate the two ſpecies.

6. Naias flexilis, or ſhort-leaved naias: leaves whorled, linear; entire in their lower part; minutely toothed, and ſpreading, at the extremity. Sent by the Rev. Dr. Muhlenberg, from pools and ditches near Lancaſter, in Pennſylvania. It is readily known from all the reſt, by its leaves growing from three to ſix at each joint, and being of a broader ſhorter figure, entire, except near the extremity, where they are minutely and copiouſly toothed, but not ſinuated. The fruit is elliptic-oblong, ſmooth.

NA'IB. See NABOB, p. 499.

NAIBA'Y, a town of Nubia: 126 miles ſouth of Syene.

NA'IC, or NA'IG, *ſ.* in the Indian armies, a ſubaltern officer of the ſepoys, equal in rank to a corporal.

NA'ID, the interior of the great deſert of Arabia, inhabited by a few ſcattered tribes of feeble and wretched Arabs.

NAID CHO'KEY, a town of Hindooſtan, in the Carnatic, near the coaſt of Coromandel: twenty-five miles north of Pullicate.

NA'IDES, a town of Germany, in the principality of Culmbach: four miles north of Wonfiedel.

NAIL, *ſ.* [næȝl, Sax. *nagel*, Germ.] The hard cruſt or horny ſubſtance at the ends of the fingers and toes. See the article ANATOMY, vol. i. p. 588, 9.—The Romans were very curious in the cutting and forming the *nails*, and had it done by artiſts, who made an employment of it. The Chineſe doctors and literati pique themſelves on the exceſſive length of their *nails*. F. le Compte ſays, ſome of them wear *nails* nearly as long as their fingers. *Chambers.*

The meaneſt ſculptor in the Æmilian ſquare
Can imitate in braſs the *nails* and hair;
Expert in trifles. *Dryden.*

The talons of birds; the claws or paws of beaſts.

NAIL, *ſ.* A ſpike of metal by which things are faſtened together.—An equivocal word, uſed for the *nail* of the hand or foot, and for an iron *nail* to faſten any thing. *Watts.*

As one *nail* by its ſtrength drives out another,
So the remembrance of my former love
Is by a newer object ſoon forgotten. *Shakeſpeare.*

The ſeveral kinds of nails are very numerous. As, *Back-nails*, made with flat ſhanks to hold faſt, and not open the wood. *Clamp-nails*, thoſe proper to faſten the clamps in buildings, &c. *Claſp-nails*, whoſe heads are flatted, and, claſping and ſticking into the wood, render the work ſmooth, ſo as to admit a plane over it. *Clench-nails*, thoſe uſed by boat, barge, &c. builders, with boves or nuts, and often without; for fine work, they are made with claſp-heads, or with the head beat flat on two ſides.

Clout-nails, thoſe ordinarily uſed for nailing on of clouts to axle-trees; they are flat-headed nails, and iron-work is uſually fixed with theſe nails. *Deck-nails*, thoſe proper for faſtening of decks in ſhips, doubling of ſhipping, and floors laid with planks. *Dog-nails*, or *j-bent nails*, proper for faſtening of hinges to doors, &c. *Flat-points* are of two kinds; viz. *long*, much uſed in ſhipping, and proper where there is occaſion to draw and hold faſt, yet no neceſſity of clenching; and *ſhort*, which are fortified with points, to drive into oak, or other hard wood. *Lead-nails*, uſed to nail lead, leather, and canvas, to hard wood: theſe are *clout-nails* dipped in lead or ſolder. *Port-nails*, commonly uſed to nail hinges to the ports of ſhips. *Ribbing-nails*, uſed to faſten the ribbing, to keep the ribs of ſhips in their place in building. *Roſe-nails* are drawn four-ſquare in the ſhank, and commonly in a round tool. *Rother-nails*, chiefly uſed to faſten rother-irons to ſhips. *Scupper-nails*, much uſed to faſten leather and canvas to wood. *Sheathing-nails*, uſed to faſten ſheathing-boards to ſhips: the rule for their length is, to have them full three times as long as the board is thick. *Brads*, long and ſlender, without heads, chiefly uſed for thin deal work, to prevent ſplitting. To which may be added *tacks*; the ſmalleſt ſerving to faſten paper to wood; middling, for wool-cards and oars; and larger, for upholſterers and pumps. They are diſtinguiſhed by the names of white-tacks, or tin-tacks, and two-penny, three-penny, and four-penny, tacks; being ſo much per hundred of ſix ſcore.

The immenſe conſumption of nails in all the mechanical arts and trades, cauſes their fabrication to be a conſiderable branch of national manufacture. It is chiefly carried on in Staffordſhire, in the neighbourhood of Dudley, Wolverhampton, and Birmingham; indeed, it is the principal conſumption of the malleable iron made in that part of England. The iron uſed in the nail-trade is of the cheapeſt ſort, chiefly made in the pudling-furnaces, and worked by rollers inſtead of a forge-hammer. This metal is, by repeated rolling, reduced into ſmall thin bars, which are then paſſed through the grooves of the ſlitting-rollers, and thus divided or ſlit into three, four, five, or ſix, ſmall ſquare rods, of a proper ſize to make nails. Theſe, which are called *nail-rods*, are a very extenſive article of trade. The nailers reſide chiefly in the cottages, where the women and children aſſiſt in the labour. They employ forges, ſuch as are uſed by ſmiths; but the bellows are very lightly loaded, ſo that a very ſmall motion given to them now and then will blow ſufficiently to heat the rods; two, three, or four, of which, according to their ſize, are always kept in the fire together; and, when any one has a good red heat, the nailer takes it out of the fire, and, battering it on the anvil, brings it to a ſharp ſquare point at two or four ſtrokes; he then applies it over the edge of a chiſel fixed on an anvil, and, by ſtriking a ſingle blow on the rod, cuts off a ſufficient length to make a nail, which falls into a tin pan; then he makes another, and, cutting it off likewiſe, returns the end of the rod to the fire for another heat; now, with a pair of tweezers, like ſugar-tongs, he takes up the nail, and introduces its point into a ſquare tapering hole, made acroſs through the end of an iron tool or mould; by ſtriking a blow or two on the end of the iron, he flattens it down, and forms a head, the figure of which is determined by the number and direction of the blows given it. This proceſs is conducted with ſurpriſing rapidity, as the nailers, by long practice, acquire a mechanical habit of forming a complete nail by a certain number of ſtrokes, ſo as never in the courſe of an hour to make an unneceſſary movement. For large nails, they can only make one, and cut it off, at each time they take the iron from the fire; becauſe they would be unable to get the heading finiſhed whilſt they were ſufficiently hot. The length of the nail is regulated by a ſtop, fixed at a certain diſtance from the edge of the chiſel, ſo that the point of the nail being applied to this, determines the proper place for the edge of the chiſel. The ſize of the mould withinſide, and the dimenſions to which the point of the nail is reduced by hammering, cauſes the cut end to project above the ſurface of the mould more or leſs; ſo that the head will be thicker or thinner, and have its quantity of metal regulated, by the degree of taper given to the point; therefore, the art of the workman is diſplayed in ſtriking with a due force, ſo that every nail ſhall be made of the ſame ſize, by a certain number of blows. In this manner the greater number of all nails are made; but the great expenſe of labour has induced many manufacturers to turn their attention to inventions which would diminiſh the labour, ſo as to enable them to bring their nails to the market at reduced prices, or of a better quality. Many patents have been taken out for theſe inventions, ſome of which we ſhall briefly notice.

Mr. W. Finch, of Wimboorne in Staffordſhire, obtained a patent in July 1790, for manufacturing nails by machinery. He propoſed, by means of a water or ſteam mill giving motion to a main-ſhaft or axis, to actuate a number of ſmall hammers, to work either in a tilt or lift manner. By theſe hammers the nails were to be forged; but the operation was to be divided among three people for headed nails; thus, one to attend the fire, and carry the rods, as faſt as they were properly heated, to the ſecond perſon, ſtationed before the hammer, who would make the nails in the moſt expeditious manner, by only turning the rod about under the hammer; when cut off, they were taken by the third perſon, who finiſhed the heads in a tool as above deſcribed, but by means of a hammer worked by machinery, inſtead of hard labour. By theſe contrivances, in conſequence of the more ſpeedy motion of the machine-hammers, ſeveral nails were to be made at once heating of the rod; whereas, by the old method, only one, or two at moſt, could be made; thus making a great ſaving of labour; and, as the operation required no ſtrength, children might eaſily make the largeſt ſpikes; the motion of the hammer being ſo regular, that they could eaſily acquire a dexterity in turning the rods properly to receive the blows.

In the ſame year, Mr. Thomas Clifford, of the city of Briſtol, obtained two patents for the manufacture of nails of every kind. The principle on which his firſt invention was founded, was that of making the nails in a die; that is, by having a die, or the impreſſion of the nail to be cut, formed in one or more pieces of ſteel; and the iron, of which the nails are to be formed, is drawn or rolled into the proper form or thickneſs, and, by a force adapted to the purpoſe, preſſed into a cavity or die, ſo as to form the nails either complete, or ſo nearly complete as that they can be finiſhed with very little labour. This operation may be done in ſeveral ways; but the one particularly recommended by Mr. Clifford is by rollers of iron or ſteel, and worked either by water, ſteam, wind, horſes, &c. The two rollers are to be made of iron, and caſed with ſteel, each of the ſame diameter, which is proportioned to the length and ſize of the nail intended to be made. Each roller ſhould have a cog-wheel on it, the cogs of one roller to work into thoſe of the other, ſo that both the rollers may perform the ſame exact revolution. One half the impreſs of the nail is to be cut in the ſurface of one roller, the other half in the other; ſo that the two impreſſions form a cavity or die of the exact form of a nail, extending the lengthways of the nail on the circumference of the rollers; and, as many impreſſions of the ſame kind may be cut in the rollers, one at the end of the other, as will complete their circumference, and continue the cavity all round the rollers; the point of one nail joining the head of the next, or the two points and two heads joining each other. The rollers muſt, in this as in other caſes, be made to work very true and cloſe to each other. The mode of operation is this: A rod of iron, previouſly rolled or drawn to a convenient ſize, is to be heated, and, while hot, the end of it is put between the rollers into the cavity or die which forms the impreſſion of the nail. The rollers, being now put in motion, will draw the iron through, and, preſſing it into the cavities or dies, form the iron into nails, one joined to the other, which muſt afterwards be ſeparated by means of inſtruments acting as nippers, ſhears, chiſels, &c. The rollers, being made to work very cloſe to each other where the edge of the nail is formed, will prevent much of the metal from being preſſed out on each ſide of the nail; and what is preſſed out may be cut off by inſtruments adapted to the purpoſe. Several pairs of rollers may be made to work together, and each pair may have ſeveral rows of dies cut on them, ſo as to form the impreſſion for ſeveral ſtrings of nails; and a rod of iron, being put into each of them, will roll out as many ſtrings of nails with one revolution of the rollers. A pair of rollers may alſo have the greater part of their ſurface cut with dies, and a flat bed made to paſs between the rollers, ſo as to form ſheet-nails; all of them connected to one another by thin plates of the iron of which they are compoſed; and this would require each nail to be cut out, or ſeparated from the ſheet by proper inſtruments.

Mr. Clifford's ſecond invention conſiſts, 1ſt. in drawing the iron or other metal into a tapering or wedge-like form, according to the length and thickneſs of the different ſizes of nails to be made. 2dly. The nails are to be cut out of thoſe wedge-like or tapering plates by means of a punch, the face of which is made according to the ſize, taper, and form, of the nail to be cut out; as alſo having a hollow bolſter, the hollow or aperture of which muſt alſo be made of the ſize and form of a nail, and conſequently to fit and receive the punch above-mentioned. The punch, thus fitted to the bed, and ſliding in a proper frame to keep it ſteady, will, by a blow, or by preſſure, cut or force part of the taper-plate into and through the aperture of the bed fitting to it, and by which the nail is formed. This operation is by the manufacturers of buckles, buttons, &c. called *cutting-out.* 3dly. To form the heads of horſe-nails called *roſe-heads,* and others of nearly a ſimilar kind; after the operations of drawing and cutting out, the nail is to be put into a heading-tool, alſo called a bed, which bed receives the nail, excepting a ſmall portion at the thick end, out of which the head is formed by a punch or die. This die, by blow or preſſure, forms the head as required; and when the nails are made of hard iron, after they are cut in the way deſcribed, the thick end is made hot before they are put into the bed, or heading-tool. 4thly. Another method adopted in the manufacture of nails is, by cutting them out of or from plates of equal thickneſs, and afterwards to point them either by hammer or other preſſure. 5thly. In making nails that are of a triangular form, the plate or ſtrip of iron is preſſed or ſtamped into a die, having impreſſions cut to the form of ſuch nails, after which they are cut out by a punch. *Rep. of Arts,* vol. vii. and ix.

About fifteen years ago, a very extenſive trade was eſtabliſhed in Birmingham and Sheffield of cut brads: that kind of nails called brads, having no head, or at leaſt only a ſmall projecting leaf on one ſide, was eaſily cut out by machinery, without the trouble of forging; but latterly the method has been improved, ſo far as to produce all kinds of ſmall nails. The iron is rolled out to large thin ſheets, of the proper thicknes to form a nail; this is cut up by ſtrong ſhears into parallel ſlips or ribbands, the width of them being equal to the length of the intended nails, which are cut off, one at a time, from the end of the ſlip: the cutting-line is not exactly perpendicular to the length of the piece, but rather inclined, ſo as to make the nail which is cut off ſharp at one end; the next time the cutting-line is inclined the other way, ſo that the head of one nail is cut from the ſame edge of the ſlip as the point of the next, and ſo on alternately. The cutting is performed by the fly-preſs, proper dies or cutters being applied in it: the lower or fixed die conſiſts of a cutter or bar of ſteel ſet up edgeways, and one of the angles of its upper ſide is ground to a ſharp ſtraight edge. The ſlider of the preſs carries a die, conſiſting of a ſquare bar of ſteel moving perpendicularly by the action of the ſcrew; and, when it is forced down, one of its flat ſides applies exactly againſt the ſtraight edge of the fixed cutter above-mentioned; but, when the moving cutter is raiſed up to the higheſt, a part is obſerved where its flat ſide is cut away in ſuch a manner as to leave a conſiderable ſpace between its face and the edge of the fixed cutter at one end of the edge, but touching it at the other. By this means, when the end of a ſlip of iron is preſſed againſt the face of the moving cutter in its reduced part, a ſhort piece of the end of the ſlip will project over the edge of the fixed cutter, and, the moving cutter being forced down by the ſcrew of the preſs, the ſhoulder of the part which is cut away comes down upon the end of the ſlip, cutting it off to the line of the edge of the fixed cutter, and therefore removing a ſmall piece from the end, which, being of a proper breadth at one end, and regularly tapered away to nothing at the other, makes a very good brad. The circumſtance of its being parallel in the other direction, is the great recommendation to this kind of nail, becauſe it will drive without firſt making any hole in the wood, and does not ſplit: the point of a nail of this kind is like the edge of a chiſel, and, the length of this edge being ſet acroſs the grain of the wood, when driven down, it cuts through, and divides all the fibres of the wood it meets with, and, by turning the divided ends of them down, as it is driven deeper, their elaſticity binds the nail forcibly between them, ſo that this nail will hold in the wood faſter than any other kind, but, being parallel in the other direction, does not tend to open or ſplit the wood in the direction of the grain.

Meſſrs. Wilmore and Tonk obtained a patent, in 1808, for a method of cutting nails, which they have thus deſcribed. They take a nail-rod, of a ſize ſuitable to that of the nail intended to be manufactured, and, applying it to a common ſcrew-preſs, mounted with proper cutters, cut off from the end of the rod two pieces at once, obliquely acroſs the rod in one place, and directly acroſs it in another. Two ſtuds or tops are ſet up, which are attached to the preſs, and are moveable in the direction of the rod, for the purpoſe of aſcertaining the length of the nail; and both ſtuds are adjuſtable in the croſs-direction of the rod, ſo that the obliquity of the cut, according to the kind of nail to be made, is thereby determined, as well as the length of the nail. This is called the firſt operation. The ſecond operation is to anneal the pieces ſo cut off, if the iron ſhould not be ſufficiently malleable, which is done in the uſual and well-known manner. The third operation is that of heading, which, for claſp-head nails, conſiſts of two parts, one for gathering, and the other for forming the head of the nail. The firſt part of this operation is performed by putting a piece, cut off the rod of iron as before deſcribed, into a pair of clams, leaving as much of the thick end projecting above the clams as is ſufficient to form the head. Theſe clams have ſteel bits let into them with ſharp edges, which preſs only againſt the two oppoſite ſides of the piece, and which have the effect of two chiſels, when the punch of the preſs is brought down upon the piece with conſiderable force, and raiſe or gather up iron towards forming the head. The ſecond part of this operation is to put the nail, thus prepared, into another pair of clams, having bits to correſpond to the under ſide of the head; and the punch, having the impreſſion of the upper ſide of the head engraved or ſunk into it, is brought to preſs ſtrongly upon the head in the clams, and thereby the claſp-head is properly formed.

For nails intended to have roſe-heads, or any other kind of heads except claſp-heads, the firſt part of this heading-operation is not abſolutely neceſſary; but the bits, which for claſp-nails muſt have ſharp edges, muſt for the other nails have blunt edges, to prevent the undercutting. For the ſecond part of this operation, the piece is put either into a pair of clams, or into the tool commonly called a *bore*, and then preſſed with punches properly engraved, or ſunk, according to the kind of head wanted. By the firſt of all theſe operations, the piece cut off the rod of iron is formed ſomething like a mortiſe-chiſſel. The fourth operation is to point it, which is done by putting the piece into a bed of ſteel, in which is cut a nick or groove having parallel ſides, but the bottom riſing towards the end, where the nail is to be formed; the end of the punch, which preſſes upon the point of the nail, is made to project more than the other part, ſo as to meet the correſponding part of the bed, when the punch is brought upon the nail. The groove or nick in the bed ſhould be juſt wide enough to receive the nail eaſily, but prevent it from twiſting when the impreſſion is made. The nail is put twice into the nick, once within the chiſel, from the end lying horizontal, and next turning a quarter round to preſs the chiſel-edge into a pointed form. If the nails, by the ſtrong preſſure which is neceſſary in this operation, ſhould become too hard to clench, they are to be annealed in the uſual way, which may be called the fifth operation. The third, fourth, and fifth, operations, above deſcribed, are applied to nails, or pieces cut off from ſheet or rolled iron in the ordinary way; but as, in conſequence of the fifth operation, which is neceſſary to give them the quality of clenching, they are apt to be too ſoft to drive well, a ſixth operation is applied, viz. quenching them in water when red-hot, which gives them ſtiffneſs enough to drive without rendering them too brittle to clench.

The Americans appear to have carried the invention of cutting nails by machinery to a greater perfection than has been done in this country. From ſome letters, publiſhed in 1810, by the American ſecretary to the treaſury, in his report on the manufactures of that country, it appears that they have invented machines which perform the cutting and heading at one operation, and with ſuch rapidity, that one machine will furniſh upwards of a hundred nails per minute. He ſays, "The importance of nail-machinery in Maſſachuſetts, and of all that relates to rolling and ſlitting-mills, with which nail-machinery is immediately connected, requires that a particular account ſhould be given of them. In old countries nails are forged; here they are cut; and it is curious to trace the progreſs of American genius through the various ſteps of this invention. Twenty years ago ſome men, now unknown, and then in obſcurity, began by cutting ſlices out of old hoops, and by a common vice, griping theſe pieces, headed them with ſeveral ſtrokes of the hammer: by progreſſive improvements ſlitting-mills were built, and the ſhears and the heading-tools were perfected; yet much labour and expenſe were requiſite to make nails. In a little time, Jacob Perkins, Jonathan Ellis, and a few others, put into execution the thought of cutting and of heading nails by water; but, being more intent upon their machinery than upon their pecuniary affairs, they were unable to proſecute the buſineſs. At different times other men have ſpent fortunes in improvements; and it may be ſaid with truth, that more than a million of dollars have been expended; but at length theſe joint efforts are crowned with complete ſucceſs, and we are now able to manufacture at about one-third of the expenſe that wrought-nails can be manufactured for, and nails which are ſuperior to them; for at leaſt three-fourths of the purpoſes to which nails are applied, and for the moſt of thoſe purpoſes, they are full as good. The machines made uſe of by Odiorne, thoſe lately invented by Jonathan Ellis, and a few others, preſent very fine ſpecimens of American genius.

"To northern carpenters it is well known, that in almoſt all inſtances it is unneceſſary to bore a hole before driving a cut nail; all that is requiſite is, to place the cutting edge of the nail acroſs the grain of the wood: it is alſo true, that cut nails will hold better in the wood. Theſe qualities are, in ſome rough building works, worth twenty per cent. of the value of the article, which is equal to the whole expenſe of manufacturing. For ſheathing and drawing, cut nails are full as good as wrought nails: only in one reſpect are the beſt wrought nails a little ſuperior to cut nails, and that is, where it is neceſſary they ſhould be clenched. The manufacture of cut nails was born in our country, and has, within its boſom, advanced through all the various ſtages of infancy to manhood; and, no doubt, we ſhall ſoon be able, by receiving proper encouragement, to render them ſuperior to wrought nails in every particular."

NAIL, *ſ.* A ſtud; a boſs:

For not the deſk with ſilver *nails*,
Nor bureau of expenſe,
Nor ſtandiſh well japan'd, avails
To writing of good ſenſe. *Swift.*

On the Nail. Readily; immediately; without delay. I once ſuppoſed it from a counter ſtudded with nails, but have ſince found in an old record, *ſolvere ſuper unguem*. It therefore means into the hand. *Johnſon.*

We want our money *on the nail;*
The banker's ruin'd if he pays. *Swift.*

Nail is alſo a ſort of long meaſure, chiefly uſed in the commerce of cloths; containing two inches and a quarter; or the ſixteenth part of a yard.

To NAIL, *v. a.* [næᵹlian, Sax.] To faſten with nails; to faſten as with nails.—How ſhall they come to thee, whom thou haſt *nayled* to their bed? *Donne.*

Unto the croſs he *nails* thy enemies;
The law that is againſt thee, and the ſins
Of all mankind, with him are crucify'd. *Milton.*

He claſp'd his hand upon the wounded part.
The ſecond ſhaft came ſwift and uneſpy'd,
And pierc'd his hand, and *nail'd* it to his ſide. *Dryden.*

To ſtud with nails.—Thoſe ſtars which *nail* heaven's pavement. *Fanſhaw's Tr. of Paſt. Fido.*

In golden armour glorious to behold,
The rivets of your arms were *nail'd* with gold. *Dryden.*

NAI'LER, *ſ.* One whoſe trade is to forge nails; a nail-maker.

NAIL'ERY, *ſ.* A manufactory for nails.—Near the bridge is a large alms-houſe, and a vaſt *nailery. Pennant.*

NAIL'LERS, a town of France, in the department of the Vendée: nine miles weſt of Fontenay le Comte.

NAILLOU'X, a town of France, in the department of the Upper Garonne: ſix miles ſouth-weſt of Villefranche, and eighteen ſouth-ſouth-eaſt of Toulouſe.

NAIM, a town of Arabia, in the province of Oman: eighty miles north-weſt of Haſſek.

NAIN, or Naim, a village of Paleſtine, ſituated at the bottom of Mount Hermon on the north ſide, was anciently a city of the tribe of Iſſachar, in the province of Galilee. It was near the gates of this city that our Saviour reſtored to life the only ſon of a widow, and where he inſpired Mary Magdalen to come and mourn for her ſins at his feet. Theſe circumſtances alone make this place worthy of notice; for at preſent Nain is only a hamlet inhabited by Chriſtians, Mahometans, and Hebrews, where there is not a ſingle monument to attract the curioſity of the traveller.

NAIN, a Moravian ſettlement on the eaſt coaſt of Labrador, near the entrance of Davis's Straits, ſouth-ſouth-weſt of Cape Farewell. From obſervations made here in 1778, 1779, and 1780, the mean temperature ſeems to have been 30°.54'. The greateſt heat obſerved in 1780 was 84°, viz. in July; and the greateſt cold in 1779 was 36°. There is no appearance of ſummer before July; though the winters are ſaid to be leſs ſevere than formerly. Lat. 57. N. lon. 61. 30. W.

NAIN, a Moravian ſettlement in Pennſylvania, on Lehigh river, eſtabliſhed in 1763: fifty miles north of Philadelphia.

NAIN, a town of Africa, in the kingdom of Tripoli, NAIN (Louis-Sebaſtian le), better known by the name of TILLEMONT. See that word.

NAI'NA, a town of Bengal: twenty-two miles ſouth-ſouth-weſt of Calcutta.

NAI'NSOOK, a river of Lahore, which runs into the Behut twenty-two miles eaſt of Puckholi.

NAI'NTRE, a town of France, in the department of the Vienne: nine miles ſouth-weſt of Chatelleraut.

NAJOO', a ſmall iſland in the Eaſtern Indian Sea, near the weſt coaſt of the iſland of Celebes. Lat. 1. 21. S. lon. 124. 25. E.

NAIR, NA'HER, or NAY'ER, *ſ.* A name which is given by the Malabarians to the nobility of their country, who form a very numerous claſs or tribe, out of which the ſovereigns of Malabar chooſe their body-guard. Many affirm that they are the oldeſt nobility in the world. Ancient writers mention them, and quote the law which allows the Nair ladies to have many huſbands.

NAIRN, one of the northern counties of Scotland, is bounded on the north by the Moray-frith, on the eaſt by the ſhire of Elgin, and on the ſouth and weſt by the county of Inverneſs. It extends about twenty miles in length from north to ſouth, and twenty-two in breadth from eaſt to weſt. Theſe, however, are the diſtances of its extreme parts; but its general breadth does not exceed twelve miles. This county formed a portion of the ancient diſtrict of Moray; and, like Moray-Proper, or Elginſhire, is divided into two portions by the natural diſtinctions of its ſurface. For the breadth of from three to ſix or ſeven miles along the ſhores, the country is uſually level and extremely fertile; but, as it recedes farther from the coaſt, it becomes very bleak and hilly. The ſoil on the level grounds, on the eaſt ſide of the county, is a free loam on a ſandy or gravelly bottom; and, on its weſtern portion, either a rich ſtiff clay, or a gravelly mould. Only a few ſpots on the declivities, ſkirting the narrow vales in which the rivers run, are under cultivation, or perhaps ſuſceptible of it. Agriculture, as a ſcience, is little underſtood in any part of the county, probably leſs ſo indeed than any other in Scotland. The inferior tenants being for the moſt part too poor to purchaſe proper implements of huſbandry, thoſe they employ are of their own conſtruction, and conſequently, as may be ſuppoſed, of the rudeſt ſtamp. Sheep and black cattle are reared in conſiderable numbers in Nairnſhire, and chiefly fed on the natural paſturage, either in the downs along the ſhore, or in the moors towards the bottom of the mountains. The ſheep are of the ſmall white-faced kind, with very fine wool, which is either conſumed by the farmers themſelves, or ſold into other diſtricts, there being no manufacture yet eſtabliſhed in this county.

There are few mineral ſubſtances in Nairnſhire, which can be applied to any practical purpoſe. All the indications of coal, lead, and iron, which have induced adventurers to attempt the diſcovery of mines of theſe ſubſtances, have hitherto proved fallacious. Neither is there any lime-ſtone found in the county; but its abſence, in an agricultural point of view, is leſs to be lamented, as marl exiſts in vaſt quantities at different places, and particularly in a ſmall loch called Conan, and in the vale of Litie, where it is of the pureſt and moſt valuable kind. In this vale is the extenſive heath of Hoar-moor, which Shakeſpeare has conſecrated as claſſic ground, by making it the ſcene of the meeting of Macbeth and the weird-ſiſterhood, in the celebrated play which bears the name of that blood-ſtained uſurper. In the ſurrounding hills are ſome quarries of free-ſtone; and in one part of the county there is alſo one of a dark blue-ſtone, which flames in the fire, while its bulk is not apparently diminiſhed.

The only rivers worthy of notice in this county are the Findhorn and the Nairn. The former takes its riſe in Inverneſsſhire, paſſes entirely through this county into that of Moray, or Murray, and diſcharges itſelf into the ſea at the bay formed by the ſand-hills of Culm. The Nairn alſo, beginning its courſe from a lake in Inverneſsſhire, flows through a conſiderable angle of Nairnſhire, and falls into Moray-frith near the county-town. This river ſkirts, in its progreſs, the weſtern ſide of the field of Culloden, in which terminated the rebellion of 1745, when the hopes of the Stewart family were fruſtrated. There is a ſmall ſalmon-fiſhery on the Nairn, the property of Mr. Brodie of Brodie.

This county contains four entire pariſhes, viz. Ardclauch, Aultdearn, Calder, and Nairn; and parts of five others; viz. a part of the pariſh of Dyke, in the county of Murray; a part of Urquhart, in Roſsſhire; and a ſmall portion of Croy, of Moy, and of Petty, all in the ſhire of Inverneſs. In the parliamentary reports of 1801, this county is ſtated to contain 1972 houſes, and 8259 inhabitants; in 1811, the number of houſes had increaſed to 2031, but the inhabitants are returned as amounting to 8251. There is probably ſome error in one of theſe returns. Aultdearn is a borough of barony, and is memorable as the ſcene of one of the moſt celebrated victories of the duke of Montroſe over the covenanters, under lieutenant-general Hurry, in 1645. Several handſome reſidences are diſperſed over the county, of which the chief are Brodie, Holme, Boath, Lethen, Cantray, and the caſtle of Kilravock. Nairnſhire is repreſented in parliament along with the ſmall county of Cromarty; each county alternately electing their joint repreſentative.

Several remains of antiquity in this county may very properly claim attention. Cawdor-Caſtle and that of Kilravock, which are both in an entire ſtate, are objects of conſiderable antiquity and intereſt; ſo are likewiſe the ruins of Penic, Inſhough, Moyneſs, and Loughnadurb. Moyneſs appears to have been one of the moſt extenſive manſions in Scotland; and Loughnadurb is remarkable for having ſuſtained a ſiege againſt kings Edward I. and II. It is ſituated near the centre of a deep lake, in the higher parts of the county, and almoſt fifteen miles from any inhabited region; ſo that it is very difficult to conceive a ſtate of ſociety which could give it importance, either in a political or military view. North-weſt from this caſtle, about four miles, in a narrow and ſolitary vale, in which the river Findhorn flows, ſtands a very curious monument of the obeliſk kind, about half the height of the celebrated one near Forres. The flag of this monument is ſo thin, that Mr. Leſlie thinks it "might be carried to ſome diſtance, by two vigorous men practiſed in ſuch exerciſes." It is ſet up the ſide of a cairn of ſtones, ſuppoſed to be piled over ſome grave; but whether really a memorial of the dead, or of ſome memorable event in hiſtory, is uncertain. Tradition, however, repreſents it as the monument of two lovers, a Highland chieftain and a Norwegian princeſs, who were drowned in the river, in the act of eloping to ſecure to themſelves that happineſs which the hoſtility of their families denied them. The ſculpture on this obeliſk is nearly the ſame on both ſides. In the loweſt compartment are two human figures, evidently in the Highland dreſs, in the attitude of embracing, or ſtruggling with each other. On each of the ſides is a circle in bold relief, about a foot in diameter, the ſurface being occupied by eight or ten ſmall globular figures placed round a cup in the centre. The remainder of the ſculpture conſiſts moſtly of foliage, tendrils, &c. This monument has no mark or emblem upon it referring to the doctrines or cuſtoms of Chriſtianity, and is therefore preſumed to be of anterior date to the introduction of that religion into Scotland.

NAIRN, a river of Scotland, has been noticed in the preceding article.

NAIRN, a royal burgh, and the county-town of Nairnſhire, ſuppoſed to be the *Tuæſis* of Ptolemy, is pleaſantly ſituated on the weſtern bank of a ſmall river, from which it derives its name, near the coaſt of the Murray-frith. It is a neat town, with a ſmall convenient harbour, which might eaſily be enlarged and improved. The chief ſtreet runs nearly parallel to the ſhore, and is interſected by a number of narrow lanes, ſtretching on one ſide towards the ſea, and on the other into an extenſive plain of fertile corn-fields. The gaol and town-houſe are in the middle of the principal ſtreet, and conſiderably injure its appearance. The houſes here are in general well-built, and rather elegant; but it is far otherwiſe in the lanes. There are two good inns in the town, and ſo many ale-houſes and whiſky-ſhops, that the Rev. J. Morriſon ſays, "to mention the number might to ſtrangers appear incredible."

Nairn has undergone many changes in the courſe of time. Originally it ſtood on a different ſcite from that which it now occupies. It was defended by a caſtle, which ſtood on an eminence called Caſtle-hill, but at a remote period, on a ſpot now covered by the ſea, where, about ſixty years ago, veſtiges of its foundations could be ſeen when the tide was low, though they are now wholly waſhed away. Buchanan tells us, that the more ancient caſtle was taken by the Danes, in the reign of Malcolm I. The one ſubſequently built has alſo been completely demoliſhed ſince the year 1747, before which time it was in the cuſtody of the thanes of Cawdor, as hereditary conſtables; and the conſtabulary garden is ſtill diſtinguiſhed as an article in the valuation of the Cawdor eſtate, to the extent of 3l. 10s. Scots. At what era Nairn was removed to its preſent poſition is not recorded; nor is it known when it was firſt conſtituted a royal burgh. The earlieſt charter now extant is dated in 1589, and is the renewal of one granted by "Alexander;" though by which of the kings of that name is not mentioned. The revenue of the borough is very conſiderable, and ariſes from an extenſive tract of moor-land let out on improving leaſes, from feu-duties, "and from the tolls of ſix annual fairs, and the weekly market." It is governed by a town-council, conſiſting of ſeventeen members: a provoſt, three bailies, dean of guild, and treaſurer, with eleven counſellors; nine of whom form a quorum. By a late deciſion of the houſe of peers, the bailies, dean of guild, and treaſurer, muſt be reſident. The ſeveral trades of the town are formed into one corporation. The magiſtrates hold a court for the trial of ſlight offences, and another for the recovery of ſmall debts; beſides which, there are ſeven county-courts held in the town, viz. the ſheriff-court, the court of quarter-ſeſſions, the court of the juſtices of the peace, the court of fence-holders, the courts of the commiſſioners of ſupply, and the court of the county lieutenancy.

In the town is an excellent ſchool, in which the number of ſcholars is ſeldom leſs than a hundred; parents ſending their children hither from all parts of the country, and frequently even from England. Every branch of ſtudy now in repute at the univerſities, is taught here in perfection; and ſeveral of the moſt diſtinguiſhed characters for ſcience and literature in Great Britain, firſt roſe to comparative eminence in the provincial ſchool of Nairn.

There is no manufacture of any extent carried on in the town, which is chiefly ſupported by the fiſhery on the river, agriculture, and the number of genteel families, who either reſide in it during the whole year, or occaſionally viſit it for the advantage of bathing. It is remarkable that, in one part of the town, Erſe only is ſpoken; while, in the other parts, the inhabitants do not underſtand that language, but ſpeak Engliſh in conſiderable purity. According to the population-returns of 1801, the whole pariſh contained only 547 houſes, and 2215 inhabitants; but in the returns of 1811, the houſes are ſtated to amount to 632, and the inhabitants to 2504, in number.

Nairn gave the title of lord to an ancient family. The laſt who enjoyed the title was attainted and deprived for adhering to the pretender in the year 1715.

Beſides the caſtles already mentioned, the vicinity of Nairn diſplays a variety of antiquarian remains. On the north-weſt ſide of the hill of Geddes are the ruins of an ancient fortreſs, called Caiſtel-Fionlah, or Caſtle Finlay: it is ſurrounded with a deep foſſe. By whom, or for what purpoſe, this edifice was erected, has not only eſcaped the notice of hiſtory, but even tradition is ſilent upon the ſubject. A little eaſtward from hence is another caſtle, called the Caſtle-of-Rait, probably built by Rait of that ilk, but at what period is uncertain. Below it is Knock-nw-gillan, at which place eighteen of the M'Intoſhes were murdered by the Cummines, who lived at Rait, on account of ſome grudge which ſubſiſted between the families. At Eaſter-Geddes are the remains of a very ancient chapel, with a burying-ground around it, where the family of Kilravock and the lairds of Geddes have been buried for more than ſix centuries paſt. Some Roman coins have been found in this neighbourhood. About ſix miles to the north-weſt of Nairn ſtands Fort George, built by order of the government, at a place called *Arderſier*, a ſmall iſthmus upon the Murray-frith. A ſhock of an earthquake was felt here on the 13th of Auguſt, 1816, at twenty-five minutes paſt ten at night: happily no material damage was done in the town or immediate neighbourhood; but the ramparts of Fort George ſhook ſo violently, that the ſentinels on duty, at the main gate, conceived an attempt was made to force it open, and, under this idea, challenged the ſuppoſed intruders. The range of front buildings, occupied as the governor's, lieutenant-governor's, and the other ſtaff-officers', houſes, appeared to the ſoldiers on guard to be bowed violently backward and forward, or, as one of them expreſſed it, to be ſhaken like a ſtrong aſh-tree in a violent ſtorm.

The ſhock was much more violent to the weſtward; and, at Inverneſs, the beautiful ſpire of the gaol and court-houſe was much damaged, being thrown about eight inches off the perpendicular, for about twelve feet at the top, and only ſupported from falling by a long iron rod, to which the weather-cock is attached. Many chimneys were thrown down, no fewer than ſeven in one court, and ſeveral houſes rent from top to bottom. One moſt providential eſcape occurred in the town: a ſtack of chimneys on a houſe adjoining one occupied by Mr. K. being thrown down, the ſtones forcing their way through the roof, and falling directly upon the bed in which Mr. and Mrs. K. were, without doing them the leaſt injury. In the diſtrict ſtill more weſt, called the Aird, the ſhock was ſtill more violent; the houſes of Phoſſachis and Bogſey being completely rent; and the eaſt end of the old priory of Beemly was likewiſe thrown down.

NAIRN, or Iniſkeel, a ſmall poſt-town of the county of Donegal, Ireland, on the weſtern ſea-coaſt, oppoſite to the little iſland of Iniſkeel. It is 135 miles north-weſt from Dublin, and eleven north from Killybegs.

NAIRO'NI (Anthony-Fauſtus), a learned Maronite, was born within the diſtrict of Mount Libanus, about the year 1631. He was the nephew and diſciple of Abraham Ecchellenſis, and became profeſſor of the Chaldee and Syriac languages in the college of Sapienza, at Rome, where he died in 1711, having nearly completed his eightieth year. He was the author of, 1. Euoplia Fidei Catholicæ Romanæ hiſtorico-dogmatica, ex vetuſtiſſimis Syrorum ſeu Chaldæorum Monumentis eruta, adverſus ævi noſtri novatores; 1694, 8vo. 2. Diſſertatio de Origine, Nomine, ac Religione, Maronitarum; 1679. In theſe works the author attempts to prove, that the Maronites have preſerved the genuine Chriſtian faith from the time of the apoſtles; and that they derive their name, not from John Maron, a monothelite, who died in 707, but from St. Maron, a celebrated anchorite, who lived towards the cloſe of the fourth century. It is remarked, however, by catholic critics, that the documents to which he appeals are not of a date ſufficiently ancient to be produced in evidence of the facts which he endeavours to eſtabliſh; that his principal authority is Thomas, a monothelite archbiſhop of Kfartab, who is ſaid to have lived about the eleventh century; and that the works of other authors, whom he cites, frequently refer to antiquity events which took place in their own time, or are evidently compiled from books of the Maronites written after their reconciliation with Rome. *Gen. Biog.*

NA'IS, one of the Oceanides, mother of Chiron or Glaucus by Magnes. *Apollod.* c. 9.—Alſo a nymph in an iſland of the Red Sea, who by her incantations turned to fiſhes all thoſe who approached her reſidence after ſhe had admitted them to her embraces. She was herſelf changed into a fiſh by Apollo. *Ovid. Met.* iv.

NA'IS, *ſ.* [from *naiad*, as inhabiting the water.] In helminthology, a genus of worms of the order molluſca. Generic Characters—Body creeping, long, linear, pellucid, and depreſſed; the peduncles or feet have ſmall briſtles on each ſide; it has no tentacula or feelers; ſometimes two eyes, and ſometimes without any. There are ten ſpecies; three of them common to the ſtagnant waters of our country, the others for the moſt part found on the ſhores of the North Seas; generally only a few lines long, and attached to the ſtalks of the aquatic plants. They are very harmleſs.

1. Nais vermicularis: lateral briſtles none; chin bearded. This little worm is found in ſtagnant waters, adhering to duck-weed in the manner repreſented on the annexed Plate at fig. 1. It is only about a quarter of an inch long, and is ſhown greatly magnified at fig. 2. The head is ſubclavate; it has no eyes; and the peduncles have five or ſix briſtles.

2. Nais ſerpentina: body ſerpentine, with red ſpiral inteſtines, and triple black collar. It inhabits Europe, in ſtagnant waters; is about an inch in length; the peduncles are warty, with three hooked briſtles. This ſpecies is repreſented at fig. 3. ſhowing the manner in which it twines round the tendrils of aquatic plants; the ſame, ſomewhat magnified, is ſhown at fig. 4. and greatly enlarged at fig. 5.

3. Nais proboſcidea: ſingle lateral briſtles, and a very long proboſcis. It inhabits clear ſtagnant waters, and is about three quarters of an inch long. It is ſhown of the natural ſize at fig. 6. and magnified at fig. 7. The body is hyaline, with a blackiſh flexuous inteſtine; the ſegments with a ſingle longiſh briſtle on each ſide. The head is forked, and armed with a mouth and tongue; the vent is terminal. It feeds on inviſible aquatic inſects.

4. Nais elinguis: ſingle lateral briſtles, and no proboſcis. It is met with in river-water; about half an inch long, and narrower than the laſt. The mouth is placed before, and is obtuſe; the vent is lateral.

5. Nais digitata: ſingle lateral briſtles, with a laciniate tail. It is found in ſtagnant waters, or the ſandy ſediment of rivers, with its head attached to the ſtalk of aquatic plants, and is not quite half an inch long. The body is marked with a reddiſh vein down the middle, and furniſhed beneath with a double row of very minute ciliate protuberances. It has no eyes; the tail is rounded, and furniſhed with ſix unequal retractile proceſſes.

6. Nais barbata: lateral briſtles faſciculate, and without a proboſcis. Found in the wet hollows of damp woods; not half an inch long; and is generally met with adhering to ſnails. The body in the lower part is furniſhed with hairs; the ſegments with four divergent briſtles on each ſide: it has two eyes.

7. Nais cæca: eyes none; lateral warts briſtly. Inhabits the Northern Seas, and is thought to be the ſame as the Nereis cæca; which ſee.

8. Nais littoralis: generally no lateral briſtles; but ſometimes they occur ſingle, double, or faſciculate. Found on the ſandy ſhores of Copenhagen. The body is long, filiform, equal, red, very fragile, and compoſed of numerous crowded annulations; the ſegments each furniſhed with a lateral briſtle.

9. Nais marina: body with ſingle lateral briſtles, and furniſhed with an extenſile tube. Found on the ſhores of Greenland, under marine confervæ; ſcarcely an inch long, and it reſembles the Nereis prolifera; which ſee. The body is of a whitiſh colour, with a yellowiſh-grey line down the middle: it has two eyes.

10. Nais quadricuſpidata: lateral warts bifid and briſtly; abdomen furniſhed with cirri; tail four-cleft. It inhabits the ſandy coaſts of Iceland, and is uſually found under ſtones; it is about two inches and a half long. The body is compoſed of 104 annular ſegments, ſometimes reddiſh, ſometimes of a reddiſh-grey, with a longitudinal purple line, which is of a ſtronger colour beneath; it is tapering towards both ends, and flatter beneath; has neither eyes nor feelers, and its tail ends in four proceſſes.

NA'ISSANT, *adj.* in heraldry. See vol. ix. p. 423.

NAISER'RA, a town of Hindooſtan, in Guzerat: thirty miles north-north-eaſt of Champaneer.

NA'ISSUS, in ancient geography, a town of Dardania, a diſtrict of Mœſia Superior, ſaid to be the birth-place of Conſtantine the Great, which ſeems probable from his often reſiding at that place. Now called *Niſſa*, a city of Servia. Lat. 43. N. lon. 23. E.

NAISTAN', a town of Perſia, in the province of Irak: eighty miles north of Iſpahan.

NAIVETE', *ſ.* [French.] Simplicity; ingenuouſneſs.—Is not that *naiveté* and good humour, which his admirers celebrate in him, owing to this, that he has continued all his days an infant, but one that unhappily has been taught to read and write? *Gray's Lett. to Beattie.*

Of the import of this word, having no correſponding one in our language, it is not eaſy to give a preciſe idea. It always expreſſes a diſcovery of character. M. Marmontel, who has given the beſt account of it, explains it thus: "That ſort of amiable ingenuity, or undiſguiſed openneſs, which ſeems to give us ſome degree of ſuperiority over the perſon who ſhows it: a certain infantine ſimplicity, which we love in our hearts, but which diſplays ſome features of the character that we think we could have art to hide; and which, therefore, always leads us to ſmile at the perſon who diſcovers this character."

NAI'WINCK, or Naiwyncx (Henry), a landſcape-engraver of conſiderable merit, who flouriſhed at Utrecht in the 17th century. He painted alſo; and in the cabinets of the connoiſſeurs of Holland are drawings in Indian-ink by this artiſt, which are performed with much care, and alſo with feeling and taſte. His reputation, however, was chiefly founded on his etching of landſcape. His works are faithful repreſentations of Nature; and the feeling and delicacy which every-where accompanies his etching-needle, has occaſioned his prints to be much ſought after both by artiſts and collectors. He always etched from his own pictures or drawings, and very rarely introduced any figures into his landſcapes.

NA'KA LA'KEM, a town of Mingrelia: twenty miles north-weſt of Cotatis.

To NAKE, or Na'ken, *v. a.* [benacan, Sax.] To make naked; to expoſe. *Not now in uſe. Huloet.*—Come, be ready, *nake* your ſwords. *Tourneur's Revenger's Tragedy.*

NA'KED, *adj.* [*naquath*, Goth. nacoð, Sax. from nacenneð, newly born. *Wachter.*] Wanting clothes; uncovered; bare.—A philoſopher, being aſked in what a wiſe man differed from a fool? anſwered, Send them both *naked* to thoſe who know them not, and you ſhall perceive. *Bacon.*

He pitying how they ſtood
Before him *naked* to the air, that now
Muſt ſuffer change;
As father of his family, he clad
Their nakedneſs with ſkins of beaſts. *Milton.*

Unarmed; defenceleſs; unprovided:

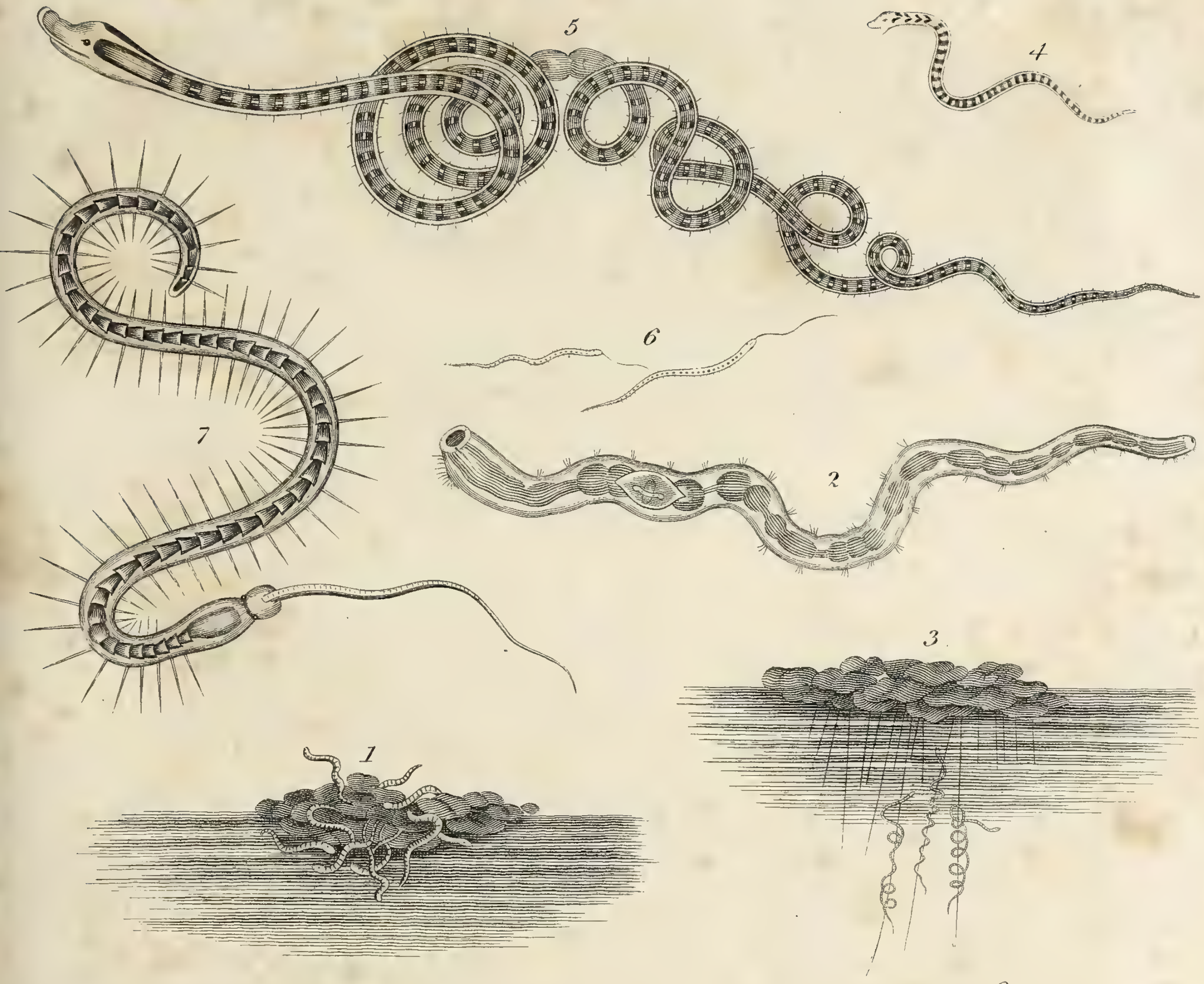
Had I but ſerv'd my God with half the zeal
I ſerv'd my king, he would not, in mine age,
Have left me *naked* to mine enemies. *Shakeſpeare.*

Plain; evident; not hidden; ["*nuda* veritas." Hor.]

The truth appears ſo *naked* on my ſide,
That any purblind eye may find out. *Shakeſpeare.*

Mere; bare; wanting the neceſſary additions; ſimple; abſtracted.—Not that God doth require nothing unto happineſs at the hands of men, ſaving only a *naked* belief, for

NAIS.



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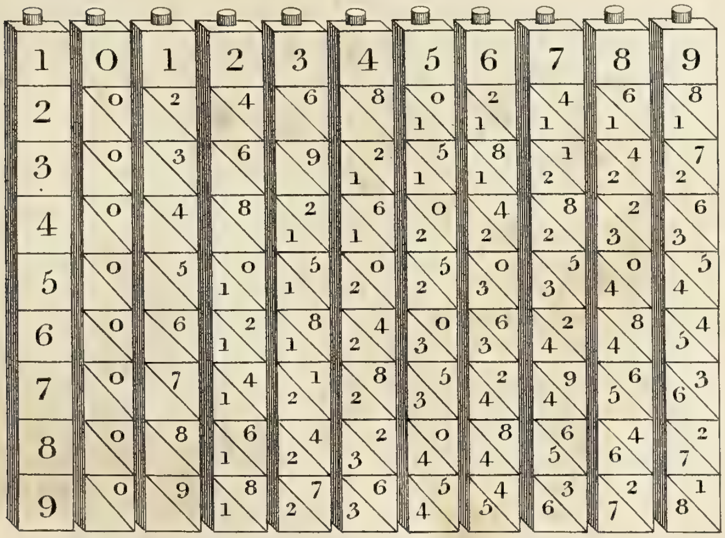

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5	0	5	1/0	1/5	2/0	2/5	3/0	3/5	4/0	4/5
6	0	6	1/2	1/8	2/4	3/0	3/6	4/2	4/8	5/4
7	0	7	1/4	2/1	2/8	3/5	4/2	4/9	5/6	6/3
8	0	8	1/6	2/4	3/2	4/0	4/8	5/6	6/4	7/2
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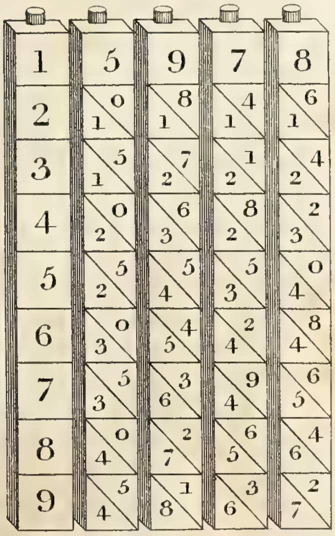

1	5	9	7	8
2	1/0	1/8	1/4	1/6
3	1/5	2/7	2/1	2/4
4	2/0	3/6	2/8	3/2
5	2/5	4/5	3/5	4/0
6	3/0	5/4	4/2	4/8
7	3/5	6/3	4/9	5/6
8	4/0	7/2	5/6	6/4
9	4/5	8/1	6/3	7/2

Pass sc.

1 to 7. Species of Nais. 8. 9. Napier's Bones.

Engraved for the Encyclopaedia Londinensis 1818.

for hope and charity we may not exclude; but that without belief all other things are as nothing, and it is the ground of thoſe other divine virtues. *Hooker.*

NA'KED LA'DIES. See COLCHICUM.

NA'KEDLY, *adv.* Without covering.—Numberleſs things, which we paſs by in their common dreſs, ſhock us when they are *nakedly* repreſented. *Burke's Vindic. of Nat. Society.*—Simply; merely; barely; in the abſtract.—Though ſeveral ſingle letters, *nakedly* conſidered, are found to be articulations only of ſpirit or breath, and not of breath vocalized; yet there is that property in all letters of aptneſs to be conjoined in ſyllables. *Holder.*—Diſcoverably; evidently.—Truth ſeeketh no holes to hide itſelf: Princes, that will hold covenant, muſt deal openly and *nakedly. Fuller's Holy War.*

So blinds the ſharpeſt councils of the wiſe
This overſhadowing Providence on high,
And dazzleth all their cleareſt-ſighted eyes,
That they ſee not how *nakedly* they lie. *Daniel.*

NA'KEDNESS, *ſ.* [naceꝺnẏꞅꞅe, Sax.] Nudity; want of covering.—I entreat my gentle readers to ſow on their tuckers again, and not to imitate the *nakedneſs*, but the innocence, of their mother Eve. *Addiſon's Guardian.*

Nor he their outward only with their ſkins
Of beaſts, but inward *nakedneſs*, much more
Opprobrious! with his robe of righteouſneſs
Arraying, cover'd from his father's ſight. *Milton.*

Want of proviſion for defence.—Ye are ſpies; to ſee the *nakedneſs* of the land ye are come. *Gen.* xlii. 9.—Plainneſs; evidence; want of concealment.—The *nakedneſs* of which opinion will not permit me to look any longer thereupon. *Spencer on Prodigies.*

Why ſeekeſt thou to cover with excuſe
That which appears in proper *nakedneſs*? *Shakeſpeare.*

NA'KEL, a town of the duchy of Warſaw: forty miles north-north-weſt of Gneſna.

NAK'ELO. See NACHELO, p. 501.

NAKGIVAN', a town of Perſia, in the province of Arokhage: thirty miles ſouth-ſouth-weſt of Arokhage.

NAKI'A, a town of Syria: ten miles north of Acre.

NA'KIB, *ſ.* The name of an officer who is a deputy to the *eadiliſkier*, or, as he may be called, the lord high chancellor of Egypt, appointed by the grand ſignior. His office is to carry the ſtandard of Mahomet. *Chambers.*

NAK'KILA, a town of Sweden, in the province of Abo: ten miles ſouth-ſouth-eaſt of Biorneborg.

NA'KLO, a town of the duchy of Warſaw: thirty-ſix miles north-north-weſt of Gneſna.

NA'KOUS, *ſ.* An Egyptian muſical inſtrument, made like two plates of braſs, and of all ſizes, from two inches to a foot in diameter; they hold them by ſtrings faſtened to their middles, and ſtrike them together ſo as to beat time. They are uſed in the Coptic churches and in the Mahometan proceſſions. *Chambers.*

NA'KRA, a town of Perſia, in the province of Choraſan: nine miles north-eaſt of Herat.

NAK'RASH, a town of Egypt, on a canal formed from the Nile to the lake Maræotis: ten miles north-weſt of Shabur.

NAK'VAY, a town of Africa, in the kingdom of Yani.

NA'LA SUN'KRA, a branch of the Indus, which divides from the main ſtream fourteen miles ſouth-weſt of Nuſſerpour, and runs into the ſea thirty miles weſt of Boogebooge.

NALABOO', a ſea-port on the weſt coaſt of Sumatra. Lat. 4. 16. N. lon. 95. 5. E.

NALADI'DY, a town of Hindooſtan, in Marawar: thirty-five miles north-weſt of Ramanadporum.

NAL'DA, a town of Spain, in Old Caſtile: three miles ſouth of Logrono.

NALDOUROU'K, a town of Hindooſtan, in Dowlatabad: 120 miles weſt of Hydrabad, and ſeventy-ſix eaſt of Viſiapour. Lat. 17. 27. N. lon. 76. 45. E.

NALIBO'KI, a town of Lithuania: twenty-five miles north-eaſt of Novogrodek.

NALIKAN', a town of Aſiatic Turkey, in the province of Natolia: thirty-two miles eaſt of Eſki-Shehr.

NALL, *ſ.* An awl, ſuch as collar-makers or ſhoemakers uſe:

Whole bridle and ſaddle, whitleather and *nall*,
With collars and harneſs. *Tuſſer.*

NALLABI'GA, a town of Hindooſtan, in Bahar: thirty-three miles ſouth weſt of Bahar.

NALLACON'D, a town of Hindooſtan, in Golconda: twenty-one miles ſouth of Combamet.

NALLAGUN'GE, a town of Bengal: ſix miles ſouth-weſt of Chilmary.

NALLIE'RES, a town of France, in the department of the Vendée: ſix miles eaſt of Luçon.

NA'LUS, a country and people of Africa, between the rivers Nuno, Triſtao, and Rio-Grande, bordering on the country of Sierra Leona, not far from the Atlantic, between lat. 10. and 11. N.

NA'LON, a river of Spain, which runs into the Pravia two miles ſouth of Oviedo.

NALUGU', *ſ.* in botany. See ARALIA, and LEEA ſambucina.

NA'MA, *ſ.* [of Pliny and Theophraſtus, ſignifying a ſtream or ſpring of water.] In botany, a genus of the claſs pentandria, order digynia, natural order of ſucculentæ, (convolvuli, *Juſſ.*) Generic Characters—Calyx: perianthium one-leafed, five-parted, permanent; ſegments lanceolate, acute, ſtraight, ſomewhat ſpreading. Corolla: one-petalled, wheel-ſalver-ſhaped; tube ſhort; border five-parted; ſegments ovate, obtuſe, the length of the calyx. Stamina: filaments five, filiform, ovate at the baſe, inſerted into the middle of the tube of the corolla, alternate with and ſhorter than the ſegments; antheræ oblong, bifid at the baſe, revolute, incumbent. Piſtillum: germen ovate, ſuperior; ſtyles two, capillary, erect, the length of the ſtamens; ſtigmas capitate. Pericarpium: capſule ovate-oblong, blunt, compreſſed, grooved on each ſide, two-celled, two-valved, ſhorter than the calyx. Seeds: numerous, very ſmall, faſtened to a flat receptacle in the middle of the partition.—*Eſſential Character.* Calyx five-leaved; corolla five-parted; capſule one-celled, two-valved.

Nama Jamaicenſis, the only ſpecies now retained. It has an herbaceous ſtem, from two inches to half a foot in length, ſubdivided, procumbent, pubeſcent, tender, three-winged from the decurrent petioles. Branchlets from the axils of the leaves, procumbent. Leaves oppoſite, wedge-ſhaped at the baſe, ovate-roundiſh, entire, pubeſcent. Flowers axillary, two to four, in cluſters, ſmall, white, on ſhort peduncles. Capſule oblong, blunt, four-cornered, acuminate, one-celled, two-valved; containing many, minute, roundiſh, brown, ſeeds. According to Gærtner, the capſule is roundiſh (teretiuſcula), marked with a groove on each ſide, two-celled, two-valved, the valves when ripe becoming bifid; ſeeds ſubglobular, ſmall, ſcrobiculate, or ſtriated lattice-wiſe. Browne ſays, that this little plant ſpreads about the root, and ſeldom grows above five or ſix inches in height; that the whole of it is ſomewhat hairy, with the ſtalk and branches margined. It is an annual plant, native of Jamaica, in cultivated grounds, and ruins of rocks.

NA'MA ZEYLAN'ICA. See HYDROLEA Zeylanica, vol. x.

NAMACU'L, a town of Hindooſtan, in the Barramaul: country: forty-two miles ſouth of Darempoury, and ſixty-two eaſt-north-eaſt of Coimbetore. Lat. 11. 22. N. lon. 78. 5. E.

NAMAGANG', a ſmall iſland in the Eaſtern Indian Sea. Lat. 6. 45. S. lon. 132. E.

NAMAN'DA, a town of Japan, in the iſland of Niphon: thirty-two miles ſouth-ſouth-weſt of Iga.

NAMAQUA'S, a people of Africa, near the weſt coaſt, north of the Cape of Good Hope.

NAMAS'KET, a river of Connecticut, which runs into Narraganſet-bay.

NAMAS'KET. See MIDDLEBOROUGH.

NAMA'TION, *ſ.* [*namatio*, Lat.] In law, the act of diſtraining, or taking a diſtreſs. See NAAM. In Scotland the word is particularly uſed for impounding.

NAMBAL'LA, a town of Peru, in the audience of Quito: forty miles north-weſt of Jaen de Bracamoros.

NAM'BE, a town of New Mexico: forty miles north of Santa Fé.

NAMBIOO'R, a town of Hindooſtan, in Myſore: twenty miles weſt of Erroad.

NAMBU', a ſeaport of Japan, on the eaſt coaſt of the Iſland of Niphon: two hundred miles north of Jeddo. Lat. 38. 58. N. lon. 142. 20. E.

NAM'BY-PAM'BY, *adj.* Having little affected prettineſſes. *Aſh.*—A cant term, or rather a term of contempt. *Todd.*

NAMDO', an iſland in the Baltic, near the eaſt coaſt of Sweden. Lat. 59. 55. N. lon. 18. 10. E.

NAME, *ſ.* [*namo*, Goth. nama, Sax. *naem*, Dut.] The diſcriminative appellation of an individual.—He called their *names* after the *names* his father had called them. *Gen.* xxvi. 18.

Thouſands there were in darker fame that dwell,
Whoſe *names* ſome nobler poem ſhall adorn. *Dryden.*

Proper names, with us, are either called *Chriſtian-names*, as being given at baptiſm; or *ſirnames*, from the *ſire*, or father. Of the diſtinction between *ſir-names* and *ſur-names*, we ſhall ſpeak farther on.

Originally, every perſon had but one name; as among the Jews, *Adam*, &c. among the Egyptians, *Buſiris;* among the Chaldees, *Ninus;* the Medes, *Aſtyages;* the Greeks, *Diomedes;* the Romans, *Romulus;* the Gauls, *Divitiacus;* the Germans, *Arioviſtus;* the Britons, *Caſſibelan;* the Engliſh, *Hengiſt*, &c. And thus of other nations, except the ſavages of Mount Atlas, whom Pliny and Marcellinus repreſent as *anonymi*, "nameleſs." And Lichtenſtein, a late traveller into Southern Africa, aſſerts poſitively, that the Boſjeſmans have no names, and ſeem not to feel the want of ſuch a means of diſtinguiſhing one individual from another. This circumſtance, which, without the moſt expreſs teſtimony, we could not have believed, is doubtleſs quite ſingular. We thought, till now, that the profound obſervation with which the king of Pheacia begins his diſcourſe to Ulyſſes, "That every man has a name," was one of thoſe ſound maxims which was never to be controverted.

The Jews gave the name at the circumciſion, viz. eight days after the birth: the Romans, to females the ſame day, to males on the ninth; at which time they held a feaſt, called *nominalia.*

The firſt impoſition of names was founded on different views, among different people; the moſt common was to mark the good wiſhes of the parents, or to entitle the children to the good fortune a happy name ſeemed to promiſe. Hence, *Victor, Caſtor, Fauſtus, Statorius, Probus*, &c. Accordingly, we find ſuch names, by Cicero called *bona nomina*, and by Tacitus *fauſta nomina*, were firſt enrolled and ranged in the Roman muſters; firſt called to ſerve at the ſacrifices, in the foundation of colonies, &c. And, on the contrary, Livy calls Atrius Umber, *abominandi omnis nomen;* and Plautus, on occaſion of a perſon named *Lyco*, i. e. Greedy Wolf, ſays:

Voſmet nunc facite conjecturam cæterum
Quid id ſit hominis, cui Lyco *nomen ſiet.*

Hence, Plato recommends it to men to be careful in giving happy names; and the Pythagoreans taught expreſsly, that the minds, actions, and ſucceſſes, of men, were according to their names, genius, and fate. Thus Panormitan, *ex bono nomine oritur bona præſumptio;* and the common proverb, *Bonum nomen, bonum omen;* and hence the foundation of the *onomomantia*, or the art of divining the good or evil fortune which ſhall befall a man, from the letters of his name. One of the greateſt rules of onomancy among the Pythagoreans, was, that an even number of vowels in a name, ſignified an imperfection in the left ſide of a man, and an odd number in the right. Another rule, about as good as this, was, that thoſe perſons were the moſt happy, in whoſe names the numeral letters, added together, made the greateſt ſum; for which reaſon, ſay they, it was, that Achilles vanquiſhed Hector; the numeral letters in the former name amounting to a greater number than the latter. And it was, doubtleſs, from a principle much of the ſame kind, that the young Romans toaſted their miſtreſſes at their meetings as often as there were letters in their names. Thus Martial: "Nævia ſex cyathis, ſeptem Juſtina bibatur."

The Romans paid particular regard alſo to lucky and unlucky names; at public luſtrations, the perſons who brought the victims were required to have *bona nomina*, fortunate names; and regard was had to the ſame circumſtance in raiſing their levies: eſpecial care was taken that the firſt man who enrolled himſelf ſhould have a name of good augury; and the cenſors, in taking the cenſus of the citizens, always began with a fortunate name, ſuch as *Valerius, Salvus*, &c. and in the abjudication of public property, they began with ſome that had a fortunate appellation, *boni ominis ergo.* Feſtus relates, that the ſcrupulous regard to names of good and bad omen was ſo minute and exceſſive among the Romans, that the women, during their pregnancy, offered ſacrifices to the goddeſs Egeria, becauſe the name Egeria had a cloſe relation to child-delivery, "quod eam putarent facile fœtum alvo *egerere.*" When Julia, the wife of the emperor Severus, had rendered herſelf infamous by her debauched and profligate courſe of life, her huſband conſoled himſelf for his miſfortune, by his belief that her name was one of bad omen; all who had borne this name, in his opinion, having been remarkable for looſe and lewd manners. This idea is purſued in an admirable vein of irony by Sterne in his Triſtram Shandy.

The abbé Barthelemi (Travels of Anacharſis, vol. v.) mentions it as a circumſtance worthy of attention, that the greater part of names found in Homer are marks of diſtinction. They were given in honour of the qualities moſt eſteemed in the heroic ages. From the word *polemos*, which ſignifies "war," have been formed Tlepolemus and Archepolemus, the names of two heroes mentioned in the Iliad. The former name ſignifies "able to ſupport," and the latter, "able to direct, the labours of war." By adding to the word *mache*, or "battle," certain prepoſitions and different parts of ſpeech, which modify the ſenſe in a manner always honourable, are compoſed the names Amphimachus, Antimachus, Promachus, Telemachus, &c. Proceeding in the ſame way, with the word *honorea*, "ſtrength or intrepidity," they formed the names Agapenor, "he who eſteems valour;" Agenor, "he who directs it." From *thoes*, "ſwift," are derived, Alcathoes, Panthoes, Perithoes, &c. From *nous*, "mind or intelligence," come Aſtynoes, Arſinoes, Autenoes, &c. From *medes*, "counſel," Agamedes, Eumedes, Lycomedes, Thraſymedes; and from *clios*, "glory," Amphicles, Agacles, Iphicles, Patroclus, Cleobulus, with many others.

Hence Camden takes it for granted, that the names, in all nations and languages, are ſignificative, and not ſimple ſounds for mere diſtinction's ſake. This holds not only among the Jews, Greeks, Latins, &c. but even the Turks; among whom, *Abdalla* ſignifies God's Servant, *Soliman*, Peaceable; *Mahomet*, Glorified, &c. and the ſavages of Hiſpaniola, and throughout America, who, in their languages, name their children, *Gliſtering, Light, Sun, Bright, Fine, Gold*, &c. and they of Congo, by the names of precious ſtones, flowers, &c.

The ancient Britons, Camden ſays, generally took their names from colours, (becauſe they painted themſelves;) which names are now loſt, or remain hid among the Welſh. When they were ſubdued by the Romans, they took Roman names, ſome of which ſtill remain corrupted; though the greateſt part became extinct upon the admiſſion of the Engliſh Saxons, who introduced the German names, as Cridda, Penda, Oſwald, Edward, &c. The Danes, too, brought with them their names; as Suayne, Harold, Knute, &c. The Normans, at the Conqueſt, brought in other German names, as originally uſing the German tongue; ſuch as Robert, William, Richard, Henry, Hugh, &c. after the ſame manner as the Greek names Aſpaſius, Boethius, Symmachus, &c. were introduced into Italy upon the diviſion of the empire. After the Conqueſt, our nation, which had ever been averſe to foreign names, as deeming them unlucky, began to take Hebrew names; as, Matthew, David, Sampſon, &c. The various names anciently or at preſent obtaining among us, from what language or people ſoever borrowed, are explained by Camden in his Remains.

It has obtained among us to give ſurnames for Chriſtian names; which ſome diſlike, on account of the confuſion it may introduce. Camden relates it as an opinion, that the practice firſt began in the reign of Edward VI. by ſuch as would be godfathers, when they were more than half-fathers. Upon which ſome were perſuaded to change their names at confirmation; which, it ſeems, is uſual in other countries. Thus, two ſons of Henry II. of France, chriſtened Alexander and Hercules, changed them at confirmation into Henry and Francis. In monaſteries, the religious aſſume new names at their admittance, to ſhow they are about to lead a new life, and have renounced the world, their family, and even their name; as, Siſter Mary of the Incarnation, Brother Henry of the Holy Sacrament, &c. The popes alſo changed their names at their exaltation to the pontificate; a cuſtom firſt introduced by Sergius, whoſe name till then, as Platina informs us, was *Swine's-ſnout*. But Onuphrius refers it to John XII. or XIII. and at the ſame time adds a different reaſon for it from that of Platina, viz. that it was done in imitation of St. Peter and St. Paul, who were firſt called *Simon* and *Saul.*

Among the ancients, thoſe deified by the heathen conſecrations had new names given them; as Romulus was called *Quirinus;* Melicertes, *Portumnus*, &c. New names were alſo given in adoptions, and ſometimes by teſtament: thus L. Æmilius, adopted by Scipio, took the name of *Scipio Africanus;* and thus Auguſtus, who was at firſt called *C. Octavius Thurinus*, being adopted by the teſtament of Julius Cæſar into his name and family, took the name of *Caius Julius Cæſar Octavianus.*

Names were alſo changed at enfranchiſements into new cities. Thus Lucumo, at his firſt being made free of Rome, took the name of *Lucius Tarquinius Priſcus*, &c. and ſlaves, when made free, uſually aſſumed their maſter's names. Thoſe called to the equeſtrian order, if they had baſe names, were always new named. And among the primitive Chriſtians, it was the practice to change the names of the catechumens. Thus the renegado Lucianus, till his baptiſm, was called *Lucius.*

Toward the middle of the fifteenth century, it was the fancy of the wits and learned men of the age, particularly in Italy, to change their baptiſmal names for claſſical ones. As Sannazarius, for inſtance, who altered his own plain name Jacopo to *Actius Syncerus.* Numbers did the ſame; and among the reſt Platina the hiſtorian at Rome, who, not without a ſolemn ceremonial, took the name of *Callimachus* inſtead of Philip. Pope Paul II. who reigned about that time, unluckily chanced to be ſuſpicious, illiterate, and heavy of comprehenſion. He had no idea that perſons could wiſh to alter their names unleſs they had ſome bad deſign, and actually ſcrupled not to employ impriſonment and other violent methods to diſcover the fancied myſtery. Platina was cruelly tortured on this frivolous account: he had nothing to confeſs; ſo the pope, after endeavouring in vain to convict him of hereſy, ſedition, &c. releaſed him after a long impriſonment.

That names were originally aſſumed from accidental, and often from ludicrous, circumſtances, may be inferred from the practice of what we may call modern nations in their infancy. Thus among the chiefs of Canada Indians, who joined the Britiſh army during the ſhort conteſt with America in 1812, we find ſuch names as Marplot, Walk-in-the-Water, Split-log, &c.

"Our name," ſays the blind Metcalf, (ſee vol. xv. p. 246.) "came by a noble vigorous action in former times. It is ſuppoſed that England was in that remote period almoſt covered with wood, and that there was a great many wild creatures in the wood; and that what men were therein, were without name. Two being together, they ſaw a red four-footed creature; they could not imagine what it was. One ſaid, Have you not heard of lions being in theſe woods? He anſwered he had, but never had ſeen any ſuch thing. So they conjectured that that was one which they ſaw. The creature advanced a few paces towards them. One of the men ran away; the other determined to meet it. Now, the animal happened to be neither more nor leſs than a red calf: ſo he that met it got the name of *Metcalf;* and he that ran away got the name of *Lightfoot.*

The four chief counſellors of the empire of Mexico, ſays Dr. Robertſon, were diſtinguiſhed by names which could have been aſſumed only by a people who delighted in blood: the firſt was called the Prince of the Deathful Lance; the ſecond, the Divider of Men; the third, the Shedder of Blood; the fourth, the Lord of the Dark Houſe.

It ſoon became neceſſary to add to the baptiſmal name a *ſurname*, for the purpoſe of better diſcriminating perſons and families. This was originally diſtinguiſhed from *ſirname*, which denotes the name of the *ſire* or progenitor. Thus Macdonald, Robertſon, are *ſirnames*, expreſſing the Son of Donald, the Son of Robert. But the word *ſurname* ſignified ſome name ſuperadded to the proper name to diſtinguiſh the individual, as Artaxerxes *Longimanus*, Harold *Harefoot*, Malcolm *Canmore.* From this it is evident that every ſirname was a ſurname, though the reverſe was not ſo. In modern times they are confounded; and Dr. Johnſon has rejected the word *ſirname* altogether; but Dr. Blair (in his Chronological Tables) retains it, uſing it preciſely in that ſituation where *ſurname* would be proper; as, Ptolemy, ſirnamed (ſurnamed) Philometor, &c. &c.

Surnames were introduced among all nations at an early period, and ſeem to have been formed at firſt by adding the name of the father to that of the ſon. This was the practice among the Hebrews, as appears from the ſcriptures. Caleb is denominated the Son of Jephunneh, and Joſhua the Son of Nun. That the ſame thing was cuſtomary among the Greeks, every one who has read the poems of Homer muſt remember. We have an inſtance of it in the very firſt line of the Iliad: Αχιλληος Πηληιαδεω, "Achilles the Son of Peleus." This is perhaps the general origin of ſurnames, for it has been common among moſt nations. Thus the old Normans uſed *Fitz*, which ſignifies ſon; as Fitzherbert, Fitzſimmons, the ſon of Herbert, the ſon of Simmons. The Iriſh uſed *O;* as O'Neal, the ſon of Neal. The Scotch Highlanders employed *Mac;* as, Macdonald, the Son of Donald; Mac Lean; "the ſon of a lean man;" but never Mac Fat. The Saxons added the word *ſon* to the end of the father's name, as, Williamſon.

The Romans generally had three names. The firſt, called *prænomen*, anſwered to our Chriſtian-name, and was intended to diſtinguiſh the individuals of the ſame family; the ſecond, called *nomen*, correſponded to the word *clan* in Scotland, and was given to all thoſe who were ſprung from the ſame ſtock; the third, called *cognomen,*

nomen, expreſſed the particular branch of the tribe or clan from which an individual was ſprung. Thus, Publius Cornelius Scipio: *Publius* correſponded to our names John, Robert, or William; *Cornelius* was the name of the clan or tribe, as Campbell was formerly the name of all the duke of Argyle's clients, and Douglas the name of the retainers of the duke of Hamilton's progenitors. *Scipio* being added, conveyed this information, that Publius, who was of the tribe of the Cornelii, was of the family of the Scipios, one of the branches or families into which that tribe was divided. Reſpecting the three names which were common among the Romans, we may ſay that the firſt was a name, and the other two ſurnames.

In theſe, too, they have been imitated by later times: thus, in our Engliſh Hiſtory, we find that Edgar was called the Peaceable; Ethelred, the Unready; Edmund, Ironſide; Harold, Harefoot; William, the Baſtard; Henry I. Beauclerk; John, Lackland, &c. But, as theſe names were never borne by the ſons, Camden, and others, think it ſtrange, that *Plantagenet* ſhould be accounted the ſurname of the royal family of England till Henry VII. or *Tydur*, or *Tudor*, that from Henry VII. to king James I. or that of *Steward*, or *Stuart*, from king James I. to king George I. or that *Valois* ſhould be eſteemed the ſurname of the late family of French kings, or *Bourbon* of the preſent; or *Oldenburg* of the kings of Denmark; or *Hapſburg* of the emperors of Germany.

Du Cheſne obſerves, that ſurnames were unknown in France before the year 987, when the lords began to aſſume the names of their demeſnes. Camden relates, that they were firſt taken up in England, a little before the Conqueſt, under king Edward the Confeſſor; but he adds, they were never fully eſtabliſhed among the common people, till the time of Edward II. Till then they varied with the father's name; if the father, e. g. was called *Richard*, or *Roger*, the ſon was called *Richardſon*, *Rogerſon*, or *Hodgſon*; but from that time they were ſettled, ſome ſay, by act of parliament. The oldeſt ſurnames are thoſe we find in Domeſday Book, moſt of them taken from places, with the addition of *de;* as, Godefridus *de* Mannevilla, Walterus *de* Vernon, Robert *de* Oyly, &c. Others from their fathers, with *filius*, as Guilelmus *filius* Oſberni; others from their offices, as Eudo *Dapifer*, Guilelmus *Camerarius*, Giſlebertus *Cocus*, &c. But the inferior people are noted, ſimply, by their Chriſtian names; without any ſurnames at all.

It was an ancient cuſtom in England, that clergymen ſhould take their ſurnames from the place where they were born, not regarding the name of their father; and, among monks and friars, this continued till the ſuppreſſion of the abbeys. Thus William Wickham, biſhop of Wincheſter, was the ſon of one Perot, and called by the name of the place where he was born; and his ſucceſſor, William Wainfleet, was the ſon of one Patyn. Thomas Rotherham, archbiſhop of York, was the ſon of Scot. Simon Sudbury, archbiſhop of Canterbury, was the ſon of one Tybald, a gentleman of Sudbury in Suffolk; Richard Bury, biſhop of Durham, was the ſon of ſir Richard Angerville, of Bury St. Edmund's; and John de Baconſthorpe, a carmelite, ſtyled alſo Reſolutus, was the ſon of ſir Henry Bacon, of Baconſthorpe in Norfolk. *Harleian MSS.* 980.

Surnames ſeem to have been introduced into Scotland in the time of William the Conqueror, by the Engliſh who accompanied Edgar Atheling when he fled into that kingdom. Theſe had their proper ſurnames, as Moubray, Lovell, Liſle, uſing the particle *de* before them; which makes it probable that theſe ſurnames had been derived from the lands which their anceſtors or they themſelves had poſſeſſed. In Kenneth II's time, in 800, the great men had indeed begun to call their lands by their own names; but the ordinary diſtinctions then uſed were only perſonal, and did not deſcend to ſucceeding generations, ſuch as thoſe employed by the Hebrews and Greeks; for example, *John the ſon of William:* or the names of office, as *Stewart;* or accidental diſtinctions from complexion or ſtation, as *Black*, *White*, *Long*, *Short;* or the name of their trade, as *Tailor*, *Weaver*, &c.

It was long before any ſurnames were uſed in Wales, except that of *ſon*, as Evan *ap* Rice, Evan the ſon of Rice; Evan *ap* Howel, Evan the ſon of Howel, but many of them have at length formed ſeparate ſurnames, as the Engliſh and Scots, by leaving out the *a* in *ap*, and joining the *p* to the father's name: thus Evan ap Rice becomes Evan Price; Evan ap Howel, Evan Powel. We are told, ſurnames were unknown in Sweden till the year 1514; and that the common people of that country uſe none to this day; and that the ſame is the caſe with the vulgar Iriſh, and the Poles and Bohemians.

When we come to inquire into the etymology of ſurnames, we muſt allow that many of them were originally ſignificant in the qualities of mind, as Bold, Hardy, Meek; ſome of the qualities of body, as Strong, Low, Short; others expreſſive of the trade or profeſſion followed by the perſons to whom they were applied, as Baker, Smith, Wright; Butler, Page, Marſhal. But the greateſt number, at leaſt of the ancient ſurnames, were borrowed from the names of places. Camden ſays, that there is not a village in Normandy but has given its name to ſome family in England. He mentions as examples, Percy, Devereux, Tankervil, Mortimer, Warren, &c. They were introduced with William the Conqueror. Several have been derived from places in the Netherlands, as Gaunt, Tournay, Grandiſon; and many from the names of towns and villages in England and Scotland, as Wentworth, Markham, Murray, Aberdeen. Many have been formed from the names of animals, as Lamb, Kid, Colt, Bullock, Goſling, Cock, Dove, Partridge; others from country occupations; as Shepherd, Cowherd, Farmer, Plowman, Gardener: many from grain, trees, plants, and flowers; as Corn, Oats, Aſh, Birch, Broom, Ivy, Violet, Lilly, Primroſe: ſome from fruits; as Cherry, Strawberry, Nut, Haws, Sweetapple, Crab; others from the water; as Lake, Pool, Ford, Rivers, Brooks: and ſeveral from the nature or diſtribution of the ground; as Hill, Dale, Heath, Wood, Greenwood, Lane, Hedges, Acres, Meadows, Townſend, &c. "Thus did our ancient families diſtinguiſh themſelves by appellations which betokened induſtry, innocence, and independency; and which bore ſome relation to either their lands, their ſeats, or their buſineſs. If moſt of the flouriſhing modern familes, who haunt the town, were to copy after our predeceſſors in this reſpect; many, who might be ambitious of being known by the particular arts of life they cultivated, or might be proud of ſignifying to poſterity by what induſtry they happened to thrive in the world, would not be thought to arrogate by appropriating to themſelves the genteel names of Dice, Hazard, Piquet, Whiſt, Baſſet, Punter, Maſker; Gameſter, likewiſe, and Sharper, are no diſreputable nor improper titles, with a handſome equipage; and, if any gentleman of the induſtrious tribe ſhould have a particular fondneſs to a rural denomination, he may borrow, from a country-animal, the ſurname of Setter." Free-Thinker, N°. 120. May 15, 1719.

The ſubject of ſurnames is treated much at length in the New Monthly Magazine, vol. i. and iii. where they are diſtributed into eighteen claſſes, according to the objects they are derived from. And in the Britannic Magazine, vol. x. there are ſome facetious remarks, with which we ſhall conclude this fanciful article.

"As men now take the names of their parents, without taking their manners, qualities, or profeſſions, a number of very incongruous appellations will offer themſelves to the recollection of every one. Have we not ſeen a tame, meek, ſweet-tempered, lady, falſely and erroneouſly called Mrs. Fury? Mrs. Lamb often beats her huſband! Then there is Mr. Croſs, the mildeſt man in the world. Mr. King is a poor ſubject. Mr. Prince lives in a lodging, without guards and attendants. Mr. Goodchild broke his father's heart. Mrs. Thorogood is a name utterly unfit for the probationary ſtate of us poor mortals; and Mr. Dogood never troubled himſelf about benefiting any-body. Mrs. Clackitt has been dumb from her infancy; while Mrs. Mum ſtuns the company with her redundancy of words.

"How often have we ſeen men of the name of Tailor, ſhoemakers by trade—ſtrange abſurdity! However, Mr. Proudfoot is allowed to be an excellent bootmaker. The Miſſes Lovejoy are the dulleſt old maids in the univerſe. Mrs. Sable never wore mourning above once in her life. Mrs. Simper always frowns; Miſs Raven ſings like a nightingale; Mr. Bloom is a ſwarthy Creole; and Mrs. Nield never prays. Mr. Popwell never fired a gun. Mr. Barwell ſhould have been an ironmonger inſtead of a nabob; but, if he was originally a waiter at a tavern, the name is not amiſs, as it may remind him of former times. Mr. Street lives in a court. Mr. Foot cannot ſtand. Mr. Golightly is very luſty. Mr. Hazard never games. Mr. Pye ſhould have been a paſtry-cook inſtead of poet-laureat. Mr. Suett ought to have been a butcher inſtead of an actor. Mr. Goodluck has had various misfortunes. There is a grocer named Pickle; Mrs. Coates very properly keeps a habit-warehouſe; and Mr. Ganer got rich by his piano-fortes. Mr. Prettiman is deformed. Mr. Brewer is a baker. Mr. Baker is a mercer. Mr. Witworth never ſaid a good thing. Mr. Bent is as ſtraight as any man in Europe. Miſs Prim is all eaſe and elegance. Mr. Prig is a plain unaffected man. Mr. Page is illiterate. Mr. Criſp is as tough as hemp. Mr. Stone ſhould have been a maſon. Mr. Shepherd has no cattle to take care of. Mr. Diamond is an actor. Mr. Maſon was an admirable poet. What incongruities! Miſs Piper has no ear for muſic. Miſs Joiner is a ſawyer's daughter. Mrs. Beard is bald. Mrs. Singer cannot turn a tune. Mrs. Peacock warbles inimitably. Miſs Tombs hates the idea of a church-yard, &c. &c. &c.

"*Blackwell*, however, has been famous for theſe fifty years as the beſt maker of *printers' ink* in London. There was one *Cooper*, but he was not fit to make *tubs* for the other's ink. As for *Greyham*, his *black* ink was very apt to turn *yellow*. Some printers are *cunning* enough to make their own ink: one of theſe is *Ben-Sly*.

"*Hazard* is an excellent name for a lottery-office keeper; ſuch as depend upon *Goodluck* will ſeldom be *Wright*. Even *Pope* is not infallible.

"Mr. *Allchin*, who lives not a hundred miles from Warwick-lane, has certainly much degenerated from his anceſtors, and would be better deſignated by the name of *Smallchin*.—Mr. *Servant*, his neighbour, is aſhamed of his origin, and chooſes to be called *Servánt*. Yet the addition of an *e (Servante)* denotes a deſcent from a French abigail.—Some of the *Smiths* forge their names into *Smythe;* and *Anvil* is poliſhed into *Envil*, or *Enville*.—Yet we have ſtill *Anneſs*, which ſignifies a *ſhe-aſs*, in Cheapſide; and almoſt oppoſite, two partners of the name of *Idle* ſtare us in the face; how elegantly and claſſically might this be changed into *Idyl!*

"Alas! the names of places want reformation too; for *Cheapſide* is a very dear place; *Fetter-lane* is within the freedom of the city; *Angel-court, Nightingale-lane*, certainly is not the moſt angelic or melodious place in the world; the *Serpentine-river* is perfectly ſtraight; a court, with perhaps more angles than any other in the metropolis, is called *Round-court;* a cinder-heap at the bottom of Gray's-Inn-lane, *Mount Pleaſant;* a dirty lane, ſo narrow that there is hardly room to turn a wheelbarrow in it, is baptiſed *Weſton Park;* a croſs ſtreet in the city, containing ſix or eight houſes, *Tower Royal;* and the rage for imitating the French has given the name of *Thanet Place* to a little court in the Strand. *Jokes upon Names;* Britannic Mag. Aug. 1803.

NAME, *ſ.* The term by which any kind of ſpecies is diſtinguiſhed.—If every particular idea that we take in ſhould have a diſtinct *name*, *names* muſt be endleſs. *Locke.*

What's in a *name?* That which we call a roſe,
By any other *name* would ſmell as ſweet. *Shakeſpeare.*

Perſon:

They liſt with women each degenerate *name*
Who dares not hazard life for future fame. *Dryden.*

Reputation; character.—The king's army was the laſt enemy the weſt had been acquainted with, and had left no good *name* behind. *Clarendon.*—Renown; fame; celebrity; eminence; praiſe; remembrance; memory; diſtinction; honour.—Viſit eminent perſons of great *name* abroad; to tell how the life agreeth with the fame. *Bacon's Eſſays.*—Bartolus is of great *name;* whoſe authority is as much valued amongſt the modern lawyers, as Papinian's was amongſt the ancients. *Baker on Learning.*

What men of *name* reſort to him?
Sir Walter Herbert, a renowned ſoldier;
And Rice ap Thomas with a valiant crew,
And many others of great *name* and worth. *Shakeſp.*

Here reſt thy bones in rich Heſperia's plains,
Thy *name*, 'tis all a ghoſt can have, remains. *Dryden.*

A hundred knights
Approv'd in fight, and men of mighty *name*. *Dryden.*

Power delegated; imputed character.—In the *name* of the people, and in the power of us the tribunes, we baniſh him. *Shakeſpeare's Coriol.*—Fictitious imputation:

When Ulyſſes with fallacious arts
Had forg'd a treaſon in my patron's *name*,
My kinſman fell. *Dryden's Æneid.*

Appearance; not reality; aſſumed character.—I'll to him again in the *name* of Brook; he'll tell me all his purpoſe. *Shakeſpeare's M. W. of Windſor.*—There is a friend which is only a friend in *name*. *Ecclus.*—An opprobrious appellation:

The huſband
Bids her confeſs; calls her ten thouſand *names;*
In vain ſhe kneels. *Granville.*

NAME OF JESUS. Theſe words ſtand in our almanacs againſt the 7th of Auguſt. In ſome almanacs we have ſeen this day marked for notice by the title of the NATIVITY OF JESUS; whence ſome have argued that our reformers meant to point it out as the true period of the birth of our Saviour, although they had not thought proper to diſturb the ancient uſage of the church as to the time of celebrating that moſt happy event. It is of little importance either way; for it is very remarkable that we have no evidence, or even tradition, as to what time of the year our Saviour was born. The moſt probable opinion (according to Brady) ſeems to be, that it took place during the feaſt of tabernacles, which began on the 15th day of the ſeventh month, Tizri, anſwering to our October.

By the Engliſh Liturgy in uſe before the conqueſt, it appears, that the church anciently included her devotion to the Name of Jeſus in her general ſervice on the feaſt of the circumciſion, that appellation having been given to our Lord, as directed by the angel, when he ſubmitted to that rite. At ſubſequent periods, the ſecond Sunday after the Epiphany was appointed expreſsly for that ceremony, with particular offices conſidered appropriate to the occaſion. Our reformers annulled the offices, as ſuperſtitious and unneceſſary; but, out of reſpect to eſtabliſhed uſage, retained the name of the feſtival, which they removed from the ſecond Sunday in Epiphany to this day, expunging for that purpoſe the anniverſary of St. Donatus, which was before held on the 7th of Auguſt, and which had, ſome time prior, been made the ſubſtitute for the anniverſary of St. Afra; both martyrs. *Brady's Clavis Calendaria*, vol. ii.

To NAME, *v. a.* To diſcriminate by a particular appellation impoſed.—Thou haſt had ſeven huſbands, neither waſt thou *named* after any of them. *Tob.* iii. 8.—His name was called Jeſus, which was ſo *named* of the angel before he was conceived. *Luke* ii. 21.

Thus was the building left
Ridiculous, and the work Confuſion *nam'd*. *Milton.*

To mention by name.—Accuſtom not thy mouth to ſwearing; neither uſe thyſelf to the *naming* of the Holy One. *Ecclus.* xxiii. 9.—To ſpecify; to nominate.—Bring me him up whom I ſhall *name*. 1 *Sam.* xxviii. 8.—Let any one *name* that propoſition, whoſe terms or ideas were either of them innate. *Locke.*

Did my father's godſon ſeek your life?
He whom my father *nam'd*? Your Edgar. *Shakeſpeare.*

To utter; to mention.—Let my name be *named* on them. *Gen.* xlviii. 16.—To entitle:

Celeſtial, whether among the thrones, or *nam'd*
Of them the higheſt. *Milton's Paradiſe Loſt.*

NA'MELESS, *adj.* Not diſtinguiſhed by any diſcriminative appellation.—A headleſs carcaſs, and a *nameleſs* thing. *Denham.*

Thy reliques, Rowe, to this fair ſhrine we truſt,
And ſacred, place by Dryden's awful duſt;
Beneath a rude and *nameleſs* ſtone he lies,
To which thy tomb ſhall guide enquiring eyes. *Pope.*

One of which the name is not known or mentioned.—Little credit is due to accuſations of this kind, when they come from ſuſpected, that is, from *nameleſs* pens. *Atterbury.*

Such imag'ry of greatneſs ill became
A *nameleſs* dwelling, and an unknown name. *Harte.*

NA'MELY, *adv.* Particularly; ſpecially; to mention by name.—The council making remonſtrances unto queen Elizabeth, of the continual conſpiracies againſt her life; and *namely*, that a man was lately taken, who ſtood ready in a very ſuſpicious manner to do the deed; adviſed her to go leſs abroad weakly attended. But the queen anſwered, that ſhe had rather be dead than put in cuſtody. *Bacon.*—Solomon's choice does not only inſtruct us in that point of hiſtory, but furniſhes out a very fine moral to us, *namely*, that he who applies his heart to wiſdom, does at the ſame time take the moſt proper method for gaining long life, riches, and reputation. *Addiſon.*

Which of theſe ſorrows is he ſubject to?
To none of theſe, except it be the laſt;
Namely, ſome love that drew him oft from home. *Shakeſp.*

NA'MER, *ſ.* [from *name*.] One who calls or knows any by name. *Sherwood.*

NA'MESAKE, *ſ.* One that has the ſame name with another.—One author is a mole to another: it is impoſſible for them to diſcover beauties; they have eyes only for blemiſhes: they can indeed ſee the light, as is ſaid of their *nameſakes*; but immediately ſhut their eyes. *Addiſon.*

NAMETZ'KY, a town of Moravia, in the circle of Brunn: eight miles north-north-eaſt of Saar.

NAMIEST', a town of Moravia, in the circle of Olmutz: ten miles weſt of Olmutz.

NAMIEST', a town of Moravia, in the circle of Znaym: thirty miles north of Znaym.

NAMINGA'TA, a town of Japan, in the iſland of Niphon: fifty-ſix miles north-weſt of Fitaqua.

NAMMES'TA, a town of Norway, in the dioceſe of Aggerhuus: twenty-eight miles ſouth-ſouth-eaſt of Chriſtiania.

NAMNAGUR', a town of Hindooſtan, in Bahar: fifty-eight miles ſouth-ſouth-weſt of Patna.

NAM'PHIO. See NANFIO.

NAM'PTWICH. See NANTWICH.

NAM'SEN, a river of Norway, which runs into a bay of the North Sea, to which it gives name. Lat. 64. 35. N. lon. 11. 25. E.

NAM'SLAW, a town of Sileſia, in the principality of Breſlaw, with a ſtrong caſtle, ſituated among moraſſes, on the river Weyda: twelve miles ſouth-eaſt of Oels, and twenty-ſeven eaſt-ſouth-eaſt of Breſlau. Lat. 51. 3. N. lon. 17. 45. E.

NAM'UJOS, a town of Peru, in the dioceſe of Truxillo: 120 miles ſouth-eaſt of Chacaporas.

NAMU'R, one of the catholic provinces of the kingdom of the Netherlands. The province or county of Namur conſtituted, in the tenth century, a part of the county of Lomme, as alſo of the country of Arnau; the former lay between the Meuſe and the Sambre, the latter extended from the Sambre to the other ſide of Gemblours, along the Ornau. The firſt count of Namur, concerning whom we have a certain knowledge, is Robert, ſon to Berenger count of Lomme, to whom ſucceeded his ſon Albrecht, who died in the year 998. In 1189, the emperor Henry declared Baldwin count of Hainault, who was ſiſter's ſon to Henry count of Namur, and his appointed ſucceſſor, margrave of the empire. Count John III. who had no legitimate children, ſold the province of Namur, in 1421, to Philip the Good, duke of Burgundy, for 132,000 crowns. On the death of Charles, the laſt male heir of that houſe, in 1477, part of his dominions paſſed to Auſtria by the marriage of his daughter with the archduke, and part was ſeized upon by the French. See FRANCE, vol. vii. p. 693. Afterwards the States General obtained conſiderable portions of it, as a barrier. During the revolutionary war, the whole province was entirely conquered by the French; and it then became the chief part of the department of the Sambre and Meuſe, which formed one of the eighteen new departments called the "Re-united Country." Of this department, however, and ſixteen others, the French nation was deprived by the peace of 1815; and it now forms a province of the newly-erected Kingdom of the Netherlands. It is bounded by Brabant on the north, by Liege and Luxemburg (part of which was included in the French department of the Sambre and Meuſe) on the eaſt, and by Hainault on the ſouth and weſt; being about twenty-eight miles long and eighteen broad. It is a fruitful country, abounding in corn and paſture, and has ſeveral good mines of iron and lead, with wood ſufficient for extracting them; alſo a bituminous earth called *houille* from its oily nature. The Maeſe or Meuſe, the Sambre, and the Mehaigne, are its principal rivers.

NAMU'R, a city of the Netherlands, and capital of the above province, ſituated in a valley, at the conflux of the Meuſe and the Sambre; the greater part on the right ſide of the Sambre, between two hills. It is ſaid to take its name from an idol called *Nam*, ſuppoſed to be Neptune. The city was defended by a very ſtrong caſtle, ſituated on a ſharp rock on the oppoſite ſide of the Sambre; which caſtle was defended by Fort William, and many other very conſiderable forts, ſo as to make it almoſt impregnable. In the year 1692, Louis XIV. being mortified at the defeat of his fleet off la Hogue, determined to lay ſiege to Namur; and, having reviewed his army, which amounted to 120,000 men, he inveſted it on both ſides the Sambre with one half of his army, while the other covered the ſiege, under the command of the duke of Luxemburg. The prince of Brabançon commanded the garriſon, which conſiſted of 9000 men. The place was well ſupplied, and the governor knew that king William would make ſtrong efforts for its relief; notwithſtanding which, the aſſailants carried on their attacks with ſuch vigour, that in ſeven days after the trenches were opened the town capitulated, and the garriſon retired into the citadel. King William, being joined by the troops of Brandenburg and Liege, advanced to the Mehaigne, at the head of 100,000 effective men, and encamped within cannon-ſhot of Luxemburg's army, which lay on the other ſide of the river. That general, however, had taken ſuch precautions, that the king of England could not interrupt the ſiege, nor attack the French lines, without

out great diſadvantage. The beſiegers, encouraged by the preſence of their monarch, and aſſiſted by Vauban their engineer, repeated their attacks with ſuch impetuoſity, that the fort of Coehorn was ſurrendered, after an obſtinate defence, in which Coehorn himſelf had been dangerouſly wounded. It was a noble ſpectacle to behold the two greateſt engineers Europe had ever bred, Vauban and Coehorn, exhauſt the whole ſcience of attack and defence. Several ſallies and aſſaults were made; the beſieged performed wonders, but the fortune of the beſiegers prevailed, and the citadel ſurrendered in ſight of king William's army. Namur remained in the poſſeſſion of the French till the year 1695, when king William re-took it, as related under the article ENGLAND, vol. vi. p. 700. The French king had ſo much confidence in the ſtrength of the place, that he cauſed this inſcription to be put up over one of the gates: *Reddi, non vinci poteſt;* "It may be ſurrendered, but cannot be conquered."

After the death of Charles II. of Spain, the French ſeized Namur, with the reſt of the Netherlands. In the year 1704, the Dutch army, under Gen. Overkirk, bombarded it from the 26th of July to the 29th, and deſtroyed great part of the city; but the French kept poſſeſſion of it till the treaty of Utrecht, when the comté, town, and caſtle, were given up to the States-General, to ſerve as a barrier againſt France; the elector of Bavaria being to enjoy the ſovereignty and revenues, and the town to contribute its quota to the maintenance of the Dutch troops and fortifications. In 1746, after the French had taken Huy, and cut off the communication of the allies with Maeſtricht, prince Charles of Lorraine abandoned the defence of Namur, and it was immediately inveſted by the enemy. The trenches were opened on the 2d of September, and the garriſon, conſiſting of 7000 Auſtrians, defended themſelves with equal ſkill and reſolution; but the cannonading and bombardment were ſo terrible, that in a few days the place was converted into a heap of rubbiſh; and on the 23d day of the month the French monarch took poſſeſſion of this ſtrong fortreſs, which had formerly ſuſtained ſuch dreadful attacks. By the peace of Aix-la-Chapelle, it was ceded to the emperor; and ſince that time the fortifications have been demoliſhed, except the citadel, of which general Valence, with a detachment of the French army, made himſelf maſter, the 2d of December, 1792. The French, however, evacuated it the following year. In the year 1794, after the defeat of general Clairfait, near Louvain, on the 15th of July, the Netherlands were found untenable by the allies. It was, at firſt, the intention of the commanders of the combined armies, to defend Namur, and to form a line of defence from that city to Antwerp; but the ſucceſſes of the republicans, and their rapid movements, totally diſconcerted this plan. Namur was abandoned by general Beaulieu on the night of the 16th, leaving behind him 200 men, who ſurrendered both the city and citadel on the firſt ſummons. A large quantity of artillery was found at Namur. On the 20th, the keys of the city were preſented at the bar of the national convention.

Namur is the ſee of a biſhop, erected in the year 1559, by pope Paul IV. It had, before the reformation begun by the late emperor Joſeph, four abbeys of Benedictines, fourteen of Ciſtertians, one of the order of Premontré, one abbey and two priories of canons regular, ſeven chapters of canons, three chapters of noble canoneſſes, with a great number of other religious houſes both for men and women, and many hoſpitals. It contains about 16,000 inhabitants. It is twenty-five miles ſouth-weſt of Liege. Lat. 50. 26. N. lon. 5. 1. E.

NAMU'SA, a ſmall iſland in the Pacific Ocean, belonging to the cluſter called Meanges. Lat. 5. 1. N. lon. 126. 58. E.

NAMUSS'O, a town of Mingrelia: ten miles ſouth of Anarghia.

NAN-BO', a town of China, of the third rank, in Pe-tche-li: ten miles eaſt-ſouth-eaſt of Chun-te.

NAN-COM', a town of China, of the third rank, in Pe-tche-li: fifteen miles ſouth-ſouth-weſt of Khi.

NAN-FONG', a town of China, of the third rank, in Kiang-ſi: forty-five miles ſouth-ſouth-weſt of Kien-tchang.

NAN-GAN', a city of China, of the ſecond rank, in Yun-nan: 1192 miles ſouth-weſt of Peking. Lat. 24. 58. N. lon. 101. 23. E.

NAN-GE-SU', a ſmall iſland near the coaſt of China. Lat. 25. 6. N. lon. 119. 24. E.

NAN-HO', a town of China, of the third rank, in Pe-tche-li: twelve miles ſouth-ſouth-eaſt of Tay-ming.

NAN-HO'ANG-TCHIN-TA'O, a ſmall iſland near the coaſt of China, in the Eaſtern Sea. Lat. 38. 18. N. lon. 120. 44. E.

NAN-KANG', a city of China, of the firſt rank, in Kiang-ſi, on the lake Po-yang: 637 miles ſouth of Peking. Lat. 29. 33. N. lon. 115. 39. E.

NAN-KANG', a town of China, of the third rank, in Kiang-ſi: ſeventeen miles ſouth-weſt of Kan-cheou.

NAN-KIANG', a town of China, of the third rank, in Se-tchuen: thirty miles north of Pa.

NAN-KIN', or KIANG-NING, a city of China, the capital of the province of Kiang-nan, ſaid to have been formerly one of the moſt beautiful and flouriſhing cities in the world. The Chineſe, in ſpeaking of its extent, ſay, that if two horſemen ſhould go out by the ſame gate, and ride round it in full ſpeed, taking different directions, they would not meet before night. Although this account is exaggerated, it is certain, ſays Groſier, that Nan-kin ſurpaſſes in extent all the other cities of China. Its walls, it is ſaid, are ſixteen miles in circumference. A French miſſionary gives the following account of its extent. The ſuburbs, he ſays, are very long, but not populous; the houſes ſtand at ſome diſtance from one another, having reeds, pools of water, or plantations of bamboo, between them. Viewing it from the fifth ſtory of the porcelain tower, which commands an extenſive proſpect, it did not appear to be above two-thirds as large as Paris. In order to reconcile this appearance with the accounts that have been given of its immenſe extent, they found, upon travelling a full league from Nan-kin, the walls of a city riſing amidſt mountains, and appearing as if cemented to the rocks. Theſe were the walls of Nan-kin, which, leaving the city where it now ſtands, have, as it were, retired thither, to encloſe a ſpace of fifteen or ſixteen leagues, twelve or thirteen of which are not inhabited.

This city is ſituated at the diſtance of a league from the river Yang-tſe-kiang; it is of an irregular figure; the mountains within its circuit having prevented its being built on a regular plan. It was formerly the imperial city, and for this reaſon called *Nan-king*, i. e. the Southern Court; but, ſince the ſix grand tribunals have been transferred from thence to Peking, it is called *Kiang-ning* in all the public acts. It has loſt much of its ancient ſplendour; no veſtige now remains of its magnificent palace; other monuments of its grandeur have alſo diſappeared. A third of the city is deſerted, but the reſt is well inhabited. Some quarters of it are populous, and full of buſineſs. The ſtreets are leſs broad than thoſe of Peking; but they are very beautiful, well paved, and bordered with rich ſhops. One of the great mandarins, called Tſong-gtou, reſides here, to take cognizance of all important concerns: the Tartars have a numerous garriſon here, commanded by a general of their own nation; and they occupy a quarter of the city ſeparated from the reſt. The palaces of the mandarins are not particularly diſtinguiſhed from thoſe of the capitals of other provinces; and here are no public edifices correſponding to the reputation of a city ſo celebrated, excepting its gates, which are very beautiful, and ſome temples, among which is the famous porcelain tower, two hundred feet high, and divided into nine ſtories, to the firſt of which is an aſcent of forty ſteps, and to each of the others twenty-one. The port was formerly rendered commodious by the breadth and depth of the river Yang-tſe-kiang; but at preſent large barks, or Chineſe junks, never enter it. In April and May excellent fiſh are caught in this river near the city, which are ſent to court, covered with ice, and tranſported by barks kept for this purpoſe. Nankin is more than 500 miles from Peking, and the boats arrive there in eight or nine days. This city, though the capital of the province, has only eight cities of the third claſs under its juriſdiction. Lat. 32. 4. N. lon. 118. 24. E.

NAN-LIU', a town of China, of the third rank, in Kiang-nan: twenty miles weſt of Nhing-koue.

NAN-NGAN', a city of China, of the firſt rank, in Kiang-ſi: 895 miles ſouth-ſouth-weſt of Peking. Lat. 25. 29. N. lon. 113. 37. E.

NAN-NGAO'-TCHING', an iſland near the coaſt of China, about twenty-two miles in circumference. Lat. 23. 30. N. lon. 116. 49. E.

NAN-NING', or Nan-ngin, a city of China, of the firſt rank, in Quang-ſi: 1145 miles ſouth-ſouth-weſt of Peking. Lat. 22. 44. N. lon. 107. 44. E.

NAN-PI', a town of China, of the third rank, in Petche-li: twenty-ſeven miles north-north-eaſt of King.

NAN-POU', a town of China, of the third rank, in Se-tchuen, on the Kialing River: twenty-five miles north-weſt of Pan.

NAN-SA-CHE', a town of China, near the weſt coaſt of the iſland of Formoſa. Lat. 25. 2. N. lon. 120. 39. E.

NAN-SAN', a ſmall iſland, near the coaſt of China. Lat. 26. 50. N. lon. 119. 29. E.

NAN-SHOO-FOU', in Sir George Staunton's account of the Embaſſy to China, is ſaid to be the frontier-city of the province of Quan-tong. The Chineſe Atlas places here a city of the firſt rank, called Nan-yong: one and the ſame place appears to be underſtood. See Nan-yong.

NAN-TA-KI', a town of China, near the weſt coaſt of the iſland of Formoſa. Lat. 24. 50. N. lon. 120. 20. E.

NAN-TAN', a city of China, of the ſecond rank, in Quang-ſi: 1037 miles ſouth-ſouth-weſt of Peking. Lat. 25. N. lon. 107. 15. E.

NAN-TCHANG', a city of China, of the firſt rank, and capital of Kiang-ſi. This city has no trade but that of porcelain, which is made in the neighbourhood of Joatcheou. It is the reſidence of a viceroy, and comprehends in its diſtrict eight towns, ſeven of which are of the third claſs, and only one of the ſecond. So much of the country is cultivated, that the paſtures left are ſcarcely ſufficient for the flocks. It is 695 miles ſouth of Peking. Lat. 28. 36. N. lon. 115. 30. E.

NAN-TCHANG', a town of China, of the third rank, in Hou-quang: thirty-ſeven miles ſouth-weſt of Siang-yang.

NAN-TCHOU'EN, a town of China, of the third rank, in Se-tchuen: forty miles north-north-weſt of Tchi-ngan.

NAN-TING-SU', a ſmall iſland near the coaſt of China. Lat. 24. 10. N. lon. 118. 6. E.

NAN-TSIN', a town of China, of the third rank, in Fokien: ſeventeen miles north-eaſt of Tchang-tcheou.

NAN-YANG', a city of China, of the firſt rank, in Ho-nan. The city is ſituated on the banks of a ſmall river; but neither large, rich, nor populous; and is ſurrounded with mountains, in ſome of which lapis-lazuli is found. The juriſdiction comprehends two towns of the ſecond order, and ſix of the third. It is 462 miles ſouth-ſouth-weſt of Peking. Lat. 33. 6. N. lon. 112. 14. E.

NAN-YONG', a city of China, of the firſt rank, in the province of Quang-tong, ſituated in a fertile country at the foot of a mountain, which ſeparates the province of Quang-tong from that of Kiang-ſi, and carrying on an extenſive trade. Its juriſdiction comprehends only two towns of the third claſs: 902 miles ſouth of Peking. Lat. 25. 10. N. lon. 113. 32. E.

NA'NAC, the name of the founder of the ſect of the Sikhs, or Seiks, in Hindooſtan; a religious ſect, which advanced, by ſucceſſive gradations, from the humble condition of religioniſts, to the rank of one of the moſt powerful ſtates in Hindooſtan. Nanac Shah, a native of a ſmall village called Talwandi, in the diſtrict of Bhatti, in the province of Lahore, was born A.D. 1469. It is now become a town, and denominated Rayapour, and is ſituated on the banks of the Beyah, or Hyphaſis. Nanac's father, whoſe name was Calu, and who belonged to the Cſhatriya caſt and Vedi tribe of Hindoos, wiſhed to bring him up to trade; but Nanac himſelf was from his childhood inclined to devotion, and manifeſted an indifference to all worldly concerns. This diſpoſition was cheriſhed by his intercourſe with the fakirs, among whom and the poor he diſtributed a great part of his ſubſtance. It is needleſs to recite his trances and viſions, his converſe with the prophet Elias, and the auſterities which he practiſed at the commencement and in the progreſs of his religious career. Nor can we accompany him in the travels which he undertook with a view of reforming the worſhip of the true God, that had been degraded by the idolatry of the Hindoos and the ignorance of the Mahometans. It will be ſufficient for us to obſerve, that after he had viſited all the cities of India, and explained to all ranks the great doctrines of the unity and omnipreſence of God, he went to Mecca and Medina, where his actions, his miracles, and his long diſputations with the Mahometan ſaints and doctors, are moſt circumſtantially recorded by his biographers. He is ſtated, on this occaſion, to have defended his own principles without offending thoſe of others; always profeſſing himſelf the enemy of diſcord, and as having no object but to reconcile the two faiths of the Mahometans and Hindoos in one religion; which he endeavoured to do by recalling them to that great and original tenet, which both of them believed, "the unity of God;" and by reclaiming them from the numerous errors into which they had fallen. During his travels, about the year 1526 or 1527, Nanac was introduced to the emperor Baber, before whom he is ſaid to have maintained his doctrine with great firmneſs and eloquence. Baber treated him kindly, and offered him an ample maintenance, which he refuſed, alleging, that he truſted in him who provided for all men, and from whom alone a man of virtue and religion would conſent to receive favour or reward. The Hindoo zealots violently oppoſed him, more eſpecially after he had laid aſide the habits of a fakir; but he treated their oppoſition and reproaches with great contempt; and, when they required him to exhibit ſome proof of his power that might aſtoniſh them, he replied, "I have nothing to exhibit worthy of you to behold. A holy teacher has no defence but the purity of his doctrine; the world may change, but the Creator is unchangeable." Having migrated from Vatala to Moultan, and from Moultan to Kirtipur, on the banks of the Ravee, or Hydraotis, he there performed many miracles, as it is reported, threw off his earthly ſhape, and was buried near the bank of the river Ravee, which has ſince overflowed his tomb. Kirtipur continues to be a place of religious reſort and worſhip; and a ſmall piece of Nanac's garment is exhibited to pilgrims, as a ſacred relic, at his Dharmaſala, or temple. Nanac was unqueſtionably a man of more than common genius, which we may infer from the diſtinguiſhed eminence to which he attained, and the ſucceſs with which he combated the oppoſition that encountered him; whilſt he laboured without intermiſſion to recall both Mahometans and Hindoos to an excluſive attention to that ſublimeſt of all principles, which inculcates devotion to God and peace towards men. The religion which he inculcated appears, ſays ſir John Malcolm, to have been a ſort of pure deiſm, grounded on moſt ſublime general truths; for Nanac profeſſed to conciliate Hindoos and Mahometans to the belief of his doctrine, by perſuading them to reject thoſe parts of their reſpective belief and uſages, which, he contended, were unworthy of that God whom they both adored. He endeavoured to impreſs both Hindoos and Mahometans with a love of toleration, and an abhorrence of war; and his life was as peaceable as his doctrine. It was not till near a hundred years after the death of Nanac that the Sikhs became a warlike people; and, as ſuch, their hiſtory muſt be included in that of HINDOOSTAN, vol. x. See alſo the article SIKH, and Malcolm's Sketch of the Sikhs, Lond. 1812.

NANAMO'W, a town of Hindooſtan, in Oude: thirty-two miles ſouth of Fyzabad.

NANARSO'AK, a town of Weſt Greenland. Lat. 61. N. lon. 47. 30. W.

NA'NAS, a town of Hungary: four miles ſouth of Tokay, and twenty-five north of Debreczin.

NA'NAS, a mountain of Carniola, between Wipach and St. Veit.

NANCASERAM', a town of Hindooſtan, in Canara: ſeven miles ſouth of Mangalore.

NANÇA'Y, a town of France, in the department of the Cher: eighteen miles north of Bourges.

NAN'CEL (Nicholas de), a phyſician and philologiſt, was born in 1539, at a village of that name between Noyon and Soiſſons. He ſtudied at the college of Preſles at Paris, of which the celebrated Ramus was at that time principal. He made ſuch a proficiency, that at the age of eighteen Ramus appointed him to teach the Latin and Greek languages in the college. He afterwards commenced the ſtudy of phyſic; but the civil wars which broke out in France interrupted his progreſs, and he retired to Flanders, where in 1562 he became profeſſor of the learned languages at Douay. Returning to Paris, he occupied a chair in the college of Preſles, and alſo was aggregated to the medical faculty. He removed for the practice of his profeſſion to Soiſſons, and afterwards ſettled and married at Tours. In that city he reſided till 1587, when he obtained the place of phyſician to the princeſs Eleanor of Bourbon, abbeſs of Fontevrault, whither he removed. He died in 1610. Of the works of this learned writer the following are the moſt remarkable: 1. Stichologia Græca Latinaque informanda reformandaque, 1579, 8vo. This is an attempt to reduce French verſe to the rules of Greek and Latin poetry, which incurred the ridicule that has attended all ſimilar attempts. 2. Diſcours de la Peſte, 1581, 8vo. 3. De Immortalitate Animi, velitatio adverſus Galenum, 1587, 8vo. This is taken from a large philoſophical work of his entitled "Analogia Microcoſmi ad Macrocoſmum," of which two editions in folio were publiſhed after his death. 4. Petri Rami Vita, 1599, 8vo. This is a curious piece of biography, written by a pupil who had the advantage of living twenty years with the maſter whom he celebrates. *Gen. Biog.*

NAN'CHE, a town of the iſland of Formoſa, on the weſt coaſt. Lat. 23. 52. N. lon. 119. 45. E.

NAN'CI, a city of France, in the department of the Meurte, near the river Meurte, alternately capital with Luneville, formerly the capital of Lorraine, and ancient reſidence of the dukes. It is ſituated in a beautiful and fertile plain, near the Meurte, and divided into Old and New Town. The firſt is ſmall and ill-built; the latter is larger and better built; the ſtreets wider, and in a ſtraight line. Before the revolution, it contained three collegiate and three pariſh churches, ſeventeen convents, an univerſity, an academy of ſciences, a medical college, an hoſpital, and a commandery of Malta. This city was formerly fortified; but, by an article in the peace of Ryſwick, the fortifications of the New Town were deſtroyed. Nanci is ſuppoſed to contain 30,000 inhabitants. It is forty-one poſts and a quarter eaſt of Paris, and eighteen weſt of Straſburg. Lat. 48. 42. N. lon. 6. 16. E.

NANCOW'RY, or SOW'RY, one of the Nicobar iſlands, lying at the entrance of the bay of Bengal. See NICOBAR.

NANDEDUR'GAM, a town of Hindooſtan, in Myſore: five miles ſouth-ſouth-weſt of Chinna Balabaram.

NAN'DELSTETT, a town of Bavaria: nine miles north-weſt of Moſburg, and fifteen weſt of Landſhut.

NANDENO'RE, a town of Hindooſtan in the Carnatic: eight miles north-north-eaſt of Chittoor.

NAN'DER, a town of Hindooſtan, in Dowlatabad: 132 miles north-north-weſt of Hydrabad, and 104 eaſt-north-eaſt of Perinda. Lat. 19. 6. N. lon. 77. 35. E.

NANDGEE'RY, a town of Hindooſtan, in Viſiapour: fourteen miles north-eaſt of Sattarah.

NANDGOM', a town of Hindooſtan, in Baglana: eighteen miles eaſt-ſouth-eaſt of Chandor.

NAN'DI, a town of Bengal: twenty-five miles ſouth-ſouth-eaſt of Moorſhedabad.

NANDIGAW', a town of Hindooſtan, in the circar of Condapilly: fifteen miles north-weſt of Condapilly.

NANDI'NA, *ſ.* [from the Japoneſe vernacular name *nandin.*] In botany, a genus of the claſs hexandria, order monogynia. Generic Characters.—Calyx: perianthium many-leaved, imbricate, in ſix rows; ſcales about ſix in each row, ovate, acute, ſmooth, caducous. Corolla: petals, ſix, oblong, concave, acute, longer than the calyx, caducous. Stamina: filaments ſix, very ſhort; antheræ oblong, erect, the length of the corolla. Piſtillum: germen ovate, ſmooth, ſuperior; ſtyle three-cornered, very ſhort; ſtigma three-cornered. Pericarpium: berry juiceleſs, globular, ſmooth. Seeds: two, hemiſpherical, ſmooth.—*Eſſential Character.* Calyx many-leaved, imbricate; corolla ſix-petalled.

Nandina domeſtica, a ſolitary ſpecies. Root perennial. Stems ſeveral, ſhrubby, upright, looſe, branched at the top, about ſix feet high, and half an inch in diameter. Branches covered with the ſheaths of the leaves, waved, leafy at the upper part. Leaves ſuper-decompound; leaflets ternate, ovate, briſtle-pointed, entire, with a reflexed margin; their ſtalks remarkably compounded, the diviſions branching off nearly at right angles; at the lower ones more eſpecially, the joints are ſwollen into a kind of globular bulb. Flowers in looſe terminal compound panicles, white, with prominent bright-yellow antheræ. Berries red, the ſize of a pea, membranous within. Seeds two, convex on one ſide, and concave on the other; Kæmpfer compares them to what are called in the ſhops *crab's-eyes;* they are aſh-coloured or reddiſh.

This ornamental plant is much cultivated both in Japan and China, and is a native of the latter, from whence it was introduced into the garden at Kew in 1804, by Mr. William Kerr. It flowers from May to July. The leaflets are remarkable for falling off at the joints of their ſtalks, as ſoon as it begins to dry between paper. *Kæmpf.* 776.

NANDOU'LY, a town of Hindooſtan, in Rohilcund: thirty miles weſt-ſouth-weſt of Pattiary.

NANDRA'NY, an ancient fortreſs of Hungary: eleven miles weſt of Arad.

NAN'DY-AL'LEM, a town of Hindooſtan, in Golconda: thirty-five miles ſouth-ſouth-eaſt of Canoul.

NANDYOL', a town of Hindooſtan, in Bengal: ten miles ſouth of Goragot.

NAN'FIO, NAMFIO, or NAMPHIO, an iſland in the Grecian Archipelago, ſituated ſouth-weſt of Stampalia, and little more than ſeven leagues in circuit. Its firſt name was *Membliaros,* derived from Membliarus, a Phœnician, who, when his relation Cadmus went in queſt of Europa, accompanied him, and ſettled in the neighbouring iſland of Thera. It has ſince been named *Anaphe,* which, in the Phœnician language, according to Bochart, ſignifies ſhaded and dark, an epithet which this iſland acquired from its gloomy and thick foreſts; or, as others ſay, from the Greek word φαινω, "to appear," from the thunder having on a ſudden occaſioned it to ariſe from the bottom of the waters, in order to receive the fleet of the Argonauts on its return from Colchis, when aſſailed by a furious tempeſt. This fable of antiquity is the hiſtory of the formation of Nanfio, which a volcano cauſed to appear ſuddenly above the ſea, in the midſt of a violent agitation of the atmoſphere and of the waves, which has been the caſe with ſome other iſlands of the Archipelago. In memory of this event was built a temple, which was conſecrated to Apollo *Ægletes,* or "dazzling with light."

Mirth and pleaſantry preſided at the feſtivals which were here celebrated. Slight veſtiges of the temple ſtill appear in the ſouth part of the iſland. The marble of which it was conſtructed was taken from a ſteep rock, of frightful aſpect, on whoſe ſummit is a chapel dedicated to "Our Lady of the Reed," or in modern Greek *Panegia Kalamitoſa.*

The foreſts which once darkened the iſland have diſappeared, and have been ſucceeded only by ſome ſcattered ſhrubs. Its mountains are barren and naked, nor do its plains afford a much more brilliant vegetation. Agriculture languiſhes; and, notwithſtanding the fertility of the ſoil, barley is almoſt the only plant that produces any harveſt. Some ſmall plantations of vines yield good wine; and honey is common. Partridges formerly multiplied ſo prodigiouſly, that, in order to preſerve the corn, all the eggs that could be found were collected about the Eaſter holidays, and made into various ſauces, and eſpecially into omlets; and yet, according to Tournefort, coveys of partridges were ſtill very numerous. Their number ſeems now to be diminiſhed. A ſmall town built to the ſouth contains the whole population of Nanſio; every thing beſpeaks the wretchedneſs ſpread over the territory of the iſland. Here is no harbour; but, in front of the town, ſhips find a very good roadſtead, protected by a ſmall ſhoal, which is called *Nanſio-Poulo*, or Little Nanſio.

NAN'FRI, a river of Sicily, which runs into the ſea on the ſouth coaſt, in lat. 37. 3. N. lon. 14. 6. E.

NAN'GA, a ſeaport-town of the iſland of Niphon, ſituated in a bay on the ſouth coaſt: fifty-five miles ſouth-weſt of Jeddo. Lat. 35. 52. N. lon. 139. 16. E.

NANGABUSAN', a town of Bengal: thirty-three miles ſouth-ſouth-weſt of Calcutta. Lat. 22. 12. N. lon. 88. 48. E.

NANGAL'LY, a town of Hindooſtan, in Myſore: thirteen miles north of Vencatighery.

NANGANJEE', a river of Hindooſtan, which runs into the Ambravetty eleven miles ſouth-weſt of Carroor.

NANGASA'KI, or NAGASEKI, a ſeaport-town of Japan, on the weſt coaſt of the iſland of Ximo, ſituated at the end of a deep commodious bay. The mouth of the harbour, which lies north of the town, is narrow, and not deep, but grows wider and deeper as we ſail farther in, till we come to a rocky iſland, where there is good riding. About half a mile from the town, are two imperial guards oppoſite to each other, encloſed with paliſades, and conſiſting each of ſeven hundred men, including thoſe that are upon duty. There are alſo ſeveral forts, built like baſtions along the harbour, but without cannon. The haven is long and deep: the ſea riſes from four and a half to ſix or ſeven fathoms; and the bottom is a ſtiff clay, which affords a firm anchorage. The city lies at the farther end of the harbour, where it ſpreads itſelf wideſt; but is deſtitute of walls, caſtles, or any other defence. The ſtreets are neither ſtraight nor wide. Three rivers run through the town, which deſcend from the neighbouring hills; the middlemoſt of which is the largeſt, and croſſes it from eaſt to weſt: the misfortune is, that they have ſcarcely water enough during a great part of the year, to water their rice-fields and gardens; though theſe ſtreams ſwell to ſuch a degree, after heavy rains, as to ſweep away whole houſes with their rapid current. The place is divided in to the Inner and Outer Town; the former of which contains twenty-ſix, and the latter ſixty-one, ſtreets. But in none of theſe are ſtrangers ſuffered to dwell: they have particular ſuburbs allotted to them, where they are narrowly watched by the emperor's officers. The chief public buildings in and about it, are five *janaguras*, or large houſes, built of timber, not far from the ſhore; where are kept three imperial *jonks*, or men-of-war, ready to be launched at command; the powder-magazine, the palaces of the two reſiding governors, and other princes and grandees of the firſt and ſecond rank, ſome of whom conſtantly reſide there, and others only on particular occaſions. There are about ſixty temples within and without the city; moſt of them built on eminences, and ſerving not only for devotion, but alſo for recreation. The *goknia*, or common priſon, ſtands near the middle of the town, and conſiſts of about one hundred ſmall huts, or cages, ſeparate from each other: here priſoners are kept and puniſhed according to their rank, or the nature of their crime; either put to the torture, or privately executed. The brothel, which conſiſts of two handſome ſtreets, is ſhut up at each end by ſtrong gates; here women are kept to be hired, either by natives or foreigners.

The houſes are low and mean, though well filled with inhabitants, who are moſtly merchants, tradeſmen, ſhopkeepers, and handicraft-men. Moſt merchandiſes here ſell dearer than in other ports, and ſo do their proviſions, though they are plentifully ſupplied with all kinds; the country about, furniſhing them with fruits, pulſe, and herbage; the ſea with fiſh; and the neighbouring countries with cattle, grain, and other proviſions; but their water, though clear and well-taſted, is apt here, as well as in moſt other parts of the empire, to cauſe violent and painful colics.

The Portugueſe were completely routed from Japan in the year 1639, (ſee vol. x. p. 869.) and no further attempts were made on the part of the Engliſh till the year 1768, when the Eaſt-India Company ſent a ſhip to Nangaſaki, with a letter from his Britannic majeſty to the emperor of Japan. The emperor, probably under the influence of the Dutch, ſent the Engliſh a meſſage, forbidding any intercourſe with his dominions. Thus ended all communication with Japan, on the part of the Engliſh, until the year 1803, when a ſhip was ſent on a mercantile ſpeculation from Calcutta, which was refuſed admittance, and ordered to leave in twenty-four hours. In 1808, Capt. Pellew, in the Phaeton frigate, entered the harbour of Nangaſaki under Dutch colours; but the event was unpropitious. Lat. 32. 45. N. lon. 129. 52. E.

NANGAX'IMA, a town of Japan, in the iſland of Xicoco: twenty miles north-north-eaſt of Toſa.

NANGIHAN' POI'NT, the ſouthern extremity of the iſland of Leyta. Lat. 10. 2. N. lon. 124. 57. E.

NAN'GIS, a town of France, in the department of the Seine and Marne: thirteen miles eaſt of Melun, and twelve weſt of Provins.

NAN'GIS (Guillaume de), an ancient French hiſtorian, is ſuppoſed to have been a native of a town of that name in the Iſle of France. He was a benedictine of the abbey of St. Denis, and lived from the time of St. Louis to the beginning of the fourteenth century. He wrote the Lives of St. Louis and of Philip le Hardi, and alſo two Chronicles: the firſt, from the creation to the year 1300; the ſecond, a chronicle of the kings of France. The Great Chronicle, written with clearneſs, and in tolerably pure Latin, has been much uſed by later writers: it has had two continuators, who have brought it down to 1368. The Lives were printed firſt in Pithou's Collection in 1596, and afterwards in that of Du Cheſne; and the Chronicle from the year 1113, was publiſhed in the Spicilegium of Luc d'Achery. *Moreri.*

NANGOI'A, a town of Japan, in the iſland of Ximo: ſixty-five miles north of Nangaſaki.

NANGU', a town of Hindooſtan, in Myſore: twenty-five miles north-eaſt of Rettinghery.

NA'NI, a town of Candahar: eight miles ſouth-weſt of Ghizni.

NA'NI (Giambatiſta), an Italian hiſtorian, of a noble Venetian family, was born in 1616, and educated under the eye of his father, who took him to Rome in his ſuite, being appointed ambaſſador from the Venetian republic to pope Urban VIII. In 1641, Nani was admitted into the college of ſenators; and, ſoon after, was appointed ambaſſador to France, where he reſided five years. He was much eſteemed by cardinal Mazarin, who was in the habit of conſulting him on public affairs. In 1648 he returned to Venice, having obtained from the court of France a conſiderable aid of men and money for the defence of Candia againſt the Turks. The ſuperintendence of the affairs of war and finances was then entruſted to him; and in 1664 he was ſent ambaſſador to the imperial court, which he viſited a ſecond time on the acceſſion of the emperor Leopold. In 1670 he was delegated upon a ſecond embaſſy to the court of France, and on his return was nominated a procurator of St. Mark; and was ſoon after raiſed to the poſt of captain-general by ſea. The maritime ſervice not agreeing with him, he continued to ſerve the ſtate at home. The office of hiſtoriographer was conferred upon him, and the manner in which he performed its duties rendered his name illuſtrious. He died in 1678. He was author of the Hiſtory of Venice from 1613 to 1671, of which the firſt part was publiſhed at Venice in 1662, and the ſecond after his death in 1679. It is much eſteemed for the veracity of the narrative, and for the depth and ſagacity of the political reflections. To the new edition in the Collection of Venetian Hiſtorians, the life of the author is prefixed. This Hiſtory has been tranſlated into French and Engliſh. He left in manuſcript, a Paraphraſe of Lucan's Pharſalia, and Conſiderations on the Annals of Tacitus. *Gen. Biog.*

NANIJAR', a town of Africa, in the kingdom of Burſali.

NANIMAN', a town of the iſland of Cuba: ſeventy-five miles weſt-ſouth-weſt of Havannah.

NANJEMOY', a river of Maryland, which runs into the Potomack near Port Tobacco.

NANI'NA, a town of Abyſſinia: ſeventy miles eaſt of Mineé.

NAN'KA I'SLANDS, three ſmall iſlands in the Eaſtern-Indian Sea, near the weſt coaſt of the iſland of Banca. Wood for fuel, and excellent water, are eaſily obtained. Lat. 2. 22. S. lon. 105. 41. E.

NAN'NI, a town of Perſia, in the province of Irak: 110 miles eaſt of Iſpahan.

NAN'NI, or NAN'NIUS (Peter), a critic and philologiſt, was born at Alcmaer in Holland in 1500. After receiving a claſſical education, he applied for ſome time to painting; but, reſuming his literary ſtudies, he taught philoſophy in his own country. He was choſen profeſſor of languages at Louvain, where he paſſed eighteen years. He then obtained a canonry at Arras, which he kept till his death in 1557. His principal works were, 1. *Miſcellaneorum Decas,* containing annotations upon a number of ancient authors, in ten books. 2. *Dialogiſmi Heroinarum*; reckoned his beſt work. 3. Annotationes in Inſtitutiones Juris Civilis. 4. Scholia in Cantica Canticorum. 5. Tranſlations of the Pſalms in Latin Verſe; and a number of other tranſlations, chiefly from Greek authors. His verſions are pronounced by Huet to be faithful, and happily expreſſive of the ſenſe of the originals; but he is ſaid by Hermant to have groſsly miſtaken the ſenſe of many paſſages of Athanaſius, almoſt all of whoſe works he tranſlated. *Gen. Biog.*

NANNUCKLOO', a ſmall iſland near the eaſt coaſt of Labrador. Lat. 56. 20. N. lon. 60. W.

NAN'NY TOWN (Old), a deſerted town of the iſland of Jamaica: ſixteen miles eaſt-north-eaſt of Kingſton.

NANO'RE, a town of Bengal: twenty-eight miles north of Burdwan.

NANO'VA, a river of Walachia, which runs into the Danube.

NANS, a town of France, in the department of the Var: ſeven miles ſouth-ſouth-weſt of St. Maximin.

NAN'SA, a town of Spain, in Aſturia: eighteen miles ſouth-weſt of Santillana.

NAN'SEMOND, a county of Virginia, on the ſouth ſide of James-river, and weſt of Norfolk-county, on the North-Carolina line, about forty-four miles long, and twenty-four broad; containing 11,127 inhabitants, including 4408 ſlaves.

NAN'SEMOND, a river of Virginia, flowing from Great Diſmal Swamp in a north-eaſt direction, and diſcharging itſelf into James-river a few miles weſt of Elizabeth-river.

NAN'SIO, an iſland of the Archipelago, a little to the north of the iſland of Santorino, ſixteen miles in circumference; but has no harbour. The mountains are nothing but bare rocks, and there are not ſprings ſufficient to water the fields. There is a vaſt number of partridges, whoſe eggs they deſtroy every year to preſerve the corn, and yet vaſt numbers of them are always produced. The ruins of the Temple of Apollo are yet to be ſeen, and conſiſt chiefly of marble columns. Lat. 36. 15. N. lon. 26. 20. E.

NANT, a town of France, in the department of the Aveiron: ten miles ſouth-eaſt of Milhau, eighteen miles north of Lodeve.

NANTAS'KET RO'AD, the entrance into Boſton Harbour, in Maſſachuſetts.

NAN'TEBACH, a town of Germany, in the county of Rieneck, on the Main: four miles eaſt of Lohr.

NANTER'RE, a town of France, in the department of Paris: five miles weſt of Paris.

NANTES, a city of France, and capital of the department of the Lower Loire, formerly capital of a diſtrict, called Nantois, in Bretagne. It is ſituated on the Loire, and has been reckoned one of the greateſt trading cities in the kingdom: it is large and populous, conſiſting of ſix parts, and comprehending 73,649 inhabitants. Before the revolution, it was the ſee of a biſhop, the ſeat of an intendency, a chamber of accounts, or board of finances, a mint-office, &c. &c. In it were, excluſively of the cathedral and a collegiate church, eleven pariſh-churches, fourteen convents, two hoſpitals, a college, and an univerſity, founded about the year 1460; a ſociety of agriculture and arts, a ſchool of anatomy and ſurgery, and a large rope-manufactory. Since the reſtoration of the Bourbons, great ſearch has been made, in various parts of France, for dead men's bones which had been diſplaced during the revolution: and the mayor of Nantes ſtates, that the bones of Arthur III. duke of Brittany and conſtable of France, who died in 1458, were ſaved in the deſtruction of the church of the Charteux where they were interred, and that they have now (1817) been conveyed to the tomb of Francis II. his nephew, and ſucceſſor in the duchy of Brittany.

Of all the ſchools founded upon the Lancaſterian ſyſtem in France, that of Nantes is upon the largeſt ſcale.

Nantes has been accuſtomed to carry on a very large trade to the French colonies, to America, to Spain, Portugal, and other parts; though ſhips of burthen can come no further up the Loire than to Paimbœuf, a market-town, where the cargoes are transferred to ſmaller veſſels, and conveyed to Nantes. Lat. 47. 13. N. lon. 1. 26. E.

This city is famous in hiſtory for the *edict* iſſued here, in the year 1598, by Henry IV. for granting to the profeſſors of the reformed or proteſtant religion, the liberty of ſerving God according to their conſciences, and a full ſecurity for the enjoyment of their civil rights and privileges, without perſecution or moleſtation from any quarter. This edict was revoked by Louis XIV. at the inſtigation of the miniſter Louvois and father La Chaiſe the king's confeſſor, in the year 1685; a meaſure which, though accompanied with the applauſe of Rome, excited the indignation even of many catholics, whoſe bigotry had not effaced or ſuſpended, on this occaſion, their natural ſentiments of generoſity and juſtice. This revocation was followed by a perſecution of the Huguenots, called, from the dragoon-troops employed in it, the *dragonade.* It is but juſtice to acknowledge, that this horrid perſecution was condemned by the greateſt and beſt men in France. M. d'Agueſſeau, the father of the celebrated chancellor, reſigned his office of intendant of Languedoc, rather than be a witneſs of it: his ſon repeatedly mentions it with abhorrence. Fenelon, Flechier, and Boſſuet, confeſſedly the ornaments of the Gallican church, lamented it. To the utmoſt of their power they prevented the execution of the decree, and ſoftened its ſeverities, where they could not prevent them. This practical condemnation of the reſort to temporal power for effecting religious converſion, does all theſe illuſtrious characters the greateſt honour, as the doctrine of religious toleration was, at that time, little underſtood. We are conſtrained, however, to allow that Boſſuet, the biſhop of Meaux, ſeems to admit, in theory, the general right of Chriſtian princes to enforce acts of religious conformity by wholeſome ſeverities; and thus allows them, for effecting a ſpiritual good, a reſort to temporal means, which the divine founder of our faith ſo explicitly diſclaimed for himſelf.

The conſequences of this cruel and unrighteous proceeding were highly detrimental to the true intereſts and the real proſperity of the French nation, by the prodigious emigration it occaſioned among the proteſtants, who ſought, in various parts of Europe, that religious liberty, and that humane treatment, which their mother-country had ſo cruelly refuſed them. Thoſe among them whom the vigilance of their enemies guarded ſo cloſely as to prevent their flight, were expoſed to the brutal rage of an unrelenting ſoldiery, and were aſſailed by every form of barbarous perſecution that might tend to ſubdue their courage, exhauſt their patience, and thus engage them to a feigned and external profeſſion of popery, which in their conſciences they beheld with the utmoſt averſion and diſguſt. From this evil, however, good has ultimately proceeded. The event was very beneficial to almoſt all the proteſtant countries of Europe; and more eſpecially to the commerce of Holland, Brandenburg, and England. The number of refugees, who on this occaſion fled from France, and carried their ſkill and induſtry in various manufactures to other countries, was, at a moderate computation, more than half a million.

The loſs of faithful ſubjects and valuable manufacturers is not the only inconvenience which the legitimate upholders of tyranny and intolerance have to deplore. From the revocation of the edict of Nantes, and the cruelties which followed, we think we can trace the cauſes of the late revolution by which kings and prieſts ſuffered in their turn. That the doctrines of the reformation made a great progreſs in France at the time of their firſt propagation, is ſufficiently known; but it is only ſince the diſcloſures made by the revolution, that it has been ſeen how very deeply their roots had ſtruck, and how much of them remained in the ground, notwithſtanding the perſevering meaſures adopted wholly to tear them up. From the flames kindled in France, by the revocation of the edict of Nantes, a ſhort century only elapſed, till the flames of the revolution began to break out. It was ſtated ſome years ago, in one of the moſt inſtructive books which the French preſs has lately yielded us, the Eſſay of Villers on the Reformation of Luther, that among the cauſes of the revolution was to be ranked, and that in a high place, the revocation of the edict of Nantes. We have important facts now before us, in ſufficient abundance, to prove the juſtice of the aſſertion; and, moſt aſſuredly, it preſents a view of the French revolution, the conſideration of which is pregnant with inſtruction.

It is not in general, in this country, known or believed, in what an exaſperated ſtate the Catholic clergy of France remained towards their Huguenot brethren, up to the very lateſt periods, and how much miſchief reſulted from their intolerance. The Aſſembly of the Biſhops in 1765 preſented a remonſtrance to Louis XV. in which they ſaid, "C'eſt en vain que l'exercice public de toute autre religion que la Romaine eſt defendue dans vos états. Au mépris des lois, les Proteſtans font de toutes parts des attroupemens;" that is to ſay, they met clandeſtinely in the fields (for, to build or uſe a houſe as a place of worſhip was impoſſible) to perform the acts of their religion; and this is the abomination, for the ſuppreſſion of which the biſhops call for the exertions of the king. They proceed; "Dans les diocèſes de Valence, Viviette, Die, Grenoble, Caſtres, Cahors, Nîmes, Rodez, Montauban, Montpellier, Luçon, Agew, Beziers, &c. ils tiennent des aſſemblées." What were the meaſures, the execution of which the biſhops in conſequence demanded? Belief is almoſt ſtaggered at the anſwer. "Si la loi," they cry, "*qui a revoqué l'edit de Nantes*, ſi votre declaration de 1724, avaient été exactement obſervées, nous oſons le dire, il n'y aurait plus de Calviniſtes en France." Becauſe the atrocious perſecutions which diſgraced the concluſion of the reign of Louis XIV. had abated; becauſe the wounds which they had inflicted on their country began to be healed; the indignation of the biſhops was excited. Nothing would ſatisfy them, but the renewal of the ſame deteſtable proceedings; they could predict nothing but miſery to France, unleſs the flames of perſecution were, to their ſatisfaction, again lighted up: "Nous n'inſiſterons pas, ſire," they continue, "ſur les ſuites funeſtes qui reſulteraient neceſſairement en France *d'une tolerance* qui deviendrait cruelle par ſes effets. . . . Nous, qui ſommes les chefs de la *tribu ſainte*, les guides, les paſteurs, de votre peuple Catholique, pouvons-nous garder le ſilence? Ce n'eſt pas ſeulement à la religion et à l'égliſe que vous devez, ſire, votre protection; vous la devez à vous-même. Si vous n'employez votre autorité pour arrêter les enterpriſes de l'hereſie, les progrès de l'impiété, il ne ſera plus tems d'y remedier. Que n'avons nous pas à craindre de nos ennemis? Dejà ils nous menacent. Rendez, ſire, rendez aux lois toute leur vigueur, et à la religion ſon eclat; que le renouvellement de votre declaration de 1724 ſoit le fruit de nos très-humbles remonſtrances."

Among the great intereſts of humanity there is ſuch a connexion, that thoſe who are the enemies of one are almoſt always the enemies of the reſt. Accordingly, in this ſame remonſtrance, the biſhops of France ſhow an hoſtility equally bitter and unrelenting againſt the liberty of the preſs and the liberty of conſcience: "Ce fléau," they tell the king, "dont nous nous plaignons, ne ceſſera de ravager ſes états, que lorſque *la librairie* ſera aſſujétie à des reglemens fidèlement executés. Ainſi penſerent et agirent vos illuſtres predeceſſeurs, lorſque le Lutheraniſme, après avoir deſolé l'Allemagne, cherchait à s'introduire en France. La piété de ces grands rois, et des magiſtrats depoſitaires de leur autorité, prit des meſures vigoureuſes pour repouſſer les livres pernicieux: ces meſures ſont dans les edits de 1542, 1547, 1551. Nous vous ſupplions, ſire, de vous faire repreſenter ces édits et reglemens. Votre majeſté y verra des *exemples de ſageſſe et de ſeverité dignes d'etre imités;* elle y verra les auteurs, les libraires, et ceux qui achetent les livres, condamnés à des peines ſévères." The time, however, was now come, when the public mind would not hear a plain and undiſguiſed declaration of the love of ignorance, without an expreſſion of indignation and contempt. The biſhops accordingly act the hypocrites; and to the words which we have juſt cited, are not aſhamed to add thoſe which follow: "Nous ſommes bien eloignés, ſire, de vouloir donner des entraves au genie, et arrêter les progrés des connaiſſances humaines; mais nous devons repreſenter à votre majeſté la contagion dont vos états ſont menacés." Enemies to the progreſs of human knowledge!—No; not any more, to be ſure, than he who ſhould prohibit the importation of grain, and the cultivation of the ground, would be an enemy to the progreſs of population.

Another aſſembly of the biſhops who met in 1770, and renewed their remonſtrances on the ſame ſubject, ſay, "La religion, ſire, ne craint pas les lumières; elle ne craint que les égaremens de l'eſprit, et non ſes efforts: elle ne s'oppoſe pas aux progrès des ſciences humaines." What then were thoſe *égaremens*, of which it was ſo much afraid? The reader will probably ſmile, when he learns that it is neither more nor leſs than *Engliſh liberty;* that very liberty, by expreſs name and deſignation, from which we fondly imagine that we have derived ſo many advantages: "C'eſt *cette fatale liberté* qui a introduit *chez les inſulaires, nos voiſins,* cette multitude de partis et d'opinions." This liberty it was, of every portion of which they demanded the extinction. Yet, theſe men *ne s'oppoſoient pas aux progrès des connoiſſances humaines!*

On a ſubject like this, the clergy were not likely to deſiſt prematurely. An addreſs, containing the ſame complaints and entreaties, was preſented on the acceſſion of Louis XVI. and another in the year 1780. In this, too, they cry, "Loin de nous, ſire, la penſée d'eteindre la flamme du genie, ou de vouloir donner des chaînes à la noble émulation des ſavans." Yet, they pray, "Que V. M. ſauve donc la religion, les mœurs, l'autorité, en ſe hâtant d'addreſſer à toutes les cours ſouveraines une loi bienfaiſante, propre à contenir enfin le plus noble de tous les arts, *l'art d'ecrire,* dans les bornes d'une genereuſe mais ſage liberté." What, in their eſtimation, was a *ſage liberté,* they make abundantly appear. It was a liberty by which, in particular, all Engliſh books, worth the obtaining, were to be ſhut out of the kingdom. "En vain," ſay they, "il n'exiſterait dans le royaume aucune ſource publique de corruption, ſi les ſujets de V. M. avaient la liberté indefinie de ſe procurer les productions étrangères, et notamment celles que repandent de toutes parts *les preſſes d'une nation enterprenante,* dont *les ecrits ont été mille fois plus funeſtes* à nos mœurs que les armes ne le furent jamais à nos poſſeſſions. Pour repouſſer, ſire, loin de vos etats, cette monſtrueuſe eſpece de contrebande, il ſuffira de faire religieuſement obſerver les reglemens anterieurs qui n'accordent qu'à un petit nombre de lieux fixes et determinés le privilege excluſif de faire entrer les livres, venant de l'etranger; livres d'ailleurs, ſoumis, avant leur délivrance, à la rigueur des viſites préalables, et à d'autres formalités, dont la violation opère *des amendes, ſaiſies, et confiſcations.*" Thoſe addreſſes of the clergy (hiſtorical documents ſo replete with inſtruction) have been happily preſerved, by publication, in a book written with partiality to the primary claſſes in France, and by which, in various modes, conſiderable light is thrown upon the hiſtory of the revolution. *Memoires Hiſtoriques et Politiques du Regne de Louis XVI.* par Soulavie.

From theſe expoſtulations of the clergy, two, among other, important facts, are ſtrongly preſented to our notice. The firſt is, that the number of Proteſtants exiſting in France, particularly in the ſouthern parts, was, previouſly to the revolution, by no means inconſiderable. The next is, that they continued expoſed to ſuch perſecution as muſt have retained their minds in a ſtate of perpetual eſtrangement from the government under which they were oppreſſed, and could not fail to give peculiar activity and energy to their efforts, as ſoon as a proſpect of deliverance was held out to them. Of the extent of their influence, at the very commencement of the revolution, a ſufficient proof is afforded by the number of them who were choſen deputies to the different repreſentative aſſemblies; and of whom ſeveral, ſuch as Rabaut de St. Etienne, and Boiſſy d'Anglas, attained the higheſt conſideration. The former, diſtinguiſhed as one of the moſt eminent and enlightened among the fine writers whom France at that time contained, was himſelf a Proteſtant miniſter, and the ſon of a Proteſtant miniſter, who, for more than half a century, had been venerated in the ſouth of France as an apoſtle, and who truly led the life of an apoſtle, hiding himſelf in corners by day from arreſtation and death, and preaching in the fields by night to vaſt audiences, who flocked from all quarters to hear him.

We have no ſpace, however, to purſue any further the reflections which the recent hiſtory of France ſuggeſts in ſuch abundance, as to the effects of that religious intolerance to which her old government adhered with ſo fatal an obſtinacy; nor would it anſwer any good purpoſe to exhibit at large the contraſt which the liberal policy of our own country has ever preſented to this ſpirit of perſecution. We will only obſerve, that the late diſturbances at Niſmes, and the very recent proſecution and conviction of a proteſtant at Bourdeaux,* may be conſidered as evidence in ſupport of the poſition with which we ſet out—that perſecution and intolerance were among the chief cauſes of one French revolution, and may perhaps be the occaſion of another.

NANTEU'IL (Robert), an eminent engraver, was born at Rheims in 1630. A talent for the arts of deſign diſcloſed itſelf in him from his childhood; and he drew and engraved, without a maſter, the decoration for the theſis which, according to cuſtom, he maintained in philoſophy when a ſtudent in the univerſity. An early marriage reduced him to indigence, which the practice of his art at Rheims was unable to relieve. Coming to Paris, he made his works known, and ſoon gained employment. He firſt drew portraits in crayons, and then engraved them. His ſucceſs in taking that of Louis XIV. procured him the place of the king's deſigner and cabinet-engraver, with a penſion. All the great perſons about the court were afterwards repreſented by the hand of Nanteuil; and he roſe to the ſummit of reputation. His heads of Colbert, Richelieu, and Mazarin, were admired as maſter-pieces. Carlo Dati, in ſpeaking, in his Life of Zeuxis, of the perfection to which the modern art of engraving was arrived, cites the portraits of Nanteuil as the moſt finiſhed examples of this excellence. His engraved heads amount to two hundred and forty, the ſubjects of which are all the moſt eminent perſons in France of his time; and for beauty of execution they are conſidered as unrivalled. He acquired a large ſum by his labours, which he ſpent freely, being of a ſocial diſpoſition, and much careſſed for his companionable qualities. He compoſed verſes with eaſe, and recited agreeably. This artiſt died at Paris in 1678.

NANTEU'IL, a town of France, in the department of the Aiſne, between Meaux and Château-Thierry.

NANTEU'IL, a town of France, in the department of the Marne: ſix miles north of Epernay.

NANTEU'IL LE HAUDOUIN', a town of France, in the department of the Oiſe: nine miles eaſt-ſouth-eaſt of Senlis, and ſeven ſouth of Creſpy.

NANTEU'IL EN VALLE'E, a town of France, in the department of the Charente: ſix miles ſouth-eaſt of Ruffec.

NANT'GLIN, a village in Denbighſhire, North Wales; with fairs on May 6 and October 27.

NANTIAL', a town of France, in the department of the Upper Vienne, and chief place of a canton, in the diſtrict of Bellac; containing 1570 inhabitants.

NAN'TICOKE, a town of the ſtate of Maryland: eighty-five miles ſouth of Philadelphia.

NAN'TICOKE CREE'K, or WAVENNY, a river of Upper Canada, which runs into Lake Erie.

NAN'TICOKE RIV'ER, a river of the ſtate of Maryland, which runs into the Cheſapeak in lat. 38. 3. N. lon. 76. 3. W.

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* The caſe was this. A deacon of the proteſtant church at Bourdeaux was convicted (June 16, 1818.) before the tribunal of police, and condemned to pay a fine and the expenſes of the proceſs, for not having decorated his houſe with hangings, in the manner of the catholics, during the proceſſion of the hoſt on Corpus Chriſti day. The 5th article of the Conſtitutional Charter, by which general toleration is granted, was urged by the accuſed. But, to the aſtoniſhment of every one, the law-officers of the crown demanded and obtained the condemnation by citing a regulation of the old government in 1757. Now this was one of thoſe vexatious decrees which renewed the perſecutions againſt the proteſtants, exiling their paſtors, interdicting their aſſemblies, annulling their marriages, baſtardizing their children, &c. What muſt we think, in the age in which we live, of ſeeing ſuch arbitrary decrees as theſe enforced! A ſimilar conviction took place a few months previouſly at Lyons.

NANTICOKES, Indians who formerly lived in Maryland, on the above river. Theſe Indians are ſaid to have been ſkilled in the art of poiſoning. Their number is now few, and they are retired farther to the north.

NANTIGNI' (Louis-Chazot de), diſtinguiſhed for his genealogical writings, was born in 1692, at Saulx-le-duc in Burgundy. He ſtudied at Dijon and Paris, and at the latter capital was intruſted with the education of ſome young men of rank. Having a particular turn to hiſtorical reſearches, he employed all his leiſure in drawing up genealogical tables; and from 1736 to 1738 he publiſhed the fruits of his labours in a work intitled "Genealogies Hiſtoriques des Rois, des Empereurs, et de toutes les Maiſons Souveraines;" 4 vols. 4to. This is conſidered as a valuable work, and he left in MS. materials for a continuation of it. He alſo publiſhed "Tablettes Geographiques; Tablettes Hiſtoriques, Genealogiques, et Chronologiques; and Tablettes de Themis." He furniſhed many genealogical articles for the Supplement of Moreri in 1749; and during the latter years of his life he ſupplied the genealogical part of the Mercure. This induſtrious writer became totally blind before his death, which happened in 1755.

NAN'TRILL, Eaſt and Weſt, two townſhips of America, in Cheſter county, Pennſylvania.

NAN'TUA, a town of France, and principal place of a diſtrict, in the department of the Ain. This town was called *Nantuacum* by the Romans; and was in their time a place of conſideration, if we may judge from ſome medals and fragments of inſcriptions which have been dug up at ſeveral times. There were, before the revolution, two convents exiſting in Nantua, one for women, and the other for men. There are manufactures for gauzes, taffetas, ſtockings, nankeen, and printed calicoes or chintzes. The lake of Nantua, though not more than four or five miles in circumference, is amply ſtocked with fiſh. Its depth, like all ſmall lakes among the Alps, is conſiderable; and more eſpecially ſo on its ſouth-eaſt ſide, where the ſteepneſs and abrupt elevation of the lateral mountains are more forcibly felt. Towards the ſouthern extremity of Nantua, are quarries of different ſorts of gypſum. It is thirty-ſix miles weſt of Geneva, and eighteen eaſt of Bourg en Breſſe. Lat. 46. 9. N. lon. 5. 41. E.

NANTUCK'ET, an iſland of North America, belonging to the ſtate of Maſſachuſetts, and ſituated between lat. 41. 13. and 41. 22. 30. N. and between lon. 69. 56. and 70. 13. 30. W. about eight leagues ſouth of Cape Cod, and eaſt of the iſland of Martha's Vineyard. It is fifteen miles long, and eleven broad, including Sandy Point; but its general breadth is three miles and a half. It has only one bay of note, formed by a ſandy point, extending from the eaſt end of the iſland to the north and weſt, on which was erected a light-houſe in 1784, and on the north ſide of the iſland as far as Eel Point. This is a fine road for ſhips, except when the wind is at north-weſt, which cauſes a heavy ſwell. The iſland conſtitutes a county of its own name, and contains 5617 inhabitants, and ſends one repreſentative to the general court. It has ten ſpermaceti-works. The inhabitants are, in general, robuſt and enterpriſing, moſt of them being ſeamen and mechanics. The ſeamen are ſingularly-expert whalemen. The whale-fiſhery originated among the white inhabitants in 1690, and advanced to a conſiderable ſtate of proſperity, which was almoſt ruined by the late war; but it has ſince revived, and extended to the great Pacific Ocean. The iſland had formerly plenty of wood. The people who inhabit it, and particularly the females, are much attached to it, and have no wiſh to emigrate. They are moſtly Friends, or Quakers; but there is one ſociety of Congregationaliſts. There are at preſent about 300 proprietors of the iſland; among whom the proportional number of cattle, ſheep, &c. are put out to paſture, and the quantity of ground appropriated to the raiſing of crops is ſubject to particular regulations; and proper officers are appointed who keep books for debiting and crediting the different proprietors.

NANTUCK'ET, formerly *Sherburn*, a ſeaport town of Maſſachuſetts, on Nantucket Iſland. In 1794, the exports amounted to 20,514 dollars: 124 miles ſouth-weſt of Boſton.

NANTUX'ET CREE'K, a river of New Jerſey, which runs into Delawar Bay in lat. 39. 21. N. lon. 75. 16. W.

NAN'TWICH, or NAMPTWICH, a market-town in the county-palatine of Cheſter, is ſeated in a luxuriant vale, on the high road from London to Cheſter, at the diſtance of 170 miles from the former place, and twenty from the latter. The earlieſt mention of this town is in the reign of William the Conqueror, when a ſanguinary battle between the Engliſh and Welſh is ſaid to have been fought in its vicinity. In 1113 it was laid waſte by the Welſh, and in 1146 we find a band of theſe mountaineers defeated here when returning homewards from a predatory excurſion. From this time hiſtory is ſilent concerning it, till the era of the civil wars between the king and the parliament in the ſeventeenth century, when it appears to have been fortified with mud-walls and ditches, and to have been ſeveral times taken and re-taken by each of the contending parties. Fire and peſtilence have alſo produced very deſtructive effects in this town: for, in 1438 and in 1583, almoſt every houſe was conſumed by the former; and, in 1604, the latter produced a mortality of upwards of five hundred perſons. Extenſive ſalt-works were formerly eſtabliſhed here; but theſe are nearly relinquiſhed. Many of the lower claſs of inhabitants now derive a livelihood from ſhoe-making for the London ſhops; and a ſmall cotton-manufactory has been lately eſtabliſhed.

Nantwich is one of the largeſt and beſt-built towns in the county; the ſtreets being very regular, and adorned with many gentlemen's houſes. It is governed by a conſtable, &c. who are guardians of the ſalt-ſprings. The town is divided into two equal parts by the Weaver, which is not navigable further than Winsford-bridge. The Cheſter-canal, begun in 1772, and long ſince completed, is finiſhed in a handſome broad baſon near this place. The church is a handſome pile of building in the form of a croſs, with an octangular tower in the middle: the chancel has a carved ſtone roof with neat ſtalls, brought from the abbey of Vale-Royal. Here is alſo a diſſenting meeting-houſe. There are ſeven alms-houſes endowed by John Crewe, eſq. of Crewe, in purſuance of the wills of ſir Thomas Crewe and ſir John Crewe; they are for men and women, who are allowed ſix pounds a-year. Six alms-houſes endowed by ſir Edward Wright for men and women, who are allowed four pounds a-year, a ſhirt, a pair of ſtockings, and a pair of ſhoes. Six alms-houſes endowed by Mrs. Willborom for men and women, who are allowed ten ſhillings per quarter, and a new gown every two years, value 1l. 4s. The work-houſe was erected in 1780; here is alſo a free-ſchool. The market-houſe is a neat modern edifice, occupying the ſcite of an ancient fabric, which ſuddenly fell to the ground in the year 1739. It is ſaid there were likewiſe formerly ſeveral hoſpitals, now gone to ruin, and their funds applied to other purpoſes; what thoſe purpoſes are, and whether for the relief of the poor or of the rich, it is hoped that the preſent enquiry into charitable endowments, for which the public is ſo much indebted to Mr. Brougham, may bring forth ſome intelligence. The petty ſeſſions for the hundred are held in this town; and the inhabitants poſſeſs an exemption from ſerving on juries except within its limits. Saturday is the market-day; and there are three fairs during the year: viz. Mar. 26, Sept. 4, and Dec. 15. Nantwich, according to the parliamentary returns of 1811, contained 873 houſes, and 3999 inhabitants.

Adjoining to the town are ſeen the foundations of the caſtle, which was a ruin ſo early as the reign of Henry VII. when it was demoliſhed, and the ſtones made uſe of for the purpoſe of enlarging the pariſh-church. The ſcite is now the property of the marquis of Cholmondeley, whoſe chief reſidence is ſituated at Malpas, about five or ſix miles further to the eaſtward. See vol. xiv. p. 211.—Crewe-hall, the ſeat of lord Crewe, lies to the weſt of Nantwich; and is a very fine ſpecimen of the architecture of the 17th century. This manſion was garriſoned for the parliament at the commencement of the civil wars; but was taken, after an obſtinate reſiſtance, by the royal army under lord Byron, in 1643. A view of a curious ſtaircaſe in this houſe, with a hiſtory and deſcription of the building, are publiſhed in Britton's Architectural Antiquities of Great Britain, vol. ii.—Doddington-caſtle, which ſtands four miles to the ſouth of the town, is alſo remarkable for having been ſeveral times beſieged and taken during the ſame unfortunate era. *Beauties of England and Wales*, vol. ii. *Wilkes's Britiſh Directory*, vol. iv.

NANTZ', a town of France, in the department of the Aveiron: twelve miles eaſt of Milhau.

NANU'I, a town of Perſia, in the province of Irak: fifty-four miles north-eaſt of Iſpahan.

NANZOO', a town of Burmah: ſixteen miles weſt of Ava.

NAOT'LAN, a town of Mexico. See ALMERIA, vol. i. p. 358.

NAOU'AI, the ſurname of *Mohi Eddin Abou Zakaria Jahia Ben Scharaf*, a muſſulman doctor of the ſect of Schafeï, who wrote many works by which he acquired great celebrity. He was a native of Naoua, a ſmall town within the juriſdiction of the city of Damaſcus, of which place he became an inhabitant at the age of thirteen, or, according to ſome authors, at the age of nineteen; this is the more probable, as it was at this early period of life he was created doctor of law. The muſſulmen call him *Imam abel Zamanehi*, or the Great Imam of his age; and they ſpeak of him as a doctor intimately converſant in the knowledge of religion, who lived retired from the world, in the practice of all the duties of piety; who was thoroughly inſtructed in traditions, and a great maſter of juriſprudence. He died at Damaſcus in the year of the Hegira 676, or 1298 of the Chriſtian era. He was buried at his native place, where he received the honours of ſaintſhip. He was author of, 1. Treatiſes on Juriſprudence. 2. A Treatiſe on Traditions. 3. On the Fundamental Principles of the Mahometan Religion; and other pieces. He is ſometimes referred to as "the doctor in traditions of the city of Damaſcus." *Gen. Biog.*

NAOU'R, a town of Nubia, on the Nile: fifteen miles north-eaſt of Moſcho.

NAOU'RS, a town of France, in the department of the Somme: nine miles north of Amiens, and eight ſouth of Doulens.

NAP, *ſ.* [from hnappian, Sax. to ſleep.] Slumber; a ſhort ſleep. A word ludicrouſly uſed.—Mopſa ſat ſwallowing of ſleep with open mouth, making ſuch a noiſe, as nobody could lay the ſtealing of a *nap* to her charge. *Sidney.*

The ſun had long ſince in the lap
Of Thetis taken out his *nap*. *Hudibras.*

Down; villous ſubſtance: [hnoppa, Sax.]—Plants, though they have no prickles, have a kind of downy or velvet rind upon their leaves; which down or *nap* cometh of a ſubtil ſpirit in a ſoft or fat ſubſtance. *Bacon.*

Ah! where muſt needy poet ſeek for aid,
When duſt and rain at once his coat invade;
His only coat! where duſt confus'd with rain
Roughens the *nap*, and leaves a mingled ſtain. *Swift.*

A knap; a protuberance; the top of a hill: [*gnypa*, Icel. cnæp, Sax.]—Between this intrenchment and the innermoſt one, is no ſpace of ground at all, but only a deep trench and a high vallum, including a large level piece of ground, which is higher than any other part of this fortification, it being the *nap* of the hill. *Carew's Survey of Cornwall.*

To NAP, *v. n.* To ſleep; to be drowſy or ſecure; to be ſupinely careleſs.—What is ſeriouſly related by Helmont, that foul linen, ſtopt in a veſſel that hath wheat in it, will in twenty-one days' time turn the wheat into mice; without conjuring, one may gueſs to have been the philoſophy and information of ſome houſewife, who had not ſo carefully covered her wheat, but that the mice could come at it, and were there taken *napping* juſt when they had made an end of their good chear. *Bentley.*

See how he *nappeth*, ſee, for cockes bones,
As he wold fallen from his horſe atones. *Chaucer.*

NAP'-TAKING, *ſ.* Surpriſe; ſeizure on a ſudden; unexpected onſet, like that made on men aſleep.—*Nap-takings*, aſſaults, ſpoilings, and firings, have in our forefathers' days, between us and France, been common. *Carew.*

NAP OF GRAY'LAND, a cape on the weſt coaſt of the iſland of Yeil. Lat. 60. 56. N. lon. 1. 31. W.

NAPABEI'CHIC, a town of Mexico, in the province of New Biſcay: 160 miles north-weſt of Parral.

NAPACA'R, a town of the iſland of Calpenteen, in the Indian Sea. Lat. 7. 56. N. lon. 79. 48 E.

NAPÆ'A, *ſ.* [from *Napææ*, nymphs of the woods. See the next article.] In botany, a genus of the claſs dioecia, order monadelphia; or claſs monadelphia, order polyandria; natural order of columniferæ, (malvaceæ, *Juſſ.*) Generic Characters—I. Male. Calyx: perianthium bell-ſhaped, five-cleft, round, permanent. Corolla: petals five, oblong, concave, patulous, convex with oblong claws. Stamina: filaments very many, capillary, of a middling length, connected in a column; antheræ roundiſh, compreſſed. Piſtillum: germen conical, minute; ſtyle cylindric, ten-cleft, capillary; ſtigmas none. Pericarpium: abortient. II. Female on a diſtinct individual. Calyx and corolla: as in the male. Stamina: filaments as in the male, but ſhorter; antheræ ſmall, effete. Piſtillum: germen conical; ſtyle as in the male, longer than the ſtamens; ſtigmas blunt. Pericarpium: capſules ten, converging into an ovate form, ſharpiſh, awnleſs. Seeds; ſolitary, kidney-form.—*Eſſential Character.* Calyx five-cleft; petals five. Male. Stamina monadelphous, very many, fertile; ſtyles ſeveral, barren. Female. Stamina monadelphous, very many, barren; ſtyles ſeveral, longer than the ſtamens; capſules orbicular, depreſſed, ten-celled; ſeeds ſolitary.

There are but two ſpecies, which Schreber, following Cavanilles, has united to Sida, to which they are very nearly allied. But we may thus, as has been before remarked, thruſt all the plants of every natural order into one genus. Beſides the circumſtance of having fertile and barren hermaphrodite flowers on diſtinct individuals, the petals are not oblique, the pedicel is not jointed, and the calyx is wider at the baſe. Gærtner remarks, that Napæa differs from Sida in having more than one capſule, and a manifeſt common receptacle; from Abutilon in having only one ſeed in each capſule, and that not clearly valved.

1. Napæa lævis, or ſmooth napæa: peduncles naked, ſmooth, and even; leaves lobed, ſmooth. Root perennial, frequently creeping. Stems ſmooth, about four feet high. Leaves alternate, upon pretty long ſlender footſtalks, deeply cut into three lobes, which end in acute points, and are regularly ſerrate; thoſe on the lower part of the ſtem are near four inches long, and almoſt as much in breadth, but they diminiſh gradually to the top of the ſtem. At the baſe of the leaf comes out the peduncle, about three inches long, dividing at top into three ſmaller, each ſuſtaining one white flower, ſmaller than in the ſecond ſort, with a longer column of ſtamens, the antheræ ſtanding out beyond the corolla. Linnæus ſays, that the leaves are cordate, five-lobed, acuminate, flat; and that the peduncles have three or four flowers.

2. Napæa ſcabra, or rough napæa: peduncles involucred, angular; leaves palmate, rugged. Root perennial,

compoſed of many thick fleſhy fibres, ſtriking deep into the ground, and connected at the top into a large head, from which come out many rough hairy leaves, near a foot diameter each way, deeply cut into ſix or ſeven lobes, irregularly indented on their edges, each lobe having a ſtrong midrib, all meeting at the footſtalk, which is large and long, ariſing immediately from the root. Flower-ſtalks ſeven or eight feet high, dividing into ſmaller branches, having one leaf at each joint, of the ſame form as thoſe below, but diminiſhing in ſize towards the top, where they ſeldom have more than three lobes, which are divided to the footſtalk. Towards the upper part of the ſtalk comes out from the ſide at each joint a long peduncle, branching out towards the top, and ſuſtaining ſeveral white flowers, which are tubulous at bottom where the ſegments of the petal are connected, but ſpread open above, and are divided into five obtuſe ſegments. The male plants are barren; but in the female plants the flowers are ſucceeded by ten capſules, placed in a ring, ſemicircular, finiſhing at top in a recurved dagger-point, compreſſed wedge-ſhaped, convex on the back, with a raiſed line along the middle, flat at the ſides and ſubcrenulate towards the dorſal margin, one-celled, valveleſs, or ſometimes but ſeldom opening by two valves. Common receptacle central, pyramidal, grooved, and finiſhing in a dagger-point: proper none or very ſhort. Seeds ſolitary, kidney-form, triangular-compreſſed, brown, very obſcurely ſtriated. Integument triple; the outermoſt very thin, the middle cartilaginous; the inmoſt membranaceous. The female flowers have ſtamens, but the antheræ are very ſmall, effete, and barren. The leaves are ſubpeltate, but open to the very petiole, and wrinkled; they have from two to ſeven lobes. Flowers in heads. Fruit orbicular, depreſſed, conſiſting of eight or ten joints.

Both theſe plants grow naturally in Virginia and other parts of North America. From their bark a ſort of hemp might be procured, ſuch as many of the malvaceous tribe afford. They flower from July to September, the ſeeds ripen in autumn, and then the ſtalks decay. Mr. Miller cultivated them in 1759. They are eaſily propagated by ſeeds, ſown on a bed of common earth in the ſpring. Keep them clear from weeds till autumn, and then tranſplant them where they are to remain. They delight in a rich moiſt ſoil, in which they will grow very luxuriantly, and muſt be allowed room. The firſt ſort may alſo be increaſed by parting the roots in autumn. They are not plants of any great beauty.

NAPÆ'Æ, [from ναπη, Gr. a grove.] Certain female divinities among the ancients who preſided over the hills and woods of the country. Yet ſome ſuppoſe that they were tutelary nymphs of the fountains, and the naiades of the ſea.

NAP'ASHISH, a lake of North-America. Lat. 62. 10. N. lon. 99. 50. W.

NAPATA', a town of Nubia, near the eaſt coaſt of the Nile: 210 miles eaſt-ſouth-eaſt of Dongala, and 160 weſt-north-weſt of Suakem.

NAPAU'L. See NEPAUL.

NAPAYOL', or NAPAYED'LA, a town of Moravia, in the circle of Hradiſch: eight miles north of Hradiſch.

NAPE, *ſ.* [Of uncertain etymology. Skinner imagines it to come from *nap*, the hair that grows on it; Junius, with his uſual Greek ſagacity, from ναπη, a hill; perhaps from cnæp, Sax. any protuberance; or *hnappr*, Icel.] The joint of the neck behind.—Turn your eyes towards the *napes* of your necks; and make but an interior ſurvey of your good ſelves. *Shakeſpeare.*

NAPE'CA, *ſ.* in botany. See RHAMNUS.

NAPEL'LUS, *ſ.* in botany. See ACONITUM.

NAP'ENFELS, a town of Bavaria, in the principality of Aichſtatt: five miles ſouth of Aichſtatt.

NA'PERY, *ſ.* [*naperia*, Ital. *nappa*, a table-cloth, a napkin; *nappe*, Fr. *naparia*, low Lat. from *nappa*, Lat. The Scotch uſe *naiprie*, which Dr. Jamieſon has noticed with this remark: "Dr. Johnſon mentions *napery*, but without any authority; the word being ſcarcely known in Engliſh." It happens, however, (though Dr. Johnſon indeed could find no example,) that this word is common in Engliſh, and ſupported by indiſputable authority. *Todd.*] Linen for the table; linen in general.—What uſe was there of a towel, where was no water? She that made a fountain of her eyes, made precious *napary* of her hair: that better flax ſhamed the linen in the Phariſee's cheſt. *Bp. Hall's Contempl.*—He did eat no meat on table-cloths; out of mere neceſſity; becauſe they had nor meat nor *napery*. *Gayton on D. Quixote.*

Some her huſband's gowne,
Some a pillowe of downe,
Some of the *napery;*
And all this ſhifte they make
For the good ale ſake. *Skelton's Poems.*

NA'PHEW, or NAVEW, *ſ.* [*napus*, Lat.] An herb. See BRASSICA.

NA'PHISH, [Heb. the ſoul.] A man's name.

NAPH'TALI, [Heb. ſimilitude.] The anceſtor of one of the tribes of Iſrael, was the ſixth ſon of Jacob, by Bilhah, Rachel's maid, and born about the year 1745 B.C. In the prophetic bleſſing pronounced by Jacob upon his ſons, according to our verſion, with which moſt ancient and modern expoſitors concur, he is deſcribed under the alluſion of "a hind let looſe, that giveth goodly words;" or, one who ſhould excel his brethren in ſwiftneſs, and be remarkable for the ſweetneſs of his eloquence. But other learned men, underſtanding the words in another ſenſe, which is agreeable to the Septuagint, Chaldee, and Arabic, verſions, render them, "Naphtali is a well-ſpread tree, which ſhoots out beautiful branches." The prediction contained in the words according to the latter tranſlation, was exactly verified by the event: for no tribe multiplied ſo wonderfully as that of Naphtali, who had but four ſons when he came into Egypt; and yet at the time of the Exodus, it could muſter fifty-three thouſand men, able to bear arms. The portion of the land of Canaan which was allotted to this tribe lay to the eaſt of the inheritance of the tribe of Aſher, between it and the river Jordan, over againſt the half-tribe of Manaſſeh. It was a very fertile diſtrict, and bounded by Syria on the north, and ſouthward by the tribe of Zebulun. *Gen.* xxx. 7, 8. xlix. 21. *Joſh.* xix. 32.

NAPH'THA, *ſ.* [Latin, from the Perſian *neſt*, or *napht.*] See the article MINERALOGY, vol. xv. p. 475.—*Naphtha* is a very pure, clear, and thin, mineral fluid, of a very pale yellow, with a caſt of brown in it. It is ſoft and oily to the touch, of a ſharp and unpleaſing taſte, and of a briſk and penetrating ſmell; of the bituminous kind. It is extremely ready to take fire. *Hill.*—Strabo repreſents it as a liquation of bitumen. It ſwims on the top of the water of wells and ſprings. That found about Babylon is in ſome ſprings whitiſh, though it be generally black, and differs little from petroleum. *Woodward.*—This *nephtha* is an oily or fat liquid ſubſtance; in colour not unlike ſoft white clay. *Sir T. Herbert's Travels.*

From the arched roof
Pendant by ſubtle magick, many a row
Of ſtarry lamps, and burning creſſets, fed
With *naphtha* and aſphaltus, yielded light
As from a ſky. *Milton's Paradiſe Loſt.*

NAPI'ER, or NE'PER (John), Baron of Merchiſton in Scotland, and inventor of logarithms, was the eldeſt ſon of ſir Archibald Napier of Merchiſton, and born in the year 1550. Having given early indications of excellent natural abilities, and of a propenſity to reading and ſtudy, his father was careful to give him the advantages of a liberal education. After being well grounded in the requiſite preparatory learning, he was ſent to the univerſity of St. Andrew's, where he went through the courſes of philoſophy, and the other branches of academic ſtudy. Afterwards he made the tour of France, Italy, and Germany. Upon his return to his native country, his literature and fine accompliſhments ſoon attracted notice, and might have raiſed him to the higheſt offices of the ſtate; but, declining all civil employment, and the buſtle of the court, he retired from the world to purſue literary reſearches, in which he made an uncommon progreſs, as appears by the ſeveral uſeful diſcoveries with which he afterwards favoured the public. He applied himſelf chiefly to the ſtudy of the mathematics; but at the ſame time did not neglect that of the holy Scriptures; in both of which he diſcovered the moſt extenſive knowledge, and profound penetration. His "Plain Diſcovery of the Revelation of St. John," publiſhed in the year 1593, affords evidence of the moſt acute inveſtigation; though the progreſs of time has diſcovered that his calculations concerning certain events had proceeded upon fallacious data. This work has been printed abroad in ſeveral languages; and a French edition of it, which appeared at Rochelle in the ſame year, was very acceptable to the French proteſtants, on account of the zeal and erudition employed by the author to prove the pope to be antichriſt.

But what principally contributed to give celebrity to his name, was his great and fortunate diſcovery of logarithms in trigonometry, which by eaſe and expedition in calculation have ſo wonderfully aſſiſted the ſcience of aſtronomy, and the arts of practical geometry and navigation. As the accuracy of aſtronomical obſervation had been continually advancing, it was neceſſary that the correctneſs of trigonometrical calculation, and of courſe its difficulty, ſhould advance in the ſame proportion. The ſigns and tangents of angles could not be expreſſed with ſufficient correctneſs without decimal fractions extending to five or ſix places below unity; and, when to three ſuch numbers a fourth proportional was to be found, the work of multiplication and diviſion became extremely laborious. Accordingly, in the end of the ſixteenth century, the time and labour conſumed in ſuch calculations had become exceſſive, and were felt as extremely burthenſome by the mathematicians and aſtronomers all over Europe. Napier, whoſe mind ſeems to have been peculiarly turned to arithmetical reſearches, and who was alſo devoted to the ſtudy of aſtronomy, had early ſought for the means of relieving himſelf and others from this difficulty. He had viewed the ſubject in a variety of lights, and a number of ingenious devices had occurred to him, by which the tediouſneſs of arithmetical operations might, more or leſs completely, be avoided. In the courſe of theſe attempts, he did not fail to obſerve, that, whenever the numbers to be multiplied or divided were terms of a geometrical progreſſion, the product or quotient muſt alſo be a term of that progreſſion, and muſt occupy a place in it pointed out by the places of the given numbers, ſo that, it might be found from mere inſpection, if the progreſſion were far enough continued. If, for inſtance, the third term of the progreſſion were to be multiplied by the ſeventh, the product muſt be the tenth; and, if the twelfth were to be divided by the fourth, the quotient muſt be the eighth; ſo that the multiplication and diviſion of ſuch terms was reduced to the addition and ſubtraction of the numbers which indicated their places in the progreſſion. This obſervation, or one very ſimilar to it, was made by Archimedes, and was employed by that great geometer to convey an idea of a number too vaſt to be correctly expreſſed by the arithmetical notation of the Greeks. Thus far, however, there was no difficulty, and the diſcovery might certainly have been made by men much inferior either to Napier or Archimedes. What remained to be done, what Archimedes did not attempt, and what Napier completely performed, involved two great difficulties. It is plain, that the reſource of the geometrical progreſſion was ſufficient, when the given numbers were terms of that progreſſion; but, if they were not, it did not ſeem that any advantage could be derived from it. Napier, however, perceived, (and it was by no means obvious,) that all numbers whatſoever might be inſerted in the progreſſion, and have their places aſſigned in it. After conceiving the poſſibility of this, the next difficulty was, to diſcover the principle, and to execute the arithmetical proceſs, by which theſe places were to be aſcertained. It is in theſe two points that the peculiar merit of his invention conſiſts; and at a period when the nature of ſeries, and when every other reſource of which he could avail himſelf were ſo little known, his ſucceſs argues a depth and originality of thought which have been rarely ſurpaſſed. The way in which he ſatisfied himſelf that all numbers might be intercalated between the terms of the given progreſſion, and by which he found the places they muſt occupy, was founded on a moſt ingenious ſuppoſition; that, of two points deſcribing two different lines, the one with a conſtant velocity, and the other with a velocity always increaſing in the ratio of the ſpace the point had already gone over; the firſt of theſe would generate magnitudes in arithmetical, and the ſecond magnitudes in geometrical, progreſſion. It is plain, that all numbers whatſoever would find their places among the magnitudes ſo generated; and, indeed, this view of the ſubject is as ſimple and profound as any which, after two hundred years, has yet preſented itſelf to mathematicians. The mode of deducing the reſults has been ſimplified; but it can hardly be ſaid that the principle has been more clearly developed. The numbers which indicate the places of the terms of the geometrical progreſſion are called by Napier the *logarithms* of thoſe terms.

Various ſyſtems of logarithms, it is evident, may be conſtructed according to the geometrical progreſſion aſſumed; and of theſe, that which was firſt contrived by Napier, though the ſimpleſt, and the foundation of the reſt, was not ſo convenient for the purpoſes of calculation, as one which ſoon afterwards occurred, both to himſelf and his friend Briggs, by whom the actual calculation was performed. The new ſyſtem of logarithms was an improvement, practically conſidered; but in as far as it was connected with the principle of the invention, it is only of ſecondary conſideration. The original tables had been alſo ſomewhat embarraſſed by too cloſe a connection between them and trigonometry. The new tables were free from this inconvenience. See the article LOGARITHMS, vol. xii. p. 885 & ſeq.

It is probable, however, that the greateſt inventor in ſcience was never able to do more than to accelerate the progreſs of diſcovery, and to anticipate what Time, "the author of authors," would have gradually brought to light. Though logarithms had not been invented by Napier, they would have been diſcovered in the progreſs of the algebraic analyſis, when the arithmetic of powers and exponents, both integral and fractional, came to be fully underſtood. The idea of conſidering all numbers as powers of one given number would then have readily occurred, and the doctrine of ſeries would have greatly facilitated the calculations which it was neceſſary to undertake. Napier had none of theſe advantages, and they were all ſupplied by the reſources of his own mind. Indeed, as there never was any invention for which the ſtate of knowledge had leſs prepared the way, there never was any where more merit fell to the ſhare of the inventor. His good fortune, alſo, not leſs than his great ſagacity, may be remarked. Had the invention of logarithms been delayed to the end of the ſeventeenth century, it would have come about without effort, and would not have conferred on the author the high celebrity which Napier ſo juſtly derives from it. In another reſpect he has alſo been fortunate. Many inventions have been eclipſed or obſcured by new diſcoveries; or they have been ſo altered by ſubſequent improvements, that their original form can hardly be recogniſed, and, in ſome inſtances, has been entirely forgotten. This has almoſt always happened to the diſcoveries made at an early period in the progreſs of ſcience, and before their principles were fully unfolded. It has been quite otherwiſe with the invention of logarithms, which came out of the hands of the author ſo perfect, that it has never received but one material improvement, that which it derived, as has juſt been ſaid, from the ingenuity of his friend in conjunction with his own. Subſequent improvements in ſcience, inſtead of offering any thing that could ſupplant this invention, have only enlarged the circle to which its utility extended. Logarithms have been applied to numberleſs purpoſes, which were not thought of at the time of their firſt conſtruction. Even the ſagacity of their author did not ſee the immenſe fertility of the principle he had diſcovered. He calculated his tables merely to facilitate arithmetical, and chiefly trigonometrical, computation; and little imagined that he was at the ſame time conſtructing a ſcale whereon to meaſure the denſity of the ſtrata of the atmoſphere, and the heights of mountains; that he was actually computing the areas and the lengths of innumerable curves, and was preparing, for a calculus which was yet to be diſcovered, many of the moſt refined and moſt valuable of its reſources. Of Napier, therefore, if of any man, it may ſafely be pronounced, that his name will never be eclipſed by any one more conſpicuous, or his invention ſuperſeded by any thing more valuable.

Napier publiſhed his invention in 1614, under the title of "Logarithmorum Canonis Deſcriptio," containing a large canon of logarithms, with the deſcription and uſes of them; but the mode of their conſtruction was concealed till the ſenſe of the learned concerning the invention ſhould be known. As ſoon as Napier had communicated this diſcovery to Mr. Briggs, at that time mathematical profeſſor of Greſham-college, the latter ſet about the application of the rules in his "Imitatio Napeirea;" and in a letter which he wrote to the celebrated Uſher in the ſame year he ſays, "Napier, lord of Merchiſton, hath ſet my head and hands at work with his new and admirable logarithms. I hope to ſee him this ſummer, if it pleaſe God; for I never ſaw a book which pleaſed me better, and made me more wonder." Briggs was too great a man to indulge the ſpirit of envy; ſo far, indeed, was he removed from a feeling of that nature, that he afforded every facility to the reception of Napier's work, teaching the nature of the logarithms in his public lectures, and at the ſame time recommending a change in the ſcale of them, which he ſubmitted to lord Napier. During a ſubſequent viſit to lord Napier theſe two friends agreed upon a form, according to which the baron ſtrongly urged Mr. Briggs to proceed with his computation; and hence they are denominated ***Briggs's logarithms***, and are thoſe now in common uſe.

The following paſſage from the Life of Lilly the aſtrologer, is quoted by lord Buchan as containing a curious account of the firſt meeting of theſe two illuſtrious men. "I will acquaint you," ſays Lilly, "with one memorable ſtory related to me by John Marr, an excellent mathematician and geometrician, whom I conceive you remember. He was ſervant to king James I. and king Charles I. When Merchiſton firſt made public his logarithms, Mr. Briggs, then reader of the aſtronomy-lectures at Greſham-college, in London, was ſo much ſurpriſed with admiration of them, that he could have no quietneſs in himſelf until he had ſeen that noble perſon whoſe only invention they were. He acquaints John Marr therewith, who went into Scotland before Mr. Briggs, purpoſely to be there when theſe two ſo-learned perſons ſhould meet. Mr. Briggs appoints a certain day when to meet at Edinburgh; but, failing thereof, Merchiſton was fearful he would not come. It happened one day as John Marr and the baron Napier were ſpeaking of Mr. Briggs; Ah John, ſaid Merchiſton, Mr. Briggs will not now come. At the very inſtant one knocks at the gate; John Marr haſted down, and it proved to be Mr. Briggs to his great contentment. He brings Mr. Briggs up to the baron's chamber, where almoſt one quarter of an hour was ſpent beholding each other almoſt with admiration before one word was ſpoke. At laſt Mr. Briggs began: Sir, I have undertaken this long journey purpoſely to ſee your perſon, and to know by what engine of wit or ingenuity you came firſt to think of this moſt excellent help into aſtronomy, viz. the logarithms; but, ſir, being by you found out, I wonder nobody elſe found it out before, when now, being known, it appears ſo eaſy. He was nobly entertained by baron Napier; and every ſummer after that, during the lord's being alive, this venerable man Mr. Briggs went purpoſely to Scotland to viſit him."

To Napier ſcience is alſo indebted for conſiderable improvements in ſpherical trigonometry, &c. particularly by his catholic or univerſal rule, being a general theorem for the reſolution of all the caſes of ſpherical triangles, in a manner very ſimple, and eaſy to be remembered, which is commonly called "the five circular parts." He likewiſe prepared for the preſs his "Conſtruction of Logarithms," a work not only of great labour, but of the greateſt ingenuity. The laſt literary exertion of this eminent man was the publication of his "Rabdology, and Promptuary of Multiplication," conſiſting of inſtruments and tables for the more eaſy performance of the arithmetical operations of multiplication, diviſion, &c. Napier died at Merchiſton in 1617, when he was in the ſixty-eighth year of his age. To him Kepler dedicated his Ephemerides; and it appears from many paſſages in a letter which he wrote about the year 1617, that he conſidered Napier to be the greateſt man of his age in the particular department to which he applied his abilities: "And indeed," ſays lord Buchan, "if we conſider that Napier's diſcovery was not, like thoſe of Kepler or of Newton, connected with any analogies or coincidences which might have led him to it, but the fruit of unaſſiſted reaſon and ſcience, we ſhall be vindicated in placing him in one of the higheſt niches in the Temple of Fame."

This family is ſaid to be deſcended from the ancient thanes of Lennox, but aſſumed the name of ***Napier*** from the following event: One of the ancient earls of Lennox had three ſons; the eldeſt ſucceeded him in the earldom; the ſecond was named Donald; and the third Gilchriſt. The then king of Scots being engaged in war, and having convocated his ſubjects to battle, the earl of Lennox was called on, amongſt others, to ſend ſuch forces as he could collect to the king's aſſiſtance, which he accordingly did, keeping his eldeſt ſon with him at home, but putting his men under the command of his two younger ſons. The battle went hard with the Scots, who were not only forced to loſe ground, but were actually running away, when Donald ſnatched his father's ſtandard from the bearer, charged the enemy with the Lennox men, changed the fortune of the day, and obtained a victory. After the battle, as the cuſtom was, every one reported his acts, when the king ſaid, "Ye have all done valiantly, but there is one among you who hath ***nae pier***," (that is, no equal;) and, calling Donald to him, commanded him to change his name from Lennox to Napier, and beſtowed upon him the lands of Goſford, and lands in Fife, as a reward for his ſervices.

The ſubject of this article was twice married, and left behind him a numerous iſſue. His only ſon, by his firſt lady, Archibald, a perſon of fine parts and learning, was raiſed to be a privy-counſellor by James VI. under whoſe reign he held the ſeveral offices of treaſurer-depute, juſtice-clerk, and ſenator of the college of juſtice; and he was promoted by Charles I. of England to the peerage, by the title of Lord Napier. "In his family," ſays lord Buchan, "he (Napier) ſeems to have been uncommonly fortunate; for his eldeſt ſon became learned and eminent, even in his father's lifetime; his third was a pupil of his own in mathematics, to whom he conſigned the care of publiſhing his poſthumous works; and, loſing none of his children by death, he loſt all his daughters by reſpectable and honourable marriages."

The titles of our author's works not already particularly ſpecified, are, 4. Mirifici Logarithmorum Canonis Conſtructio; et eorum ad ipſorum numeros habitudines; una cum Appendice, de alia eaque præſtantiore Logarithmorum ſpecie condenda. Quibus acceſſere Propoſitiones ad Triangula Sphærica faciliore calculo reſolvenda; una cum Annotationibus doctiſſimi D. Henrici Briggii in eas, et memoratam Appendicem; publiſhed by the author's ſon in 1619. 5. Rabdologia, ſeu Numerationis per virgulas, Libri duo, 1617. 6. A Letter to Anthony Bacon, the original of which is in the archbiſhop's library at Lambeth, entitled, "Secret Inventions, profitable and neceſſary in theſe days for the Defence of this Iſland, and withſtanding Strangers, Enemies to God's Truth and Religion," dated June 2, 1596, which the earl of Buchan has printed in the Appendix to his "Account of the Writings and Inventions of Napier of Merchiſton."

Of Napier's method of LOGARITHMS, and of other methods which aroſe from it, we have given a full account under that article, in vol. xii. It remains now to deſcribe another curious and uſeful invention of his, called

NAPIER'S ***Rods***, or ***Bones***, an inſtrument whereby the multiplication and diviſion of large numbers is much facilitated. As to the conſtruction of Napier's rods; ſuppoſe the common table of multiplication to be made upon a plate of metal, ivory, or paſteboard, and then conceive the ſeveral columns (ſtanding downwards from the digits on the head) to be cut aſunder; and theſe are what we call *Napier's rods*, or *bones*. But then there muſt be a good number of each; for, as many times as any figure is in the multiplicand or diviſor, ſo many rods of that ſpecies (i. e. with that figure on the top of it) muſt we have; though ſix rods of each ſpecies will be ſufficient for any example in common affairs; there muſt be alſo as many rods of o's. But, before we explain the way of uſing theſe rods, there is another thing to be known, viz. that the figures on every rod are written in a manner ſomewhat different from that in a common multiplication table; for the little ſquare in which the ſeveral products of every column are written, is divided into two triangles by diagonals, in ſuch manner as that the units are found in the right-hand triangle, and the tens in the left-hand triangle; the left-hand row of large figures is called the *index-rod*. See a complete ſet of rods at fig. 8. of the preceding plate.

Uſe of Napier's Bones in Multiplication.—To multiply any given number by another; diſpoſe the lamellæ in ſuch a manner, as that the top figures may exhibit the multiplicand; and to theſe, on the left-hand, join the index-rod, or lamella of units: in which ſeek the right-hand figure of the multiplicator; and the numbers correſponding thereto, in the ſquares of the other lamellæ, write out by adding the ſeveral numbers occurring in the ſame rhomb together, and their ſums. After the ſame manner write out the numbers correſponding to the other figures of the multiplicator; let them be diſpoſed under one another, as in the common multiplication, and laſtly, add the ſeveral numbers into one ſum.

Example.—Suppoſe the multiplicand 5978, and the multiplicator 937. From the outermoſt triangle on the right-hand of fig. 9. which correſponds to the right-hand figure of the multiplicator 7, write out the figure 6, placing it under the line. In the next rhomb, towards the left, add 9 and 5; their ſum being 14, write the right-hand figure, viz. 4, againſt 6; carrying the left-hand figure 1, to 4 and 3, which are found in the next rhomb. The ſum 8, join to 46, already put down; after the ſame manner in the laſt rhomb, add 6 and 5, the latter figure of the ſum 11, put down as before, and carry 1 to the 3 found in the left-hand triangle; the ſum 4 join as before, on the left of 1846; thus you will have the factum of 7 into 5978; and after the ſame manner will you have the factum of the multiplicand into the other figures of the multiplicator: the whole added together gives the whole product.

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   5978
    937
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  41846
 17934
53802
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5601386
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Uſe of Napier's Bones in Diviſion.—Diſpoſe the lamellæ ſo, as that the uppermoſt figures may exhibit the diviſor; to theſe, on the left-hand, join the index-rod as before. Deſcend under the diviſor, till you meet thoſe figures of the dividend wherein it is firſt required how oft the diviſor is found, or at leaſt the next leſs number, which is to be ſubtracted from the dividend; the number correſponding to this, in the place of units, write down for a quotient. By determining the other parts of the quotient after the ſame manner, the diviſions will be completed.

Example.—Suppoſe the dividend 5601386, and the diviſor 5978; ſince it is firſt aſked how often 5978 is found in 56013, deſcend under the diviſor (fig. 9.) till in the loweſt ſeries you find the number 53802, approaching neareſt to 56013; the former whereof is to be ſubtracted out of the latter, and the figure 9 correſponding thereto in the lamella of the units write down for the quotient. To the remainder, 2211, join the following figure of the diviſor, 8; and the number 17934 being found, as before, to be the next leſs number thereto, the correſponding number in the lamella of units, 3, is to be written down for the quotient; and the ſubtraction to be continued as before. After the ſame manner the third and laſt figure of the quotient will be found to be 7; and the whole 937.

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5978)5601386(937
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      22118
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To make the uſe of the rods yet more regular and eaſy, they are kept in a flat ſquare box, whoſe breadth is that of ten rods, and the length that of one rod, as thick as to hold ſix (or as many as you pleaſe), the capacity of the box being divided into ten cells, for the different ſpecies of rods. When the rods are put up in the box (each ſpecies in its own cell diſtinguiſhed by the firſt figure of the rod ſet before it on the face of the box near the top), as much of every rod ſtands without the box as ſhows the firſt figure of that rod; alſo upon one of the flat ſides without and near the edge, upon the left-hand, the index-rod is fixed; and along the foot there is a ſmall ledge; ſo that the rods, when applied, are laid upon this ſide, and ſupported by the ledge, which makes the practice very eaſy; but, in caſe the multiplicand ſhould have more than nine places, that upper face of the box may be made broader. Some make the rods with four different faces, and figures on each for different purpoſes.

NAPIMO'GA, *ſ.* [from the Caribean name of the tree, *napimogal.*] In botany, a genus of the claſs polyandria order trigynia, natural order roſacea, ***Juſſ.*** Generic Characters—Calyx: perianthium ſuperior, of one leaf, ſmall, concave, in ſix roundiſh, acute, permanent, ſegments. Corolla: petals ſix, ovate, villous, inſerted into the receptacle of the flower, oppoſite to the calyx. Stamina: filaments eighteen, inſerted into the ſame part; antheræ roundiſh, of two cells. Piſtillum: germen inferior, crowned by the calyx; ſtyles three; ſtigmas obtuſe. Pericarpium and ſeed: unknown.—*Eſſential Character.* Calyx in ſix deep ſegments; petals ſix, villous; ſtamens three to each petal; germen crowned with the calyx.

Napimoga Guianenſis, a ſingle ſpecies. This is a tree, whoſe trunk riſes to the height of twenty-five feet, and is one and a half in diameter, with a reddiſh wrinkled and cracked bark. The wood is white and ſoft. The branches ſpread in every direction. Leaves alternate, on very ſhort and ſlender ſtalks, elliptical, ſmooth, ſerrated, with a blunt point. Stipules ſmall, in pairs at the baſe of the footſtalks, deciduous. Flowers ſmall, greeniſh, in ſlender, axillary, long-ſtalked, ſpikes, each flower accompanied by a ſmall ſcale-like bracte. This tree is a native of the woods of Guiana, flowering in November. Juſſieu ranges the genus next after Homalium, to which it appears to have ſome affinity; but the barbarous name can only be tolerated till enough is known of the plant to eſtabliſh its generic character with certainty. *Aubl. Guian.* 592. t. 237.

NAP'LACH, a town of Carinthia, on the Moll: five miles eaſt of Velach.

NAPLES, a kingdom of Italy, comprehending the ancient Samnium, Apulia, Campania, Lucania, and Bruttium. It is bounded on the north-weſt by the Campagna di Roma, Umbria, and the marquiſate of Ancona; on the north-eaſt by the Adriatic, and on the other parts by the Mediterranean. It lies between lat. 37. 46. and 42. 55. N. and between lon. 13. 20. and 19. 15. E. Its form has been likened to the lower part of a leg and foot; its greateſt length from ſouth-weſt to north-eaſt being 375 Engliſh miles, its greateſt breadth 116, and its circuit 1223. According to Pinkerton, it contains, 29,824 ſquare miles.

POLITICAL HISTORY.

The ancient hiſtory of this country falls under the articles ROME and ITALY. The preſent ſtate of it, as well as of the reſt of Italy, is owing to the conqueſts of Charlemagne. When that monarch put an end to the kingdom of the Lombards, (A.D. 774.) he obliged the dukes of Friuli, Spoleto, and Benevento, to acknowledge him as king of Italy; but allowed them to exerciſe the ſame power and authority which they had enjoyed before his conqueſt.

Of theſe three dukedoms, Benevento was by far the moſt powerful and extenſive; it comprehended almoſt all the preſent kingdom of Naples; that part of Farther Calabria beyond the rivers Savuto and Peto, a few maritime cities in Hither Calabria, with the city of Acripoli, and the promontory in its neighbourhood called Capo di Licoſa; and laſtly, the dukedoms of Gaeta, Naples, and Amalfi, which were very inconſiderable, and extended along the ſhore only about one hundred miles, and were interrupted by the Gaſtaldate, or county of Capua.

This flouriſhing and extenſive dukedom was at this time governed by Arechis, who had married one of the daughters of the laſt king of the Lombards, and had ſubmitted, and taken the oath of allegiance to the emperor Charles. However, a few years after, he renounced his allegiance to the Franks, declared himſelf an independent ſovereign, and was acknowledged as ſuch by all the inhabitants of his duchy. To ſtrengthen himſelf againſt Pepin king of Italy, who reſided at Ravenna, he enlarged and fortified the city of Benevento, and likewiſe built Salerno on the ſea-coaſt, ſurrounding it with a very ſtrong and high wall. He engaged in ſeveral wars with the Greeks, whom he ſometimes obliged to give him hoſtages; but, having invaded the territories of the pope, whom Pepin could not aſſiſt, Charlemagne was prevailed on to return to Italy. Arechis unable to oppoſe ſuch a formidable enemy, ſent his eldeſt ſon, Romuald, to Rome, with an offer of ſubmiſſion; but, at the inſtigation of the pope, Charlemagne refuſed the offer, and detained his ſon priſoner; after which he ravaged the country, and made himſelf maſter of Capua. Other deputies, however, proved more ſucceſsful; and, in the year 787, a peace was concluded on theſe conditions: That Arechis and the Beneventans ſhould renew their allegiance to the Franks; that he ſhould pay a yearly tribute to Pepin; deliver up all his treaſure; and give his ſon Grimoald and his daughter Adelgiſa, with twelve others, as hoſtages for his fidelity; however, after many entreaties, Adelgiſa was reſtored to her father.

Charles had no ſooner left Italy, than Arechis forgot all his engagements, and began to negociate with Irene, empreſs of Conſtantinople, and her ſon Conſtantine, for expelling the Franks out of Italy. For himſelf, he deſired the honour of patriciate, and the dukedom of Naples with all its dependencies; and, in return, promiſed to acknowledge the Greek emperor as his ſovereign, and to live after the manner of the Greeks. He required, however, to be ſupported by a Greek army; and that his brother-in-law Adalgiſus, ſon to Deſiderius the laſt king of the Lombards, ſhould be ſent over into Italy, to raiſe a party among his countrymen. Theſe conditions were readily accepted, on condition that prince Romuald ſhould be ſent as an hoſtage; ambaſſadors were ſent to Naples with the enſigns of the patrician order, namely, the mantle of cloth of gold, the ſword, the comb, and the ſandals; but, before the ceremony could be performed, prince Romuald died, and ſoon after him his father, whoſe death was ſuppoſed to have been haſtened by that of his ſon.

After the death of Arechis, the Beneventans ſent a moſt ſubmiſſive embaſſy to Charlemagne, entreating him to ſend them Grimoald, the late king's ſon, and only lawful heir to his crown; threatening at the ſame time to revolt if their prince was denied them. Charles readily granted their requeſt, and allowed Grimoald to depart, after he had agreed to the following conditions, viz. That he would oblige the Lombards to ſhave their beards; that, in writings, and on money, the name of the king ſhould be put before that of the prince; and that he would cauſe the walls of Salerno, Acerenza, and Conſia, to be entirely demoliſhed. The new king was received by his ſubjects with the utmoſt joy; and for ſome time continued faithful to his engagements, excepting only the laſt article, which he either neglected or eluded. So far, however, was he from aſſiſting the Greeks, that he gave notice of their machinations to Pepin king of Italy; raiſed an army to oppoſe his uncle Adalgiſus; and, being joined by Hildebrand duke of Spoleto, and Vinigiſe the general of Pepin, he attacked the Greeks in Calabria ſoon after they had landed, entirely defeated and took his uncle priſoner, and, as is ſaid, put him to a cruel death. Yet, in a ſhort time, Grimoald contracted an alliance with the Greek emperor by marrying his niece Wanzia; and in the fifth year of his reign a war broke out between him and Pepin, which continued for twelve years; at the end of which time a truce was concluded. Grimoald ſurvived this pacification only three years, and was ſucceeded by his treaſurer Grimoald II. who ſubmitted to Charlemagne after the death of Pepin; and from this time the Beneventans were looked upon as tributaries of the weſtern emperors.

As yet, however, the city of Naples did not own allegiance to the dukes of Benevento, but was held by the eaſtern emperors; and frequent wars took place between the Beneventans and Neapolitans. This happened to be the caſe when Grimoald II. aſcended the throne. He concluded a peace with them; which however, was of no long continuance; for Theodore, governor of Naples, having granted protection to Dauferius, a noble Beneventan, who had been concerned in a conſpiracy againſt his prince, Grimoald marched againſt the city of Naples, and inveſted it by ſea and land. Theodore ſtill refuſed to deliver up the traitor, and a general engagement both by land and ſea was the conſequence; in which the Neapolitans were defeated with ſo great ſlaughter, that the ſea was ſtained with their blood for more than ſeven days. Theodore then conſented to deliver up Dauferius, with 8000 crowns for the expenſes of the war; and Grimoald not only pardoned Dauferius, but received him into favour. The latter, however, reflecting on the heinouſneſs of his crime, was ſeized with remorſe; and went a pilgrimage to the holy land, carrying a large ſtone in his mouth, by way of penance, which he never took out but at his meals.

In the year 821, Grimoald was murdered by Radelchis count of Conſia, and Sico Gaſtald of Acerenza; the latter of whom ſucceeded to the dukedom of Benevento. Radelchis, being ſoon after ſeized with remorſe, became a monk; while Sico aſſociated his ſon Sicardo with him in the government; and both, being of an ambitious and reſtleſs diſpoſition, ſought a pretence for attacking the Neapolitans. This was ſoon found, and the city was inveſted by ſea and land. The walls were furiouſly battered; and, part of them being beat down, Sico prepared for a general aſſault. Stephen, at that time duke of Naples, pretended to ſubmit; but, that he might prevent the city from being pillaged, entreated Sico to put off his entry till the morning; and, in the mean time ſent out his mother and his two children as hoſtages. Sico conſented to his requeſt; but next morning found the breach built up, and the Neapolitans prepared for their defence, Exaſperated at their perfidy, he renewed his attacks with vigour, but without any ſucceſs; the beſieged defending themſelves with the utmoſt obſtinacy. At laſt, perceiving that they ſhould not be able to hold out much longer, they conſented to a peace on the following conditions, viz. That the Neapolitans ſhould pay an annual tribute to the princes of Benevento, and conſent to the tranſporting of the body of St. Januarius from his church without the walls of Naples to Benevento. Theſe conditions being ratified, Sico returned with great honour to Benevento; but ſoon after renewed the war, under pretence that the Neapolitans had neglected to pay the ſtipulated ſum; and hoſtilities continued till his death, which happened in 833.

Sico was ſucceeded in the government of Benevento by his ſon Sicardo, who had married the daughter of Dauferius; and, being influenced by the evil counſels of Roffrid's his wife's brother, oppreſſed his ſubjects to ſuch a degree, that they conſpired againſt his life. He beſieged Naples with a powerful army, and took poſſeſſion of Acerra and Atella, both of which he fortified. But Bonus, the Neapolitan duke, defended himſelf ſo vigorouſly, that the Beneventans were obliged to retire, and even to abandon Acerra and Atella, the fortifications of which were immediately demoliſhed. At laſt Sicardo agreed to a peace for five years, on the interceſſion of Lothaire, emperor and king of Italy; but his chief motive was thought to have been the fear of the Saracens, whom the duke of Naples had called over from Africa to his aſſiſtance; for no ſooner were they ſent back, than Sicardo attempted to delay the concluſion of the treaty; but, the emperor interpoſing his authority, a peace was concluded in the year 836, after the war had continued, with very little intermiſſion, for ſixteen years.

Soon after the concluſion of this peace, the Saracens landed at Brindiſi; and, having made themſelves maſters of the place, ravaged all the neighbouring country. Sicardo marched againſt them with a numerous army; but the Saracens, having dug a great number of ditches which they ſlightly covered over, found means to draw the Beneventans in among them, whereby they were repulſed with great loſs. However, Sicardo, having reinforced his army, marched again to attack them; but the Saracens, deſpairing of ſucceſs, pillaged and burnt Brindiſi, and then retired with their booty, and a great many captives, to Sicily. Sicardo, then, without any apparent provocation, attacked the city of Amalfi, levelled its walls with the ground, carried off all its wealth, and the body of its tutelar ſaint, Triphomen. A great many of the inhabitants were tranſported to Salerno; and, by promoting alliances between the inhabitants of both places, he endeavoured to unite Amalfi to his own principality as firmly as poſſible.

During all theſe tranſactions, Sicardo had tyrannized over his ſubjects in ſuch a manner, that at laſt he became intolerable. Among other acts of injuſtice, he impriſoned his own brother Siconolphus; compelled him to turn prieſt; and afterwards ſent him bound to Tarento, where he cauſed him to be ſhut up in an old tower that had been built for a ciſtern. By ſuch acts of tyranny his nobles were provoked to conſpire againſt him; and in the year 839 he was murdered in his tent.

On the death of Sicardo, Radelchis, his ſecretary or treaſurer, was unanimouſly elected prince of Benevento; but Siconolphus, the laſt king's brother, having regained his liberty, formed a great party againſt the new prince. Radelchis did not fail to oppoſe him with a formidable army; and a moſt ruinous civil war enſued. Both parties by turns called in the Saracens; and theſe treacherous allies acted ſometimes againſt one, and ſometimes againſt the other; or turned their arms againſt both, as ſeemed moſt ſuitable to their own intereſt. Thus the war continued with the utmoſt animoſity for twelve years, during which time the principality was almoſt entirely ruined; till at laſt, the emperor Louis interpoſed, and obliged the competitors to agree to a partition of the principality. By this treaty, Radelchis promiſed to acknowledge Siconolphus and his ſucceſſors as lawful princes of the principality of Salerno, which was declared to contain Tarento, Latiano, Caſſano, Coſſenzo, Laino, Lucadia, Conſia, Montella, Rota, Salerno, Sarno, Ciraterium, Furculo, Capua, Feano, Sora, and the half of the Gaſtaldate of Acerenza, where it joins Latiano and Conſia. The boundary betwixt Benevento and Capua was fixed at St. Angelo ad Cerros; Alli Peregrini was made the boundary betwixt Benevento and Salerno, and Staffilo betwixt Benevento and Conſia. The monaſteries of Monte Caſſino and St. Vincent were declared to be immediately under the protection of the emperor: both princes ſtipulated that no hoſtilities ſhould be committed by either, againſt the ſubjects of each other; and promiſed to join their forces in order to drive out the Saracens. Soon after this pacification, however, both Radelchis and Siconolphus died; the former appointing his ſon Radelgarius, or Radelcar, to ſucceed him; and the latter leaving an infant ſon, Sico, to the care of his godfather Peter.

The war with the Saracens proved very unſucceſsful: neither the united efforts of the princes, nor the aſſiſtance of the emperor Louis himſelf, being able to expel the infidels; and in 854, Adelgiſe, the ſecond ſon of Radelchis, who had now ſucceeded, on the death of his brother Radelcar, to the principality of Benevento, was obliged to pay them an annual ſubſidy. Two years after, Lando count of Capua revolted from the prince of Salerno, and could not be reduced. In the mean time, Sico, the lawful prince of Salerno, had been poiſoned by count Lando, and the principality uſurped by Ademarius, the ſon of Peter above mentioned; but, in 861, Ademarius himſelf was ſeized and impriſoned by Gauferius, the ſon of Dauferius formerly mentioned. This was occaſioned by his cruelty and rapaciouſneſs, which entirely alienated the hearts of his ſubjects from him, and encouraged Gauferius to become the head of the conſpirators. The Saracens in the mean time committed terrible ravages throughout the Beneventan territories; which at laſt obliged Adelgiſe to enter into an alliance with Gauferius, and both together ſent a moſt humble embaſſy to the emperor Louis, requeſting him to take them under his protection. About the ſame time an embaſſy arrived from Conſtantinople, propoſing a junction of the forces of the eaſtern and weſtern empires againſt the infidels; upon which Louis gave orders for aſſembling a formidable army. But, in the mean time, Adelgiſe fell off from his alliance, and made peace with the Saracens; nay, according to ſome, he encouraged them in their incurſions; and it was at his deſire that they invaded the duchy of Capua, and afterwards that of Naples, which they ravaged in a moſt barbarous manner. The Neapolitants, in conjunction with the duke of Spoleto and the count of Marſi, endeavoured to oppoſe them; but, being defeated, the Saracens continued their ravages with redoubled fury, and retired to Bari, which was their capital city, with an immenſe booty.

In 866, Louis arrived at Sora with his army; and, having marched to Capua, was there joined by Landulph, the biſhop and count, with a body of Capuans; but, Landulph ſoon after perſuading his countrymen to deſert, Louis marched againſt that city, which he took after a a ſiege of three months, and almoſt totally deſtroyed. At the end of the year he was joined by Gauferius with his quota of troops, having ordered the eyes of Ademarius to be put out in his abſence. Louis confirmed him in the principality, and marched with his army to Benevento, where Adelgiſe received him with great reſpect. Having reduced ſome inconſiderable places belonging to the Saracens, Louis ſoon after inveſted Bari; but, as the Saracens received continual ſupplies from their countrymen ſettled in Sicily, and beſides were protected by the Neapolitans, he could not reduce the place till the year 871, though he had received conſiderable aſſiſtance from his brother Lotharius, and the Greek emperor had ſent him a fleet of 200 ſail. The expulſion of the Saracens was completed the ſame year by the taking of Tarento; after which the emperor returned with great glory to Benevento, reſolving next to carry his arms into Sicily, and expel the infidels from thence alſo. But his future ſchemes of conqueſt were fruſtrated by a quarrel between him and Adelgiſe. The latter, pretending to have been inſulted by the empreſs, and oppreſſed by the French, ſeized the emperor himſelf, and kept him priſoner for forty days. His impriſonment would probably have been of much longer continuance, had not a body of Saracens arrived from Africa, who, being joined by ſuch of their countrymen as had concealed themſelves in Italy, laid ſiege to Salerno with an army of 30,000 men, ravaging the neighbouring country at the ſame time with the utmoſt barbarity. By this new invaſion Adelgiſe was ſo much alarmed, that he ſet the emperor at liberty; but firſt obliged him to ſwear that he would not revenge the inſult that had been offered him, and that he would never return to Benevento. Louis, having then joined his forces to thoſe of the prince of Salerno, ſoon obliged the Saracens to raiſe the ſiege of Salerno; but, though they were prevented from taking that city, they entirely deſtroyed the inhabitants of Calabria, leaving it, according to the expreſſion of one of the hiſtorians of that time, "as deſolate as it was at the flood."

In the year 873, Louis, being abſolved from his oath by the pope, went to Benevento, and was reconciled to Adelgiſe; but ſoon after this reconciliation he died, and the Saracens continued their ravages to ſuch a degree, that the inhabitants of Bari were conſtrained to deliver up their city to the Greeks. At the ſame time, the Salernitans, Neapolitans, Cajetans, and Amalfitans, having made peace with the Saracens, were compelled to agree to their propoſal of invading the territories of the Roman pontiff. His holineſs exerted himſelf to the utmoſt, both with ſpiritual and temporal weapons, in order to defend his right; but was at laſt reduced to the neceſſity of becoming a tributary to the infidels, and promiſing to pay them a large ſum annually.

In the mean time, all Italy was thrown into the greateſt confuſion by the death of Charles the Bald, who died of poiſon at Pavia, as he was coming to the pope's aſſiſtance. Sergius duke of Naples continued a firm friend to the infidels; nor could he be detached from their intereſts even by the thunder of a papal excommunication; but, unluckily happening to fall into the hands of his brother Athanaſius biſhop of Naples, the zeal of that prelate prompted him to put out his eyes, and ſend him a cloſe priſoner to Rome; for which the higheſt encomiums were beſtowed on him by the holy father.

In 876, Adelgiſe was murdered by two of his nephews; one of whom, by name Gaideris, ſeized the principality. About the ſame time, Landulph biſhop of Capua dying, a civil war enſued among his children, though their father's dominions had been divided among them according to his will. The princes of Salerno and Benevento, the duke of Spoleto, and Gregory the Greek governor of Bari and Otranto, took different ſides in the quarrel, as they thought moſt proper; and, to complete the confuſion, the new biſhop was expelled, and his brother, though a layman, choſen to that office, and even conſecrated by the pope, who wrote to Gauferius, forbidding him to attack Capua under pain of excommunication. But, though Gauferius was, in general, obedient to the pope's commands, he proved refractory in this particular, and laid ſiege to Capua for two years ſucceſſively.

This the Capuan territories were reduced to the moſt miſerable ſituation; being obliged to maintain at the ſame time, the armies of the prince of Benevento and of the duke of Spoleto. The Saracens, in the mean time, took the opportunity of ſtrengthening themſelves in Italy; and Athanaſius, notwithſtanding the great commendations he had received from the pope for putting out his brother's eyes, conſented to enter into an alliance with them, in conjunction with whom, he ravaged the territories of the pope, as well as thoſe of Benevento and Spoleto, plundering all the churches, monaſteries, towns, and villages, through which they paſſed. At the ſame time, the prince of Salerno was obliged to grant them a ſettlement in the neighbourhood of his capital; the duke of Gaeta invited them to his aſſiſtance, being oppreſſed by the count of Capua; and even the pope himſelf was obliged to make peace with them, and to grant them a ſettlement on the north ſide of the Carigliano, where they fortified themſelves, and continued for more than forty years.

To put a ſtop to the confuſion which reigned in Italy, the pope now thought proper to reſtore the biſhop of Capua, who had been expelled, but allowed his brother to reſide in the city, and govern one half of the dioceſe; but, notwithſtanding this partition, the civil diſſenſions continued with the utmoſt violence, the neareſt relations murdering or baniſhing each other, according as the fortune of the one or the other prevailed. Athanaſius, notwithſtanding all the pope's remonſtrances, continued his alliance with the Saracens; in conjunction with whom, he ravaged the territory of Benevento, and fomented the diviſions in Capua, in hopes of being able to make a conqueſt of it. At laſt his holineſs thought proper to iſſue a ſentence of excommunication againſt him; but this attached him to the Saracens more than ever; inſomuch, that he ſent to Suchaim, king of the Saracens in Sicily, deſiring him to come over and command a great body of his countrymen who had ſettled at the foot of Mount Veſuvius. Suchaim accepted of the invitation, and immediately turned his arms againſt Athanaſius; allowing his troops to live at diſcretion in the territory of Naples, where they raviſhed the women, and plundered the inhabitants. Theſe calamities were, by the ſuperſtitious Neapolitans, imagined to be a conſequence of the ſentence of excommunication; and, therefore, they uſed their utmoſt endeavours to perſuade the prelate to conclude a league with ſome Chriſtian prince, and renounce all connexion with the infidels. In this they at laſt proved ſucceſsful; and Athanaſius concluded an alliance with Guaimarius prince of Salerno; in conſequence of which, the Saracens were obliged to quit the Neapolitan territories, and retire to Agropoli. Athanaſius then directed his force againſt Capua, of which he made himſelf maſter in the year 882. The Saracens, however, ſtill continued their incurſions, and ravaged ſeveral provinces in ſuch a manner, that they became entirely deſolate.

Theſe confuſions continued for a long time; during which the Greeks found an opportunity of making themſelves maſters of Benevento, and well nigh became maſters alſo of Salerno; but in this they failed through the treachery of the biſhop, and in the year 896 they were totally expelled by him, four years after they had become maſters of it. In 915, the Saracens received ſuch an overthrow at Carigliano, that ſcarcely one of them remained. However, a new body ſoon arrived from Africa, and infeſted the ſea-coaſts for ſome time longer. A war alſo enſued between Landulph and the Greeks; which concluded diſadvantageouſly for the former, who was obliged to ſubmit to the emperor of Conſtantinople in 943.

In 961, Otho the Great, king of Germany, invaded Italy with a powerful army againſt Berengarius III. and, marching to Rome, received the imperial crown from the hands of the pope. In 964, he erected Capua into a principality, received homage from the other princes of Lombardy, and formed a deſign of recovering Puglia and Calabria from the Greeks. But in this laſt ſcheme he failed; and, after various hoſtilities, a treaty was concluded, and the young princeſs Theophania married to Otho's ſon, afterwards emperor.

All this time the Saracens continued their incurſions; and the Greeks had gained ground ſo much, that they were now in poſſeſſion of two-thirds of the preſent kingdom of Naples; but in the year 1002 or 1003, the Normans firſt began to be formidable in Italy. They had, about a century before, embraced Chriſtianity, and become very zealous in all the ſurperſtitions which were then practiſed. They were particularly zealous in viſiting ſacred places, eſpecially Rome, and the holy ſepulchre at Jeruſalem; and, being naturally of a very martial diſpoſition, they forced through great bodies of Greeks and Saracens who oppoſed their paſſage. About this time forty, or, as others write, a hundred, of theſe Normans, returning from Jeruſalem by ſea, landed at Salerno in the habit of pilgrims, where they were honourably received by Guaimarius. During their reſidence at Salerno, a great body of Saracens landed, and inveſted the city. Guaimarius, not being in a condition to oppoſe the invaders by force, was preparing to pay them a large ſum of money, which they demanded, when the Normans propoſed to attack them; and, having got arms and horſes from the prince, they engaged the infidels with ſuch fury and bravery, that they entirely defeated them, and obliged them to fly to their ſhips. By this complete victory, Guaimarius was filled with ſuch admiration of the valour of theſe ſtrangers, that he entreated them to remain in his country; offering them lands, and the moſt honourable employments; but, not being able to prevail with them to ſtay in Italy, or even accept of his preſents; at their departure he ſent ſome ambaſſadors with them to Normandy, in veſſels loaded with exquiſite fruits, rich furniture for horſes, &c. in order to allure the valiant Normans to leave their own country. This kind invitation encouraged a Norman chief, named Oſmond Drengot, to ſettle in Italy about the year 1015; having killed another lord in a duel, which obliged him to leave his own country, in order to avoid the reſentment of his ſovereign, Robert duke of Normandy.

In the mean time, the city of Bari had revolted from the Greeks, and choſen one Mello for their leader, whoſe wife and children happened ſoon after to fall into the hands of their enemies, and were ſent priſoners to Conſtantinople. No ſooner, therefore, did Mello hear of the arrival of theſe adventurers, than he engaged them to aſſiſt him; and, having drawn together a conſiderable army, defeated the Greeks with great ſlaughter, and obliged them to abandon their camp. In this engagement the Normans diſtinguiſhed themſelves by their bravery; and the news of their ſucceſs ſoon brought from Normandy an innumerable multitude of their countrymen, with their wives and children. By this reinforcement, Mello gained two other victories, took a great many towns, and obliged the Greeks to abandon a large territory; but, in 1019, they were utterly defeated, and every thing recovered by the Greeks. The Greek general, Bajanus, continued to go on with ſuch ſurpriſing ſucceſs, that he almoſt entirely re-eſtabliſhed the affairs of his countrymen in Italy, and made a diſtinct province of the weſtern part of Puglia, which he called *Capitanata*, and which to this day retains the name. His great progreſs at laſt alarmed the emperors of Germany; and, in 1027, Pandulphus prince of Capua made himſelf maſter of Naples; but was obliged, three years afterwards, to leave it, by the Normans, who built the city of Averſa, which was now erected into a county. In conſequence of this piece of good fortune, great numbers of Norman adventurers migrated into Italy; among whom were William, Drogo, and Umbert, three of the ſons of Tancred duke of Hautville; from whoſe poſterity thoſe princes were deſcended, who firſt conquered the iſland of Sicily from the Saracens, and formed the preſent kingdom of Naples.

In 1040, the Greek emperor Michael Paleologus, in order to ſecure the affection of his fickle ſubjects, undertook the conqueſt of Italy from the Saracens, and for that purpoſe ſent a general named Michael Maniacus into Sicily. This commander, hearing of the great reputation of the Normans, ſent to Guaimarius, prince of Salerno, entreating him to grant him ſome of thoſe warriors. His requeſt was moſt willingly hearkened to by the prince of Salerno, who, to encourage the Normans to engage in the expedition, promiſed them ſome additional rewards beſides the emperor's pay. William, Drogo, and Umbert, accordingly marched from Salerno with three hundred of their countrymen; and paſſing over into Sicily, diſtinguiſhed themſelves moſt remarkably in the conqueſt of that iſland. Maniacus acknowledged, that the recovery of Meſſina was chiefly owing to their valour; and William with his Normans gained a complete victory over the Saracens before Syracuſe, where he killed the governor of the city in ſingle combat. Maniacus made himſelf maſter of Saracuſe, and almoſt entirely reduced the whole iſland; but, being accuſed of treaſon, was next year carried priſoner to Conſtantinople. His ſucceſſor, Doceanus, being a man of no abilities, quickly loſt the whole iſland, except Meſſina, and treated his Norman auxiliaries with the utmoſt contempt. He would not allow them any ſhare of the booty; and even cauſed one Ardoin, a noble Lombard, an aſſociate and interpreter of the Normans, to be whipped round the camp, becauſe he refuſed to part with the horſe of a Saracen whom he had ſlain in ſingle combat. The conſequences of this tyrannical behaviour were very fatal to the Greeks. Ardoin ſoon after obtained leave to return to Italy under a pretence of a vow, and all the Normans embarked at night along with him; but, inſtead of going to Rome, Ardoin went immediately to Averſa, where he perſuaded count Rainulphus, ſovereign of that province, to join with him in the deſign he had formed of attacking the Greek provinces in Italy, which he ſhowed him would be an eaſy conqueſt, as the inhabitants ſubmitted with great reluctance to the Greeks, and the provinces were at that time almoſt entirely defenceleſs. Rainulphus, approved of the ſcheme, and raiſed 300 ſoldiers, whom he ſent under twelve officers to join the other Normans under the ſons of Tancred; and made an agreement with Ardoin, that the conqueſts ſhould be equally divided among the chief leaders.

Their firſt enterpriſe was the reduction of Melphis, one of the ſtrongeſt cities in Puglia, which preſently ſurrendered; and they increaſed its fortifications ſo much, that it thenceforth became impregnable. Soon after this they made themſelves maſters of Venoſa, Aſcoli, and Lavello, with very little oppoſition. Doceanus, alarmed with the rapidity of their conqueſts, immediately left Sicily, and marched with his army into Puglia, where he attacked the invaders near the river Oliviento; but, after a fierce engagement, he was obliged to retire with conſiderable loſs. The Greeks were ſoon after defeated a ſecond time at Cannæ; and in a third engagement, which happened near the river Ofanto, the army of Doceanus was entirely routed, and he himſelf obliged to fly to Bari. On this bad ſucceſs, Doceanus was ordered to return to his command in Sicily, and another general was ſent with an army into Puglia. This new commander, however, had no better ſucceſs than his predeceſſor; for his army was entirely defeated in an engagement with the Normans, and he himſelf taken priſoner. Atenulphus, brother to one of the princes of Benevento, on whom the Normans had conferred the chief command, ſet at liberty the captive general without conſulting them, on receiving from him a conſiderable ſum of money. With this the Normans were ſo much diſpleaſed, that they deprived Atenulphus of his command, and beſtowed it on Argyrus, ſon to the late Mello, who had eſcaped from Conſtantinople, and now aſſumed the title of Duke and Prince of Italy. Before this time alſo Maniacus, whom we have formerly mentioned, had returned to Italy; and, to ſtrike the greater terror into the revolted cities, had executed a number of people of all ages and ſexes with great inhumanity. Soon after this Maniacus openly rebelled againſt the Greek emperor Conſtantinus, and prevailed upon his own army to proclaim him emperor, beginning hoſtilities immediately againſt the Greek cities. Argyrus at the ſame time took Giovenazzo, and beſieged Trani, and ſoon after beſieged Maniacus himſelf in Tarento; but he, being afraid of falling into the hands of the Normans, fled to Otranto, and from thence to Bulgaria, where, being entirely defeated by one of the emperor's generals, he was taken priſoner, and had his head ſtruck off.

The Normans, having now conquered the greateſt part of Puglia, proceeded to make a diviſion of their conqueſt, in which, after each commander had got his proper ſhare, the city of Melfis was left common to all, and appropriated as a place for aſſembling to conſult about the moſt important affairs of the nation. Argyrus alone was neglected in this diviſion; but he, having gained the favour of the emperor by expelling the rebel Maniacus from Italy, was by him created duke of Bari, on purpoſe to check the power of the Normans, with the title of Prince and Duke of Puglia. The Normans, however, were too powerful to be much awed by Argyrus, and behaved with great inſolence to the neighbouring princes; but, as they could not be expelled by force, and were confirmed in their conqueſts by Henry II. emperor of Germany in 1047, the Greek emperor attempted to get rid of them, by ſending Argyrus with large ſums of money to bribe them to enter into his ſervice againſt the Perſians. But they, perceiving the ſnare, replied that they were reſolved not to leave Italy unleſs they were expelled by force: upon which Argyrus made uſe of the ſame money in bribing the Puglians to aſſaſſinate theſe invaders. This brought on a maſſacre, in which greater numbers of Normans periſhed than had fallen in all the late wars. Argyrus attempted to take advantage of the confuſion produced by this maſſacre, but was defeated; after which he had recourſe to pope Leo, beſeeching him to deliver Italy from theſe cruel tyrants: but this ſcheme proved ſtill more unſucceſsful than the others had been; for the pope himſelf was defeated and taken priſoner; and, in conſequence of the reſpect ſhowed him by the Normans, granted them, as a fief of the holy ſee, all the conqueſts they had made or ſhould make in Calabria and Sicily.

Soon after this, the Norman power became extremely formidable; the famous Robert Guiſcard aſcended the throne in 1056. He made great progreſs in the conqueſt of Calabria, and reduced moſt of the cities which held out for the Greeks in thoſe parts. About the ſame time the counts of Capua were expelled from their territory; and the abbot Deſiderius mentions his having ſeen the children of Landulphus V. the laſt count, going about as vagabonds, and begging for their ſupport. The pope, alarmed by theſe conqueſts, excommunicated the Normans by wholeſale, pretending that they had ſeized ſome of the territories belonging to the church; but, by the pretended ſubmiſſion of Robert, he not only was perſuaded to take off the ſentence of excommunication, but to inveſt him with the provinces of Apulia, Calabria, and Sicily. After this he continued the war againſt the Greeks with great ſucceſs. In 1071, in conjunction with his brother Roger, he conquered the iſland of Sicily, and gave the inveſtiture of the whole iſland to him with the title of *count*, reſerving to himſelf only the half of Palermo, Meſſina, and the valley of Demona. The like ſucceſs attended his arms againſt Salerno in 1074; but after this, having unadviſedly taken ſome places from the pope, he again fell under the ſentence of excommunication; yet he was reconciled to him in 1080, and received a ſecond time the inveſtiture of all his dominions. The next year he undertook an expedition againſt the Greeks; and, though the emperor was aſſiſted by a Venetian fleet, Robert made himſelf maſter of the iſland of Corfu, reduced Durazzo, and great part of Romania; inſomuch that, by the ſucceſs of his arms, and his near approach to Conſtantinople, he ſtruck an univerſal terror among the Greeks. But, while Robert was thus extending his conqueſts, he was alarmed by the news of a formidable rebellion in Italy, and that the emperor Henry VI. had taken the city of Rome, and cloſely ſhut up the pope in the caſtle of St. Angelo. Robert, therefore, leaving the command of the army to his ſon Boemund, returned to Italy, where he immediately diſperſed the rebels, and releaſed the pope, while his ſon gained a conſiderable victory over the Greeks. After this, Robert made great preparations for another expedition into Greece, in order to ſecond his ſon Boemund. Alexius Comnenus, who was about this time declared emperor by the Greek army, being aſſiſted by the Venetian fleet, endeavoured to oppoſe his paſſage; but was entirely defeated, with the loſs of a great many galleys. But a final ſtop was now put to his enterpriſes by his death, which happened in the iſland of Corfu in 1085.

Though the power of the Normans was thus thoroughly eſtabliſhed in Italy and Sicily, and though the prince of Benevento was in 1130 inveſted by the pope with the title of King of Sicily; yet, by reaſon of the civil diſſenſions which took place among themſelves, and the general confuſion which reigned in Italy in thoſe ages, they were obliged, notwithſtanding all their valour, to ſubmit to the emperor in 1195. By him the Sicilians were treated with ſo great cruelty, that the empreſs Conſtantina was induced to conſpire againſt him in 1197, took him priſoner, and releaſed him only on condition of his ſending off his army immediately for the Holy Land. This was complied with; but the emperor did not long revive the reconciliation, being poiſoned, as was ſuppoſed, by order of the empreſs.

In 1254 the pope claimed the kingdom as a fief devolved on the church in conſequence of a ſentence of depoſition pronounced againſt Frederic at the council of Lyons; but the kingdom was for ſome time preſerved and protected by Manfred, or Mainfroy, natural ſon of the late emperor Frederic II. His father, at his death in 1250, had bequeathed him the principality of Tarento with ſome adjacent counties. When his brother Conrad arrived from Germany to take poſſeſſion of the Sicilian kingdoms devolved to him, he became jealous of Manfred's power and abilities, and took from him a part of his inheritance. The prince, however, faithfully ſerved him in reducing the enemies which the pope had excited againſt him. Conrad, at his deceaſe in 1254, left his infant ſon Conradin, then in Germany, his heir, and appointed a nobleman named Berthold regent. This was a man of mean abilities; and, when pope Innocent, who claimed the kingdom as a fief of the holy ſee, made preparations to invade it, Berthold reſigned the regency to Manfred. The pope excommunicated him; and Manfred, being able to make no oppoſition to his army, received him ſubmiſſively in Naples. Soon after, however, he made his eſcape to Lucera, where a colony of Saracens had been ſettled by Frederic; and, raiſing a body of troops from them, augmented by Germans who flocked to him from all parts of Apulia, he defeated and diſperſed the papal army. Innocent, dying ſoon after, was ſucceeded by Alexander IV. who renewed Manfred's excommunication, and ſent an army againſt him, commanded by cardinal Octavian. Manfred, by his ſuperior military talents, reduced this general to the neceſſity of making a treaty, which the pope refuſed to ratify, and gave the inveſtiture of the kingdom to Edmund, ſon of Henry III. of England. Manfred, however, recovered all the Neapolitan territory, and was received into the city of Naples, where he behaved with great generoſity and clemency. He afterwards paſſed over to Sicily; and, a report being ſpread, probably through his contrivance, of the death of young Conradin, he was unanimouſly elected king by the Sicilian and Apulian barons, and was crowned at Palermo in 1258.

Poſſeſſing his kingdom in profound tranquility, which he ſecured by a mild and equitable adminiſtration, he was enabled to ſend troops into Lombardy for the ſupport of the Ghibelline or imperial party, which ſo exaſperated the pope, that all the thunders of the church were again diſcharged againſt him, but with no effect. Meantime ambaſſadors arrived from Germany with the intelligence that Conradin was living, and claimed the crown as his birthright. To their remonſtrances Manfred replied, that he had conquered the kingdom from two popes, and could not think of reſigning it, but would leave it to Conradin after his death. His ſucceſs now rendered him reſpected by foreign princes; and he married one of his daughters to the ſon of James king of Arragon, and another to the marquis of Montferrat. He founded a new city on the Adriatic, to which he gave the name of Manfredonia, and peopled it with the inhabitants of Siponto, which he deſtroyed on account of its unhealthy ſituation. His troops in Tuſcany gained a ſignal victory over the Guelfs, in conſequence of which the city of Florence acknowledged his ſovereignty.

A ſtorm at length began to gather over his head. Urban IV. who had ſucceeded to the popedom in 1262, publiſhed a cruſade againſt him, and, in the following year, conferred the inveſtiture of Naples and Sicily upon Charles of Anjou, brother of the French king Louis IX. Charles prepared to invade the country, and Manfred was equally diligent in making diſpoſitions to reſiſt him. He was, however, betrayed by his barons, who ſecretly negociated with his rival; and in February 1266, Manfred, engaging the French army near Benevento, after fighting with great valour, was defeated and ſlain. As an excommunicated perſon, his body was thrown into a ditch and buried under a heap of ſtones. The pope afterwards ordered it to be taken up, and carried out of the territories of the church. Manfred has not only been ſtigmatiſed as an uſurper, but he has been charged, by writers attached to the papal ſee and to the houſe of Anjou, with the blackeſt crimes, ſuch as the poiſoning of his father and brother, and other atrocities. It is certain, however, that he diſplayed both the talents and virtues of a great ſovereign; that he was accompliſhed beyond moſt princes of his time; and that, if he were guilty of criminal ambition in gaining his crown, he wore it with honour.

Charles count of Anjou now ſucceeded without farther queſtion. Conradin, however, ſoon after laid claim to Sicily, and marched with an army into Italy; but was entirely defeated and taken priſoner by Charles. On the 26th of October, 1269, this young prince, then but ſeventeen years of age, was conducted, with the duke of Auſtria, Girando da Piſa, and ſome others, to a ſcaffold in the market-place of Naples, where they were publicly beheaded, to the eternal infamy of king Charles, and the general regret of the ſpectators. Soon after this execution, his mother arrived at Naples, with a large ſum of money and many jewels for the ranſom of her ſon; but, finding him dead, ſhe cauſed his body to be taken up and buried in a convent, whither in ſorrow ſhe retired for life.

Charles, being pleaſed with the ſituation of Naples, cauſed Caſtel Nuovo to be rebuilt after the French faſhion, and adorned the city with ſeveral new churches and monaſteries. He repaired and ſtrengthened the fortifications; cauſed the ſtreets of the city to be finely paved with ſquare ſtones, taken out of the Via Appia; and, to encourage traffic, made a new market-place, much larger than the former. He particularly enlarged the univerſity, and beſtowed upon it many new prerogatives and privileges, promiſing his royal protection to the youth of all nations who ſhould go thither to ſtudy. He, however, entirely loſt the affections of his ſubjects by his arbitrary and oppreſſive government; and diſobliged the pope by refuſing to give his daughter in marriage to one of the Orſini. Nicholas, therefore, reſolved to humble him. Charles had reſolved on an expedition againſt Conſtantinople; and for this purpoſe had fitted out a fleet of 100 galleys, 30 large ſhips, 200 tranſports, beſides many other ſmaller veſſels, on-board of which he intended to embark 10,000 horſe, and a numerous army on foot. This formidable armament greatly alarmed the emperor Michael Paleologus; for which reaſon he entered into a negotiation with John di Procida, a noble Salernitan, lord of the iſle of Procida in the bay of Naples, who had formed a ſcheme for a general revolt in the iſland of Sicily. John, though a nobleman, was alſo a phyſician, and had been counſellor to two former princes, and even to Charles himſelf; but, being ſtripped of his eſtate by the king under pretence of treaſon, and his wife being debauched by the French, he retired to Conſtantia queen of Arragon, where he was created a baron of the kingdom of Valencia, by her huſband king Peter, and lord of Luxen, Benizzano, and Palma. As he was greatly exaſperated againſt the French, he employed many ſpies both in Puglia and Sicily; and, being informed that the Sicilians were totally diſaffected to the French, he came to the iſland in diſguiſe, and concerted a plan with the moſt powerful of the malcontents for a revolution in favour of Conſtantia, though ſhe derived her right only as being the daughter of Manfred. Procida then ſet out for Conſtantinople, where, in ſome private conferences with the emperor, he perſuaded him, that the moſt probable means of defeating Charles's ſcheme was by aſſiſting the Spaniards and Sicilian malcontents. Paleologus accordingly granted him a large ſum of money, and on his departure ſent one of his ſecretaries along with him, who, landing in Sicily, had a conference with the chief conſpirators. John, having received letters from them, diſguiſed himſelf in the habit of a Franciſcan, and went to Suriano in the neighbourhood of Rome. As he well knew the enmity which ſubſiſted between the pope and king Charles, he diſcloſed his deſign to his holineſs: who readily entered into his meaſures, wrote to Peter to haſten his armament, promiſing him the inveſtiture of the iſland as ſoon as he had taken poſſeſſion of it; and, by refuſing the aſſiſtance he had promiſed to Charles, obliged him for the preſent to delay his expedition. In the beginning of the year 1280, Procida returned to Arragon, and, by ſhowing the letters from the pope and Sicilian barons, prevailed on Peter to embark in his deſign, by aſſuring him of the aſſiſtance of Paleologus. This king of Arragon accordingly prepared a formidable fleet under pretence of invading Africa, and is even ſaid to have received 20,000 ducats from Charles, in order to aſſiſt him in his preparations.

But, while John went on thus ſucceſsfully with his ſcheme, all his meaſures were in danger of being broken by the death of pope Nicholas. The new pope, Martin IV. was entirely in the intereſt of Charles, on whom, in 1281, he conferred the ſenatorial dignity at Rome. Procida, however, ſtill reſolved to proſecute his ſcheme; and, leaving Italy, had another conferrence with the conſpirators in Sicily; after which, he again went to Conſtantinople, and obtained from Paleologus 30,000 ounces of gold, with which he immediately returned to Arragon. The death of Nicholas had damped the ardour of Peter; but, being urged with great earneſtneſs by John, he again renewed his preparations; which alarmed the pope and the king of France. In conſequence of this, they ſent a meſſage to him, deſiring to know againſt what Saracens he deſigned to employ his armament. In this particular Peter refuſed to ſatisfy them; upon which they earneſtly counſelled Charles to guard againſt an invaſion: but he neglected their advice, being wholly intent on his eaſtern expedition, and encouraged by a revolt which had happened in Greece; and, to facilitate his expedition, he prevailed on the pope to excommunicate the Greeks, on pretence that they had broken ſome of the articles of union concluded at the council of Lyons a few years before.

Peter in the mean time continued his preparations with great diligence, intending to put to ſea the following ſummer. Procida had returned to Palermo, to wait for a favourable opportunity of putting his deſign in execution, which was ſoon afforded him by the French. On Eaſter Monday, March 30, 1282, the chief conſpirators had aſſembled at Palermo; and, after dinner, both the Palermitans and French went in a grand proceſſion to the church of Monreale, about three miles without the city. While they were in the fields, a bride happened to paſs by with her train, who being obſerved by one Drochet, a Frenchman, he ran to her, and began to uſe her in a rude manner, under pretence of ſearching for concealed arms. A young Sicilian, exaſperated at this affront, ſtabbed him with his own ſword; and, a tumult enſuing, two hundred French were immediately murdered. The enraged populace then ran to the city, crying out, "Down with the French!" and, without diſtinction of age or ſex, ſlaughtered all of that nation they could find, even ſuch as had fled to the churches; for it was the time of veſpers; and hence this maſſacre has been called the *Sicilian veſpers.* Children were not ſpared, nor women who were ſuppoſed to be with child by Frenchmen; the unhappy mothers were ripped open, and their half-formed infants torn away. Not fewer than 8000 males were deſtroyed, beſides women and children. The conſpirators then left Palermo, and excited the inhabitants to murder the French all over the iſland, excepting in Meſſina, which city at firſt refuſed to be concerned in the revolt; but, being invited by the Palermitans to throw off the French yoke, a few weeks after, the citizens in a tumultuous manner deſtroyed ſome of the French; they tore down the arms of king Charles, and, erecting thoſe of the city, choſe one Baldwin for their governor, who ſaved the remaining French from the fury of the populace, and allowed them to tranſport themſelves, with their wives and children, to Italy.

Immediately after this maſſacre, the Sicilians offered their allegiance to Peter king of Arragon; who accepted of the invitation, and landed with his forces at Trapani. From thence he went to Palermo, where he was crowned king of Sicily with great ſolemnity, and Charles left the iſland with precipitation. The day after he landed his army in Italy, the Arragonian fleet arrived, took twenty-nine of his galleys, and the next day burnt eighty tranſports in preſence of his army. Soon after this, Charles ſent an embaſſy to Peter, accuſing him of perfidy, in invading his dominions in time of peace; and, according to ſome, challenged him at the ſame time to decide the matter by ſingle combat. Others ſay that the challenge was given by Peter. Certain it is, however, that a challenge was given, and to appearance accepted: but Peter determined to employ much more effectual means in ſupport of his pretenſions than truſting to a duel; and therefore puſhed on his operations moſt vigorouſly, while his adverſary trifled away his time: and thus he at laſt became maſter of the conteſted kingdom; which, however, he did not long enjoy, dying about the end of the year 1285.

By his will, Peter left the kingdom of Arragon to his eldeſt ſon Alphonſus, and Sicily to Don James his other ſon, who was alſo to ſucceed to the kingdom of Arragon in caſe Alphonſus ſhould die without male iſſue. Accordingly, Don James was ſolemnly crowned at Palermo the 2d of February, 1286. In 1295, however, he deſerted them, and tamely reſigned his right to Charles of Anjou, ſon to him above mentioned, in a manner perhaps unparalleled. On his reſignation, the Sicilians conferred the crown upon his brother Don Frederic: after which the war continued with great violence till the year 1303, when a peace was concluded, and the kingdoms of Naples and Sicily formally disjoined; Frederic being allowed to keep the latter, under the name of *Trinacria;* and Charles being confirmed in the poſſeſſion of the former, which he quietly enjoyed till his death in 1309.

Naples continued to be governed by its own kings till the beginning of the ſixteenth century; but the line of Anjou had expired in 1382, in the perſon of the infamous Jane. This princeſs, who is commonly called Jane of Naples, was betrothed, when only five years of age, to Andrew, the ſecond ſon of the king of Hungary. Upon the death of her grandfather Robert, in 1343, Jane was appointed his ſucceſſor; and, two years afterwards, the pope granted a bull for the coronation of her huſband Andrew. The princes of the blood had uſed their utmoſt endeavours to prevent the granting of the bull; but, their hopes being diſappointed, they now formed a conſpiracy to murder the king, with the conſent even of Jane, who was openly accuſed of adultery with her couſin Louis prince of Tarento, and ſeveral other perſons about her court. She is ſaid, by many authors, to have conceived a diſguſt for her huſband, on account of his barbarous Hungarian manners, his inſolence and debility, which laſt was owing to his exceſſes after the conſummation of their marriage. Andrew, having gone with his queen to Averſa, on the 18th of September, 1345, about midnight was called out of his bed-chamber by one of the conſpirators, under pretence of ſome important news from Naples. He had no ſooner entered the hall adjoining, than they threw a rope about his neck and ſtrangled him, by hanging him over a balcony into the garden, at the ſame time, torturing him after the moſt cruel manner, as appears by informations taken concerning the murderers, by order of pope Clement. [Alii vero receperunt eum per genitalia, et adeo traxerunt, quod multi, qui decebant ſe vidiſſe, retulerunt quod tranſcenderunt genua.] The conſpirators, being diſcovered by an Hungarian maid, left the corpſe in the garden, and fled. Jane appeared but ſlightly concerned at the murder, and next morning returned to Naples, whence ſhe wrote to the pope, and to Louis king of Hungary, giving them an account of the fact, and aſſuring them of her innocence. In the mean time, ſhe was delivered of a ſon, who was named Carobert, after his grandfather, and, ſoon after, created duke of Calabria.

The pope, upon hearing of the murder, expreſſed great reſentment and grief; and queen Jane, under pretence of ſecuring the kingdom againſt the threatened Hungarian invaſion, married Louis of Tarento, without waiting for his diſpenſation. As her huſband was her full couſin, the marriage was looked upon as inceſtuous, and ſhe was beſides accuſed of having had a criminal intimacy with him during the life of Andrew. The king of Hungary, however, ſoon after entered Naples with a black ſtandard, on which his brother was repreſented as ſtrangled. Jane, in the mean time, fled to Provence, and afterwards to Avignon, where ſhe was kindly received by the pope, who, *on condition of her preſenting to him Avignon and its territory,* declared her innocent. Yet ſhe ſoon after poiſoned her ſecond huſband, Louis. She poiſoned alſo her third huſband, James of Majorca; and married a fourth, Otho of Brunſwick. Jane, however, at length, ſuffered the puniſhment due to her crimes.

After a long ſeparation, Alphonſus of Arragon at laſt united both Sicily and Naples under his dominion. During the government of his ſon, theſe kingdoms were unſucceſsfully invaded by John of Anjou, and during that of his grandſon by Charles VIII. of France. In the reign of their ſucceſſor Frederic, in 1495, Naples was invaded by the kings of France and Spain, who divided it betwixt them; but, a difference taking place about the limits of their ſhares, the French were expelled from the kingdom in 1504; and the government at laſt devolved to the king of Arragon. Upon the death of Ferdinand, Charles V. ſucceeded to Naples, as well as to the reſt of the Spaniſh monarchy. In his reign, Francis I. of France alſo invaded Naples; but was by him made a priſoner, and carried into Spain. During the government of Charles, and that of his ſucceſſors, Philip II. Philip III. and Philip IV. Naples was governed by the viceroys of Spain.

The government of the Spaniards proved no leſs oppreſſive to the Neapolitans than that of others had been. The kings of Spain ſet no bounds to their exactions, and of conſequence the people were loaded with all manner of taxes; even the moſt indiſpenſable neceſſaries of life not being exempted. In 1647, a new tax was laid on fruit; which the people looked upon as the moſt grievous oppreſſion, the chief part of their ſubſiſtence, during the ſummer-months, being fruit, which in the kingdom of Naples is very plentiful and delicious. The edict for collecting the new duty was no ſooner publiſhed, than the people began to murmur in a tumultuous manner; and, when the viceroy came abroad, they ſurrounded his coach, bawling out to have their grievances redreſſed. They were encouraged in their ſedition, by the news that the citizens of Palermo had actually revolted on account of the impoſition of new duties. The viceroy, therefore, apprehenſive of greater diſorders, began to think of taking off the tax; but, thoſe who farmed the tax having bribed ſome of his favourites, he was by their means perſuaded not to aboliſh it. The indignation of the people, who had ſuſpected his intention, was now greatly increaſed, eſpecially as they were privately excited by ſeveral malcontents. The farmers of the revenue, and all thoſe concerned in raiſing the taxes, had incurred the hatred and deteſtation of the people, particularly of Tommaſo Aniello, commonly called *Maſſaniello of Amalfi*, a fiſhermen, whoſe wife, having been diſcovered in ſmuggling a ſmall quantity of meal, was impriſoned, and condemned to pay a fine of 100 ducats.

Maſſaniello, a few years before, had come to Naples from Amalfi, where his father had been a fiſherman. At this time he was about twenty-four years of age, and the father of four children. He was of a middle ſtature and an agreeable aſpect; was diſtinguiſhed for his boldneſs, activity, and integrity: and had a great influence with his companions, by whom he was beloved and eſteemed. As he was obliged even to ſell his furniture to pay his wife's fine, he had conceived an implacable hatred againſt the farmers of the taxes, and was alſo moved with compaſſion for the miſerable ſtate of the city and kingdom. He therefore formed a deſign, with ſome of his companions, to raiſe a tumult in the market-place on the feſtival-day of the Carmelites, uſually celebrated about the middle of July, when between five or ſix hundred youths entertain the people by a mock fight; one half of them, in the character of Turks, defending a wooden caſtle, which is attacked and ſtormed by the other half in the character of Chriſtians. Maſſaniello being appointed captain of one of theſe parties, and one Pione, who was privy to his deſign, commanding the other, for ſeveral weeks before the feſtival they were very diligent in reviewing and training their followers, who were armed with ſticks and reeds; but a ſmall and unforeſeen accident tempted them to begin their enterpriſe without waiting for the feſtival.

On the 7th of July a diſpute happening in the market-place betwixt the tax-gatherers and ſome gardeners of Pozzuolo who had brought ſome figs into the city, whether the buyer or ſeller ſhould pay the duty; after the tumult had continued ſeveral hours, Maſſaniello, who was preſent with his company, excited the mob to pillage the office built in the market for receiving the duty, and to drive away the officers with ſtones. The elect of the people, who, by deciding againſt the gardeners, had increaſed the tumult, ran to the palace, and informed the viceroy, who moſt imprudently neglected all means of putting a ſtop to the commotion. Maſſaniello, in the mean time, being joined by great numbers of people, ordered his young troop to ſet fire to all the offices for the taxes through the city; which command being executed with diſpatch, he then conducted them directly to the palace, where the viceroy, inſtead of ordering his Spaniſh and German guards to diſperſe them, encouraged their inſolence by timidly granting their demands. As they ruſhed into the palace in a furious manner, he eſcaped by a private door, and endeavoured to ſave himſelf in Caſtel del Ovo; but, being overtaken by the rioters in the ſtreets, he was trampled upon by them, and pulled by the hair and whiſkers. However, by throwing ſome handfuls of gold among them, he again eſcaped, and took ſanctuary in a convent of Minims, where, being joined by the archbiſhop of Naples, cardinal Filomarini, and ſeveral nobles, by their advice he ſigned a billet, by which he aboliſhed all taxes upon proviſions. As a means to quell the tumult, he likewiſe deſired the cardinal to offer Maſſaniello a penſion of 2400 crowns, who generouſly rejected the bribe; and declared, that, if the viceroy would keep his word, he would find them obedient ſubjects.

It was now expected that the tumult would ceaſe; but Maſſaniello, upon his return to the market-place, being joined by ſeveral malcontents, among whom were Genuino and one Peronne, who had formerly been a captain of the Sbirri, he was adviſed by them to order the houſes of thoſe concerned in raiſing the tax to be burned; which were accordingly in a few days reduced to aſhes, with all their rich furniture. Maſſaniello being now abſolute maſter of the whole city, and being joined by great numbers of people of deſperate fortunes, he required the viceroy, who had retired to the Caſtel Nuovo, to aboliſh all the taxes, and to deliver up the writ of exemption granted by Charles V. This new demand greatly embarraſſed the viceroy; but to appeaſe the people, he drew up a falſe deed in letters of gold, and ſent it to them by their favourite the duke of Matalone, who had before been in confinement. The fraud, however, being diſcovered, the duke was pulled from his horſe and maltreated by the mob, and at length committed as a priſoner to Peronne. This accident, to the great joy of the viceroy, enraged the people againſt the nobility, ſeveral of whom they killed, burnt the houſes of others, and threatened to extirpate them all. Maſſaniello, in the mean time, tattered and half-naked, commanded his followers, who were now well armed, and reckoned about 100,000 men, with a moſt abſolute ſway. He ate and ſlept little, gave his orders with great preciſion and judgment, appeared full of moderation, without ambition or intereſted views. But, the duke of Matalone having procured his liberty by bribing Peronne, the viceroy imitated his example, and ſecretly corrupted Genuino to betray his chief. A conſpiracy was accordingly formed againſt Maſſaniello by Matalone and Peronne; the duke, who was equally exaſperated againſt the viceroy, propoſing that after his death his brother Don Joſeph ſhould head the rebels.

Maſſaniello, in the mean time, by means of the cardinal archbiſhop, was negotiating a general peace and accommodation; but, while both parties were aſſembling in the convent of the Carmelites, the banditti hired by Matalone made an unſucceſsful attempt upon Maſſaniello's life. His followers immediately killed 150 of them. Peronne and D. Joſeph, being diſcovered to be concerned in the conſpiracy, were likewiſe put to death, and the duke with great difficulty eſcaped. Maſſaniello by this conſpiracy was rendered more ſuſpicious and ſevere. He began to abuſe his power by putting ſeveral perſons to death upon ſlight pretences; and, to force the viceroy to an accommodation, he cut off all communication with the caſtles, which were unprovided with proviſions and ammunition. The viceroy likewiſe, being afraid leſt the French ſhould take advantage of the commotion, earneſtly deſired to agree to a treaty; which was accordingly concluded on the fifth day of the inſurrection, by the mediation of the archbiſhop. By the treaty it was ſtipulated, that all duties impoſed ſince the time of Charles V. ſhould be aboliſhed; that the writ of exemption granted by that emperor ſhould be delivered to the people; that for the future no new taxes ſhould be impoſed; that the vote of the elect of the people ſhould be equal to the votes of the nobility; that an act of oblivion ſhould be granted for all that was paſt; and that the people ſhould continue in arms under Maſſaniello till the ratification of the treaty by the king.

By this treaty, no leſs than 10,000 perſons who fattened upon the blood of the public were ruined. The people, when it was ſolemnly publiſhed, manifeſted an extreme joy, believing they had now recovered all their ancient rights and privileges. Maſſaniello, at the deſire of the viceroy, went to the palace to viſit him, accompanied by the archbiſhop, who was obliged to threaten him with excommunication before he would conſent to lay aſide his rags and aſſume a magnificent dreſs. He was received by the duke with the greateſt demonſtrations of reſpect and friendſhip, while the ducheſs entertained his wife, and preſented her with a robe of cloth of ſilver, and ſome jewels. The viceroy, to preſerve ſome ſhadow of authority, appointed him captain-general; and at his departure made him a preſent of a golden chain of great value, which with great difficulty he was prevailed upon to accept; but yielded at length to the entreaties of the cardinal. Next day, in conſequence of the commiſſion granted him by the viceroy, he began to exerciſe all the functions of ſovereign authority; and, having cauſed a ſcaffold to be erected in one of the ſtreets, and ſeveral gibbets, he judged all crimes, whether civil or military, in the laſt reſort; and ordered the guilty to be immediately put to death, which was the puniſhment he aſſigned to all offences. Though he neglected all forms of law, and even frequently judged by phyſiognomy, yet he is ſaid not to have overlooked any criminal, or puniſhed any innocent perſon. His grandeur and proſperity were of a very ſhort continuance; for, his mind becoming diſtracted and delirious for two or three days, he committed a great many mad and extravagant actions; and on the 18th of July he was aſſaſſinated with the conſent of the viceroy.

The tumult did not end with the death of Maſſaniello: on the contrary, the people now expelled the Spaniards from moſt of the cities throughout the kingdom; and, this general inſurrection being the ſubject of diſcourſe at Rome, the duke of Guiſe, who happened then to be at the pope's court, took the opportunity, at the inſtigation of his hoſineſs, to offer his ſervice to the Neapolitans againſt the Spaniards. The duke was prompted by his ambition to engage in this enterpriſe, eſpecially as he himſelf had ſome diſtant pretenſions to the crown. The Spaniards in the mean time made a vigorous attack on the city; but were repulſed by the people, who now formally renounced their allegiance to them. In a ſhort time, however, their city being ſurpriſed by the new viceroy, the count d'Oniate, and the duke of Guiſe himſelf taken priſoner, the people returned to their allegiance; and thus all the attempts of the French on Naples were fruſtrated.

In the year 1700, Philip V. of Spain ſucceeded to the crown of Naples and Sicily. His title, however, was oppoſed by the houſe of Auſtria, which, while it contended with that of Bourbon for the crown of Spain, envied it alſo the ſceptre of Naples. Theſe views of aggrandiſement were not in vain: a conſpiracy procured the government of Naples for Charles II. ſon of the emperor Leopold. By the conditions of the general peace, Naples again owned the ſway of Philip; but Sicily was given to the duke of Savoy. The emperor Charles VI. however, by force, ſeized upon Naples ſome years afterwards; and, by ceſſion, obtained alſo Sicily. He reigned over them for ſeveral years; till Don Carlos, being veſted with the rights of his father, Philip V. of Spain, who was yet alive, conquered theſe two kingdoms in 1734, and fixed the ſeat of his government among his ſubjects. His title was confirmed by the treaty of Vienna, Nov. 7, 1738.

During the two centuries immediately preceding his reign, the ſovereigns, reſiding at a diſtance, had drained theſe kingdoms of both men and money; but now proſperity was reſtored by the preſence of a mild and economic king. New vigour was given to the manufactures; the commerce of the Levant, then nearly extinct, was revived; a ſtrict police was eſtabliſhed; and an order and regularity, before unknown, were introduced into the juridical and financial departments of the ſtate. Aided by theſe wiſe inſtitutions, Don Carlos changed the face of theſe kingdoms; and, twenty-five years afterwards, when, in 1759, on the death of his brother Ferdinand VI. he went to take poſſeſſion of the crown of Spain, left them in a flouriſhing condition to his third ſon Ferdinand III. of Sicily, and IV. of Naples, (the eldeſt being found incapable of reigning, and the ſecond being declared heir to the crown of Spain,) who poſſeſſes the crown at this moment, though his reign has met with ſome interruptions of which we are preſently to ſpeak.

In the year 1767, the Jeſuits were expelled from Naples. Without ceremony, or leave being aſked, they were all conveyed into the pope's dominions; the vicinity of whoſe territories made every ſcheme of oppoſition fruitleſs. The court of Rome complained loudly of this outrage, and preſented memorials to all the foreign miniſters in that city. In theſe memorials, the pope complains, that the king of Naples has violated, in the firſt place, the divine right, by the manner in which his ſoldiers entered into holy places, and by the ſequeſtration of the eccleſiaſtical revenues; ſecondly, the right of mankind, by forcibly depoſiting ſome of his ſubjects in the dominions of his holineſs, and by marching his troops into a country that was not his own; and laſtly, the right of good neighbourhood, in not communicating his deſign to the pope, both as the head of the church and as a temporal prince, who has the ſupreme ſovereignty over Naples. Theſe memorials produced the ſame effect which the remonſtrances of weak princes to their powerful neighbours generally do: they were careleſsly anſwered, and no further notice taken of them. The cardinal Orſini, Neapolitan miniſter at Rome, made a verbal declaration to the following purport: "That, every ſovereign having a right to drive from his dominions perſons convicted of being enemies thereof, no other means could be found of getting rid of thoſe fathers, than cauſing them to be eſcorted to the eccleſiaſtical ſtate, ſince the kingdom of Naples had no other frontiers; and that, as to the confiſcation of the effects of the ſociety, it no leſs belonged, by the ſame right of ſovereignty, to the royal treaſury."

Nothing very important in the ſubſequent hiſtory of Naples occurs till the period of the French revolution, by which all Europe was to be affected and diſturbed, more or leſs. As the throne was occupied by a Bourbon who was married to an archducheſs of Auſtria, Naples was of courſe conſidered as one of the family-courts. It was the intereſt of Ferdinand IV. as well as that of all the Italian ſtates, to remain at peace; but he ſoon, unhappily for himſelf, entered into the gigantic projects of more powerful princes, and, in the hopes of aggrandiſement and revenge, forgot the principles by which his conduct ought to have been regulated.

The court of Naples, therefore, exhibited the moſt decided oppoſition to the various changes that had taken place in France; and, although it had formerly acknowledged the republic on the appearance of a naval armament under admiral Latouche-Treville, (Dec. 15, 1792.) yet no ſooner did his ſquadron diſappear than the former ſyſtem was reſumed. The decollation of the unhappy Louis of courſe widened the breach; and the proffered aſſiſtance and protection of England at length converted an equivocal neutrality into a ſtate of war. A convention was accordingly entered into (July 12, 1793.) between their Britannic and Sicilian majeſties; and the former not only agreed to protect the dominions of the other by means of a reſpectable fleet in the Mediterranean, but alſo to grant a ſubſidy, in order to infuſe vigour into the proceedings of his ally.

But the time was not yet arrived for the king of Naples to take an active and decided part. Even on the invaſion of Italy by the French in 1796, after ſome immaterial hoſtilities, a ſuſpenſion of arms was agreed to between the king of Naples and the republican commander. The multiplicity of operations at that time undertaken by the French, did not permit them to exert ſeverity with a prince who was able conſiderably to oppoſe them; and, about the middle of October 1796, a peace was concluded between the two powers. Naples, however, was required to pay the ſum of eight millions, either in money or in naval ſtores.

Two years after this, however, the friends of the French republic were ordered to quit the Neapolitan territories. Nelſon's victory at Aboukir, in 1798, had raiſed the ſpirits of all the opponents of France, and had cauſed ſuch a coalition againſt the republic as was far more to be dreaded than thoſe ſhe had already contended with. The king of Naples not only admitted rear-admiral Nelſon and his victorious fleet into his ports, in expreſs contravention to the third article of the late treaty, but alſo conferred honours and rewards on the hero of the Nile, ſuch as never had been granted to a foreigner. His majeſty alſo entered into freſh engagements with the courts of Vienna and London; from the former of which he expected a reinforcement of 16,000 troops, and from the latter, not only the protection of a naval force, but alſo a ſubſidy. In the mean time, having obliged the convents and the clergy to furniſh him with money, he had recourſe to new levies, and ſoon obtained a numerous, rather than a formidable, army. But, as his own dominions could not ſupply him with a commander, he applied to the emperor, and obtained the aſſiſtance of general Mack; notwithſtanding this, he determined to place himſelf at the head of his troops, and inſtead of waiting for, march in queſt of, the enemy.

The immediate object of his ambition appeared to be magnanimous; for Ferdinand IV. who had hitherto reclined on the lap of pleaſure, was ſuddenly ſmitten with a paſſion for military glory, and meditated the ſplendid project of relieving the people of Rome from the rapacity and injuſtice of the invaders, avenging the cauſe of the dethroned pontiff, and forcing the hitherto-victorious French to repaſs the Alps as in former times, leaving the deſtiny of Italy to be regulated by her own princes. His majeſty accordingly publiſhed a manifeſto, dated at San Germano, Nov. 22, 1798, in which, after ſtating to his ſubjects "that he was about to ſet out at the head of the brave defenders of their country, full of confidence in the Lord of Hoſts," he intimated that he had left "his dear and well-beloved conſort regent during his abſence;" and concluded with obſerving, "that it is better to die gloriouſly for God and our country, than to live ſhamefully oppreſſed." The Neapolitan troops, accompanied by the king, accordingly marched next day; and the epoch muſt be allowed to have been peculiarly auſpicious, as Bonaparte and his veteran armies were no longer to be contended with, and the march of the Ruſſians towards the frontiers of Germany occupied all the attention of the directory.

On the approach of the Neapolitan army, conſiſting of 60,000 combatants, general Championnet, being conſcious that he could not defend Rome, placed a ſtrong garriſon in the caſtle, and immediately retired. He was followed by the conſuls, the ſenators, and the tribunes, of the new republic; and they were, in turn, ſucceeded by the king of the Two Sicilies, who took up his reſidence at the palace of Farneſe. It was in this metropolis his majeſty learned the joyful intelligence that the French had been forced to evacuate Leghorn; and he now appeared ſo conſcious of the ſtability of his recent conqueſt, that he invited the pope to return from Tuſcany, and take poſſeſſion of his capital; but his holineſs, although far better calculated for a cloiſter than a palace, foreſaw that the triumph of this monarch, who had not been able to ſubdue the fortreſs of St. Angelo, would be but of ſhort duration, and wiſely determined not to expoſe himſelf to new mortifications.

No ſooner had the French general collected a ſmall body of forces, than he determined to advance againſt the Neapolitans, without regarding the ſuperiority of their numbers. Nor was he miſtaken in his opinion of the enemy; for they were overcome in ſucceſſion by general Ruſca at Porto Fermo, and by Kellermann at Monteroſi. On this, general Mack concentrated all his forces in an entrenched camp, where he waited the approach of the republicans; he was, however, unable to withſtand the impetuoſity of their attack, for his works were ſtormed by general Macdonald, and his army ſo completely routed, that no leſs than 11,000 priſoners were taken by the victors, and nearly the whole park of artillery.

This deciſive action (Dec. 15, 1798.) produced the immediate evacuation of Rome, and Ferdinand IV. after endeavouring in vain to rally his broken and diſpirited cohorts, was forced to fly in diſorder along the banks of the Garigliano and the Volturna, happy to be able to regain his own dominions with the ſcanty remainder of that numerous army which he had ſo recently commanded. Shattered and diſpirited, he retreated with precipitation to Naples. The king, with part of the troops, repaired to his capital: the general, with the remainder, undertook the defence of Capua; whence he ſent a letter to Championnet, the French commander, propoſing an armiſtice, "on account of the ſeverity of the weather and the badneſs of the roads." The Frenchman returned for anſwer, that, "as his army had overcome the difficulties of both the way and the weather with their uſual patience, he ſhould not halt until he had made his entry into Naples."

Thus, in the courſe of a few weeks, that very prince, who was ſo lately proclaimed a victor in the capitol, and, although conſidered as a vaſſal of the Holy See, had generouſly offered to reſtore the popedom, was conſtrained on the laſt day of the year to abdicate all his continental dominions, and, taking refuge with his court on-board an Engliſh man-of-war, ſeek for protection in Sicily.

While the king, on-board of a Britiſh flag-ſhip, commanded by the gallant admiral ſo lately victorious at Aboukir, was ſteering towards Palermo, to take refuge in the palace uſually allotted for the reſidence of his viceroys, the French were advancing with haſty marches towards the metropolis.

But, although this prince had abandoned his ſubjects, a large portion of them were not only hoſtile to the republicans, but attacked and cut off their convoys, ſeized on their baggage, and maſſacred all the ſtragglers. However, the invaders ſtill continued to advance in three columns, under the generals Duheſme, Le Roy, and Macdonald; until Championnet, the commander-in-chief, having at length concentrated his forces, threatened to carry Capua, the laſt refuge of the Neapolitan army, by aſſault. The ſoldiers, diſcontented at being governed by a foreigner, and forſaken by the royal family, already murmured aloud; and, notwithſtanding the inſurrection by this time appeared general, it was deemed prudent to negociate with the victors. Accordingly, prince Pignatelli, who had been appointed viceroy, ſent a deputation to the head-quarters of the French, offering to ſurrender the city of Capua on condition that an armiſtice ſhould immediately take place. But, notwithſtanding Championnet was at this moment in want of proviſions and ammunition, he inſiſted that the capital ſhould alſo be delivered up as a pledge of the peaceable intentions of the Neapolitans. It was deemed prudent, however, to relax from ſome of theſe pretenſions; and a proviſional treaty was at length concluded, in conſequence of which he obtained poſſeſſion of Capua, one of the principal bulwarks of the kingdom. It was at the ſame time ſtipulated, Jan. 7, 1799, that the ports of the Two Sicilies ſhould be declared neutral; that the ſhips appertaining to the nations at war with France ſhould be obliged to depart immediately; that ten millions of livres ſhould be advanced towards defraying the expenſes of the war; and that the preſent agreement ſhould be ſubmitted to the approbation of their reſpective governments.

When this was done, it appeared that the treaty was diſapproved by both parties: by the French directory, who thought the terms too lenient, and by the king of Naples, who thought them too hard: he loudly condemned the conduct of the viceroy; and accordingly tranſmitted a letter from his palace at Palermo, where he was exempt from the dangers, and removed from even the din, of war; in which he reproached Pignatelli for having made conceſſions that muſt lead to the irretrievable loſs of the whole kingdom. Ferdinand alſo denied that he had entruſted the viceroy with powers to enter into ſuch a negociation; and concluded by obſerving, "that he muſt either have forgotten that he had a *maſter*, or only remembered it for the purpoſe of impoſing the moſt ſcandalous and diſgraceful terms upon him." A proclamation was ſoon after publiſhed, formally diſavowing the late armiſtice, and calling on all the inhabitants of the different provinces to riſe in defence of their country, their families, their property, and their religion. They were told, "that cowardice and treachery alone had rendered the invaſion formidable," and that "the bravery and attachment of the people to their ſovereign muſt ſpeedily render their enemies contemptible."

In this ſituation of affairs, Championnet had recourſe to popular arts, and determined to divide before he attempted to conquer. He well knew that a great number of the chief inhabitants of the city of Naples, were diſguſted with the monarch, and dreaded the reſtoration of royalty, which would be a ſignal for their proſcription. Inſtigated by their fears of a prince whom they had offended, and attached to the French, whom they conſidered as deliverers, many of the moſt dignified, opulent, and reſpectable, had become deſirous of eſtabliſhing a republic, and aboliſhing the kingly office for ever; nor is it a little remarkable, that they recurred on this occaſion to the doctrine of *abdication*, employed with ſuch ſucceſs in England poſterior to the expulſion of James II. The Lazzaroni, on the other hand, who had been gained by donations and furniſhed with arms, were determined to defend Naples, and to expel thoſe who might be hoſtile to their opinions. They took poſſeſſion of all the arms, and, forming themſelves into bands, ran through the ſtreets, invoking the names of the king and St. Januarius. General Mack was noted as a traitor, and the remains of the army which he commanded, as jacobins, corrupted by French gold. Even Pignatelli the viceroy was become an object of ſuſpicion, and, apprehenſive of the danger that awaited him from both ſides, prudently withdrew to his barge, that lay in the bay, and ſet ſail for Sicily. The ſoldiers, terrified by the numbers and the menaces of the Lazzaroni, deſerted to the French ranks; and, in two days, the Neapolitan army was totally diſorganized and annihilated. General Mack even demanded an aſylum from Championnet.

The Lazzaroni, exaſperated at the eſcape of their prey, collected themſelves in a body, and ruſhed, like madmen, on the French advanced poſts at Ponte Rotto; routed the advanced guards; and penetrated even to the line. Returning to the city, they put to death all whom they ſuſpected of attachment to the French. The revolutionary party, headed by the prince Moliterno, now ſeized the caſtle of St. Elmo; intelligence of which was the ſignal for Championnet to make the attack. He advanced, every thing was ready for an aſſault, and Naples was on the point of being given up to all the horrors of a ſtorm, when Championnet, anxious to prevent ſo great and ſo unneceſſary a waſte of life, addreſſed a proclamation to that effect, by the chief of a ſquadron, to the magiſtrates of the city. But Naples had now no magiſtrates. Such of the inhabitants as had not taken up arms, had ſhut themſelves up in their houſes, or concealed themſelves from the fury of the Lazzaroni, who, to the number of ſixty thouſand, had ſworn to defend themſelves to the laſt. The meſſenger of Championnet was received by a volley of muſketry. A ball broke the pommel of his ſaddle; and, on his attempting to make them underſtand the general's propoſition, another volley forced him to retreat. The French, therefore, prepared for the attack. Orders were given for two battalions, ſtationed on Capo-di-Monte, to march, in the ſilence of the enſuing night, to join the patriots in St. Elmo, when the citadel was to open a general diſcharge of all its artillery upon the city; upon which, alſo, general Elbe was to open all his batteries. The whole army, inveſting the city, were to ruſh forward, and bear down every thing that oppoſed them. Columns, armed with torches, were to carry fire and deſolation wherever they could penetrate. The Lazzaroni, drawn up in columns, anticipated the attack with aſtoniſhing addreſs and courage. When repulſed, they returned again to the charge, and ſeveral times repulſed the French in their turn. At length, they were forced to yield ſome ground, of which they diſputed every foot, with part of their artillery. The French became maſters of ſeveral ſtreets. The Lazzaroni were harraſſed and preſſed, but not vanquiſhed. Night overtook the combatants, but the fire was ſtill continued. The French troops, overcome with fatigue, divided themſelves into two equal portions. One kept up the fight, whilſt the other lay down to reſt amidſt corpſes and ruins. At the dawn of day, the fury of the combatants redoubled, and final victory was yet uncertain.

From the exhauſted ſtate of both parties, a momentary ceſſation took place from mutual ſlaughter. In this interval, Championnet ſpoke to ſome of the inhabitants who had crept forth from their houſes, and aſſured them of protection. He profeſſed profound reſpect for St. Januarius, to whom he put up fervent prayers for the preſervation of human lives, and the reſtoration of tranquillity to the unhappy city of Naples. The report of the general's reſpect for St. Januarius was carried into the ranks of the Lazzaroni. The cry of *Vivent les François, Vive la Republique*, began to be heard. A guard of honour was ſtationed, by the French, at the church of the tutelary ſaint. The conſign was, "Reſpect for St. Januarius." The general twice paid his homage at the ſhrine of the apoſtle. His converſion flew like lightning through the city. Numbers of the Lazzaroni crowded round him as he rode on horſeback through the ſtreets or ſquares, and kiſſed his boots. The avenues to the church of St. Januarius were filled with Lazzaroni, and other inhabitants of Naples: one of the chiefs of the Lazzaroni, placing himſelf at the head of the French, harangued his terrible ſoldiers, ordering them to ceaſe their fire and ground their arms. He was heard reſpectfully and obeyed. A ſhout of general joy ſucceeded to the voice of mourning and the ſhrieks of deſpair. The war was ended, peace reſtored, and Naples reduced under the power of the French.

The 23d of January, 1799, was the memorable day on which Naples ſurrendered. The neighbouring forts were now immediately garriſoned by the republican conquerors; and the Lazzaroni, to exhibit an unequivocal proof of their new-born zeal for a republican government, as well as their abjuration of monarchical principles, proceeded in a body to pillage the reſidence of the abſent king. But they were prevented by the French, who ſoon found it neceſſary, for their own ſecurity, to diſarm this motly and capricious race. Nor were the clergy backward, upon the preſent occaſion, in paying their court to the victors; for the cardinal archbiſhop not only condeſcended to ſolemnize the entrance of the French into Naples, but had actually recourſe to a pious fraud to reconcile the people to their new deſtiny. In conſequence of long and earneſt prayers, the phial that contained a precious portion of the patron-ſaint, ſo much reſpected by the inhabitants, exhibited undoubted marks of miraculous interpoſition; an event immediately communicated to the credulous and overjoyed multitude. After this a day was appointed for a ſolemn Te Deum, on which occaſion all the faithful citizens were invited "to return thanks to the Moſt High, for the glorious entry of the French troops, who, protected in a peculiar manner by Providence, had come to regenerate the nation, and conſolidate its happineſs." The venerable prelate did not fail to intimate, at the ſame time, that St. Januarius had greeted their arrival in the kindeſt manner; "his blood having miraculouſly liquified on the very evening of that day on which the republican forces had taken up their abode in the capital."

After aſſiſting, with every appearance of the moſt edifying piety, on this ſolemn occaſion, Championnet changed the appellation of his troops into that of the "Army of Naples," and addreſſed an able and ſeductive proclamation to the inhabitants, in which he inveighed bitterly againſt the tyranny of their late king, offering them liberty at the ſame time, in the name of his own commonwealth. "You are at length free," ſays he; "your love is the only price which France deſires to obtain from you for your liberty, and the only clauſe of the treaty of peace, which the army of the republic comes to ratify by a ſolemn oath with you within the walls of the capital, and on the ſubverted throne of your laſt monarch. Miſery be to the wretch who ſhall refuſe to ſign with us this honourable compact, in which the fruit of victory is given to the vanquiſhed, and which only leaves to the conqueror the glory of having conſolidated your happineſs; he ſhall be treated as a public enemy, againſt whom we remain in arms. If there are ſtill among you hearts ſo ungrateful as to reject that liberty which we have gained for you at the expenſe of our blood; or men ſo inſane as to regret a king deprived of the right of commanding, in conſequence of his violating the oath which he had ſworn to defend them; let them fly for protection to ſtandards which are diſgraced by perjury! War ſhall be proſecuted againſt ſuch to extermination. Republicans, the cauſe in which you have ſo generouſly ſuffered is ultimately victorious. What the brilliant victories of the army of Italy have not been able to accompliſh, has been happily effected by the blindneſs of your laſt king. Let him blame then his own mad pride, and his audacious aggreſſions, for the happineſs of your fate, and the diſgrace which he has experienced; but let him be juſtly puniſhed for having attacked, againſt the faith of oaths, a nation in alliance with him, and for having attempted to deprive a neighbouring people of their liberty; let him be puniſhed by the loſs of a crown which he has diſhonoured, and by the chagrin of having been the principal inſtrument of making you free; let no apprehenſion embitter the ſentiment of an happineſs ſo unexpected. Let the republican authorities, which are about to be eſtabliſhed, reſtore order and tranquillity on the baſis of a paternal adminiſtration; let them diſſipate the idle alarms of ignorance, and oppoſe the fury of fanaticiſm, with a zeal equal to that which has been employed by perfidy to increaſe them; and, in a ſhort time, the ſeverity of diſcipline, which reeſtabliſhes order with ſo much facility among the troops of a free people, will not fail to put a period to the crimes produced by hatred and revenge."

Immediately after this, Naples was proclaimed a commonwealth, under the deſignation of the *Parthenopean Republic;* and the proviſional government confided to twenty-one citizens, choſen by the French general. Theſe were enjoined to draw up a plan for a new conſtitution, worthy of a free people; and, while money was levied for the payment of the army, the eſtates of the clergy and the domains of the crown were declared to appertain to the conquerors. But, although Championnet took care that his troops ſhould not be a burden to the mother-country, he at the ſame time reſtrained the ſpoliations of the agents of the directory, and not only ſuſpended them from the exerciſe of their functions, but obliged them to return home, declaring that the public faith pledged by him ſhould not on any account be violated. At the head of the new adminiſtration was placed Charles Laubert, a man accuſed of jacobinical principles; and none of the reſt poſſeſſed the confidence of the nation, except Dominico Cirillo, a celebrated phyſician, and Flavio Pirelli, formerly a preſident of the royal chamber. The national guard, however, boaſted of the firſt grandees; as it contained the princes Della Torelli and Rocca, both knights of St. Januarius, and the two richeſt individuals in the kingdom. The prince of Moliterno was appointed commander-in-chief, and the duke de Roccaromana offered to levy a regiment at his own expenſe. An aſſembly, repreſenting the *piazze*, or ancient parliaments, was ſoon after convoked; and care was taken to admit two repreſentatives on the part of the Lazzaroni, who ſtill continued to poſſeſs conſiderable ſway in Naples, while their former leaders were inveſted with employments, or gratified with penſions.

But the dream of republicaniſm was ſoon to be at an end. In a few months afterwards, the great ſucceſſes of the Auſtro-Ruſſian army entirely changed the aſpect of affairs; and general Macdonald was ordered to retreat from the ſouth of Italy, leaving, both at Rome and at Naples, thoſe who had taken part in the late revolutions there, to the moſt terrible reſponſibility. That general, however, having left garriſons in the caſtles of St. Angelo and St. Elmo, as well as at Capua, Caſtel Mare, and Gaeta, ſeveral of the patriots retired thither in conſequence of the commotions originally excited by the rapacity of the French commiſſaries; and now greatly increaſed, partly by the ſucceſſive defeats of the republican armies, and partly by the attachment which many of the people ſtill entertained for the ancient government; for Ferdinand, although he had abandoned his capital, was not wholly forſaken by his ſubjects. The inhabitants of the provinces in particular, ſtill retained an affection for their abſent king, and were ready to ſacrifice their lives in his defence.

Theſe ſentiments had been carefully cheriſhed by cardinal Ruffo, one of the moſt extraordinary men of the age. This ſingular eccleſiaſtic, in conſequence of ſome diſputes with the pope, had taken refuge in the court of Naples, where he exerciſed an employment but little ſuitable to the dignity of the Roman purple. Having accompanied the king to Palermo, at a period when all the courtiers deſpaired of the reſtoration of the monarchy, he obtained leave to repair to Calabria, on purpoſe to erect the ſtandard of royalty there. Although accompanied by five perſons only, when he landed at Scilla, this fortunate adventurer was ſoon joined by numbers of the inhabitants, headed by don Reggio Rinaldi, rector of Scalca, who had already organiſed an inſurrection, and waited only for the arrival of a chief.

The warlike cardinal, after collecting a number of new levies in the capacity of general, recurred to his holy functions as a prieſt, on purpoſe to arouſe the fanaticiſm of a people whom he knew to be both ſuperſtitious and barbarous in the extreme. Accordingly, in virtue of his ſpiritual authority, he excommunicated all thoſe who would not take up arms, while he enjoined every true catholic to wear a red croſs in his hat, as a ſignal of faith; and promiſed ſuch as might die in battle the immediate enjoyment of paradiſe. In addition to many of the peaſantry, his eminence was ſoon joined by a multitude of galley-ſlaves, criminals impriſoned in the gaols, and robbers who had infeſted the highway; theſe were immediately formed into diviſions, under three chiefs, every way worthy of their followers. The firſt of theſe was called Fra' Diabolo, a monk who, after being expelled from his convent, became the leader of a deſperate band of freebooters; the ſecond was the gaoler of Salerno, who marched at the head of his priſoners; and the third, Pauzanera, of whom it is reported, that he had committed fourteen homicides. Such were the talents and good fortune of this martial prelate, that with troops ſuch as theſe, on whom he had conferred the appellation of "the Chriſtian Army," he attacked, ſeized, and plundered, the towns of Crotona and Catanzaro.

Having overcome the detachments ſent againſt him, in ſeveral actions, he determined on ſtill greater exploits. Accordingly, no ſooner was intelligence received that the French had evacuated Naples, than, after collecting the wreck of general Mack's army, and being joined by a body of Engliſh and Ruſſians, Ruffo marched againſt the capital, of part of which he made himſelf maſter on the feaſt of St. Anthony, who immediately ſucceeded to all the honours of St. Januarius, now conſidered as an apoſtate and a jacobin, and depoſed ſoon after, on account of the decided protection exhibited by him towards the patriots. The executive directory, the members of the legiſlature, and all thoſe who held any offices under, or countenanced, the Parthenopean republic, now took ſhelter within the fortreſſes, and ſet their enemies, who were but ill prepared for a ſiege, at defiance. Ruffo, who by this time was appointed governor, and exerciſed his civil and military functions under the denomination of Vicar to the King of Naples, reſolved to put an end to the civil war by means of a treaty, which, while it reſtored his ſovereign, ſhould at the ſame time ſecure the lives of the principal inſurgents. He therefore entered into a negociation for that purpoſe; and it was at length ſtipulated, June 20, 1799, in a treaty to which the Turkiſh and Ruſſian commanders acceded, that "the members of the new government, and the patriots in the forts, ſhould march out with all the honours of war, for the purpoſe of being conducted in ſafety to Toulon; until which period they were to retain poſſeſſion of the caſtles of Ovo, Nuovo, and St. Elmo."

Caſtel-a-Mare, about eighteen miles from Naples, was next ſummoned. The patriots fought with incredible valour, having, at firſt, formed the reſolution of burying themſelves under the ruins. They were ſummoned a ſecond time; and, as they had no hope of obtaining any ſuccours, they ſurrendered to a Britiſh ſquadron, under the command of commodore Foote. The capitulation was ſigned on the 22d of June, and ratified by cardinal Ruffo, commodore Foote, and the commanders of the Ruſſian and Turkiſh ſquadrons. The conditions were the ſame as for Naples.

Soon after, a coaleſced army of Engliſh, Ruſſian, Turkiſh, Portugueſe, and Italian, troops, came into port, under the direction of lord Nelſon, and his meritorious ſecond, captain Trowbridge. To the treaty which the cardinal had agreed to with the prince of Caraccioli and ſome other members of the revolution, lord Nelſon refuſed to accede. Accordingly, a body of Engliſh, Ruſſian, and Portugueſe, troops, obtained poſſeſſion of the caſtles of Ovo and Nuovo on the 26th, under the command of captain Hood; and another detachment, led by captain Trowbridge, inveſted the caſtle of St. Elmo on the 29th. This was a work of great difficulty; ſeven batteries, armed with cannon of the largeſt bore, were ſucceſſively erected; and, on July 11th, thirty pieces of ordnance were ready to play on the fort. This arduous taſk was chiefly accompliſhed by the exertions of a body of Britiſh ſeamen. The garriſon perſiſted in a vigorous defence; but, the batteries of the place being almoſt all diſmounted, and the works very much ſhattered, Mejan, the commanding officer, thinking the place was about to be ſtormed, at length conſented to a capitulation. The terms were agreed to, and ſigned on the 12th. The garriſon, after having laid down their arms, were to be embarked for France, on the condition of not ſerving again until an exchange ſhould take place; and "all the ſubjects of his Sicilian majeſty were to be delivered up to the allies."

The only towns not yet reduced under the authority of the Neapolitan government, were Capua and Gaeta. The former ſurrendered to captain Trowbridge, June 28. The French garriſon laid down their arms on the glacis on the 29th, and marched towards Naples, to be there embarked for France. Capua ſurrendered, July 1ſt, on the ſame condition.

The king of the Two Sicilies arrived at Naples from Palermo on the 10th of July; and, having repaired on-board the Foudroyant, the Engliſh admiral's ſhip, where the royal ſtandard was hoiſted, ſaw alſo his flag waving once more over his capital. He then formally diſavowed the authority of cardinal Ruffo to treat with ſubjects in rebellion. He accordingly put an end to the truce, and inſtantly blockaded the convoy deſtined to carry the members and adherents of the late government to France. However, as the honour of the Engliſh nation was immediately implicated in reſpect to the priſoners at Caſtel-a-Mare, which had ſurrendered to the ſquadron under commodore Foote, the articles of *that* capitulation were ſtrictly enforced, and conſidered as inviolable, amidſt all the convulſions that afterwards enſued.

It was hoped that the magnanimity of the allies would have protected the patriots from the burſt of royal vengeance; but Ferdinand looked upon thoſe patriots as traitors, and, diſregarding all treaties, his majeſty was determined they ſhould be treated as ſuch. A ſpecial commiſſion was appointed, which pronounced ſentence of death, without much formality, on ſuch as had taken an active part in the late revolutionary government.

The unfortunate priſoners on-board the ſhips in the bay, now addreſſed a letter to admiral Nelſon, claiming his protection, which we here ſubjoin: "After the arrival of the Britiſh fleet in this road, commanded by your excellency, the capitulation was begun to be put in execution. The garriſon of the forts, on their part, ſet at liberty the ſtate-priſoners and the Engliſh priſoners of war, and gave up, to the troops of his Britannic majeſty, the gate of the royal palace which leads to the new fort; and, on the other ſide, the troops of his majeſty the emperor of all the Ruſſias attended the march of the garriſon, with all the honours of war, out of the forts. It is now twenty-four days that we are lying in this road, unprovided with every thing neceſſary for exiſtence. We have nothing but bread to eat; we drink nothing but putrid water, or wine mingled with ſea-water; and we have nothing but the bare planks to ſleep on. Our houſes have been entirely pillaged, and the greater part of our relations either impriſoned or maſſacred. We are perſuaded that all the treatment which we ſuffer, after having capitulated, and after having, on our ſide, put the articles of the capitulation religiouſly into execution, is entirely unknown to your excellency, and to his Sicilian majeſty, your fidelity and his benevolence being engaged in our deliverance. The delay of the execution of the capitulation, gives us room to claim and implore his and your juſtice, in order that a treaty, concluded with four of the moſt civilized powers of Europe, who have always appreciated the inviolability of treaties, ſhould be executed as ſpeedily as poſſible. We hope that, by means of your good offices with his Sicilian majeſty, due execution will be given to the articles of a capitulation which has been ſigned with good faith, and religiouſly fulfilled on the part of the garriſon."

The following was lord Nelſon's anſwer: "I have ſhown your letter to your *gracious* king, who muſt be the beſt and only judge of the merits and demerits of his ſubjects."

The executions commenced with the chevaliers Maſſa, Serra, Julian Colonna, and the prince de Strongoli, who ſuffered death in the Caſtel del Ovo. Belloni and Piſtici, two prieſts, were hanged near the Vicaria; the adjutant-general Grimaldi burſt from the hands of the guards, and periſhed fighting againſt them; Menthone, the miniſter at war, ſuffered after a ſhort and memorable ſpeech. Dominico Cirillo, on being interrogated as to his condition, replied "Under the deſpotiſm I was a phyſician; in the time of the republic, a repreſentive of the people; at preſent, a hero!" Prince Carraccioli, general and chief of the Neapolitan marine, was executed on-board a Neapolitan frigate. Marcello Scoti, Paſchal Buffo, Joſeph Luogoteta, and ſeveral others, ſuffered. Nor was the ſofter ſex exempt from this terrible proſcription; for

Eleonora Fonſeca, and eighteen ladies of diſtinction, were executed by the cord; while the ducheſſes of Caſſano and Popoli were ſhut up for life in a penitentiary-houſe. Theſe are a few only of thoſe who were put to death by the ſentence of the ſtate-inquiſition, and who chiefly conſiſted of Sicilians: ſome periſhed by their own hands, to avoid the diſgrace of a public execution; others were burnt within their palaces; hundreds were torn to pieces by a frantic populace; and, if we are to give credit to ſome of the few who eſcaped from this ſcene of general carnage, the Lazzaroni frequently diſputed with each other the bleeding members of their victims, which they were accuſtomed firſt to broil on the ſmoking ruins, and then devour. We truſt, for the ſake of humanity, that this account has been exaggerated.

The original number of thoſe who had capitulated was from 1500 reduced to 500. Theſe who continued onboard the tranſports were allowed to ſail for a French port, on condition of perpetual baniſhment, and the total confiſcation of all their eſtates: they ſailed from the bay of Naples on the 12th of Auguſt, 1799.

The king, however, notwithſtanding he was ſupported by a Britiſh fleet, a body of confederates, and an army of Calabrians, and ſtill further ſtrengthened by a new alliance, offenſive and defenſive, with the court of Vienna, and the promiſe of 60,000 Auſtrians, in caſe his dominions ſhould be again invaded, did not deem himſelf ſafe in Naples, but thought fit to return to Sicily, and fix his reſidence again at Palermo, where he continued for more than a twelvemonth.

In the year 1801, a ſhort time previous to the general peace of Amiens, the king of Naples, alarmed at the approach of an army under general Murat, withdrew his troops in ſucceſſion from the territories of Tuſcany and Rome; and, at the moment the French were about once more to enter his kingdom, he contrived, by the powerful interceſſion of Ruſſia and of Spain, to prevent the re-eſtabliſhment of the Parthenopean republic. The treaty, however, by means of which he purchaſed his ſafety, was humiliating; for Ferdinand agreed to ſhut the ports of Naples and Sicily againſt the ſhips of war of Great Britain and Turkey, and renounced Porto Longone, with all his poſſeſſions in the Iſle of Elba, the preſidial ſtates in Tuſcany, and the principality of Piombino. But, what was infinitely more diſagreeable to this prince, he not only ſtipulated by a ſpecific article to pay the ſum of 500,000 lives, by way of indemnification for the lives loſt and damages ſuſtained during the late diſorders in the kingdom of Naples, but he alſo ſolemnly agreed to permit all thoſe, who had been either impriſoned or baniſhed on account of their political opinions, to be liberated, and return to their native country.

The ſituation of Naples during the war, and at the peace (of Amiens), is thus ſummed up by Mr. Stephens in his Hiſt. of Wars which aroſe out of the French Revolution: "Ferdinand IV. king of Sicily and Naples, experienced various good and ill fortune. Flying before an inſurgent people and an invading enemy, he at one time ſcarcely deemed Palermo ſecure from the vengeance of the Parthenopean republic. Aided, however, by the martial ſpirit of an adventurous prieſt, ſhielded by the protection of Ruſſia, and ſupported by the victorious fleets of England, he returned in triumph to his capital; and, after annulling a ſolemn treaty entered into in his own name with his viceroy, threatened to annihilate the whole order of nobility from the golden book. Doomed to inevitable deſtruction by republican France, but ſpared by the conſular government, (it was at the cloſe of the year 1799 that Bonaparte had been declared firſt conſul,) he cheerfully reſigned a ſmall portion of his dominions to obtain peace; but, acquieſcing in his lot, he ſeemed to forget the cares that plant the pillow of royalty with thorns; and, while hunting the wild boar in the neighbourhood of Caſerta, or patiently angling for mullets in the bay of Naples, happily ceaſed to remember his exile in Sicily, and thought himſelf ſecure."

But he was ſoon to be ſubjected to new trials; and, on account of his former cruelties, he had little compaſſion to expect.

After the battle of Auſterlitz, which had been followed by the treaty of Preſburg, Bonaparte (now the emperor Napoleon) had no remaining enemy within his reach except the king of Naples, whoſe recent conduct had been ſuch as to provoke the utmoſt fury of his indignation. A treaty of neutrality between France and Naples had been concluded at Paris on the 21ſt of September, 1805, by Talleyrand and the marquis di Gallo; and ratified at Portici by the king of Naples on the 8th of October. By this treaty, the French agreed to withdraw their troops from the Neapolitan territory, where they had been ſtationed, without any juſtifiable pretence, ſince the re-commencement of the war with England; and the king of Naples engaged, in return, to remain neutral in the war between France and the allies, and to repel by force every encroachment on his neutrality. He more particularly became bound not to permit the troops of any belligerent power to enter his territories; not to confide the command of his armies or defence of his ſtrong places to any Ruſſian or Auſtrian officer, or French emigrant, or ſubject of any belligerent; and not to admit any belligerent ſquadron into his ports. But hardly had ſix weeks elapſed after the ratification of this treaty, when every one of its ſtipulations were violated by the court of Naples. On the 20th of November, a ſquadron of Engliſh and Ruſſian ſhips of war appeared in the bay of Naples, and landed a body of forces in that city and its vicinity. It is ſtill doubtful whether this expedition was undertaken by the allies in concert with the Neapolitan government; but, whether previouſly conſulted or not, by not oppoſing the landing of the troops, nor even remonſtrating againſt it, the latter made itſelf a party to the tranſaction, and forfeited the neutrality ſecured to it by the treaty recently concluded. Such at leaſt was the interpretation of its conduct by the French ambaſſador at Naples, who inſtantly took down the arms of France from over the gate of his hotel, and demanded paſſports, to enable him to leave the kingdom. Had the court of Naples been able to juſtify itſelf from a participation in the counſels that led to theſe proceedings, or been ſtill deſirous of maintaining its neutrality in the war between France and the allies, this was the moment for explanation. But, inſtead of keeping open the door for accommodation, it ſuffered the French ambaſſador to depart, without even attempting a vindication of its conduct; and contented itſelf with iſſuing a decree, in which, after ſlightly alluding to the late tranſactions, but without even condeſcending to ſay that the neutrality of its territory had been violated againſt its will, it promiſed to foreign merchants, ſubjects of the allies of France, and reſident in the Neapolitan dominions, who might otherwiſe be alarmed at the departure of the French ambaſſador, protection for their property, and permiſſion to purſue their commerce. The appearance of ſuch a decree, at ſuch a juncture, was regarded by France as an unequivocal declaration, that the late proceedings of the allies at Naples, if not undertaken at the requeſt of the Neapolitan government, were agreeable to its wiſhes; and, if any doubts had remained of its intention to diſregard the treaty of Portici, and connect itſelf with the allies, its ſubſequent conduct would have ſoon removed them.

The Ruſſians, who were in number about 14,000 men, under general Laſcy, landed at Naples, and were quartered in that city and its neighbourhood. The Engliſh, amounting to about 10,000, diſembarked at Caſtel-a-Mare, and were cantoned at that place, at Torre del Greco, and in the vicinity. Sir James Craig was commander-in-chief of the Engliſh forces, and ſir John Stuart ſecond in command. No ſooner were the troops on ſhore, than preparations for active hoſtilities were begun by the government of Naples. Levies of Neapolitans were ordered. Horſes and waggons, neceſſary for the advance of the army, were provided. Magazines were collected, and every demonſtration was given by the court of Naples, that, if not conſulted before the expedition was undertaken, the plan of operations, whatever it was, had now its hearty approbation and ſupport.

It was not long before the court of Naples was made ſenſible of the full extent of its imprudence. On the morning after the ſignature of the peace of Preſburg, Bonaparte iſſued a proclamation from his head quarters at Vienna, declaring "the Neapolitan dynaſty had ceaſed to reign," and denouncing vengeance againſt the reigning family, in terms that left no hope of pardon or accommodation. (See the article FRANCE, vol. vii. p. 886.) Hardly had this threatening proclamation reached Naples, when the allies, who had brought the Neapolitan government into theſe difficulties, ſet the firſt example of flight, and abandoned to their fate the royal perſonages whom they had ſo inexcuſably involved in ruin. A courier arrived at Naples, with orders from the emperor Alexander for the Ruſſian troops to re-embark and return to Corfu. The retreat of the Ruſſians led neceſſarily to that of the Engliſh. Had the Ruſſians remained, who formed the greater part of the allied army, there is a ſtrong poſition on the road from Rome to Naples, having the mountains of Abruzzo on the right, and the Ganigliano on the left, which might have been maintained againſt the French. But, after the departure of the Ruſſians, the Engliſh were too few in number for ſo extenſive a line of defence, and therefore ſir James Craig determined on retiring with his troops to Sicily, without waiting for the arrival of the enemy. This reſolution, which ſeems, indeed, the only reaſonable plan left him to adopt, he carried into execution without delay, and thus ſecured Sicily from the French, which had he attempted without ſucceſs, the defence of Naples muſt have fallen into their hands without reſiſtance. This haſty retreat of ſir James Craig ſeems to have excited murmurs among his ſoldiers, who, with the ſpirit natural to Britiſh troops, were indignant at the appearance of flying before an enemy, diſtant from them many hundred miles. It was ſtill leſs acceptable to the court of Naples, which was unwilling to abandon its capital, and too weak, without aſſiſtance, to attempt its defence. But, the Britiſh general, diſregarding the murmurs of the one, and remonſtrances of the other, perſiſted in his reſolution; and, being convinced that Naples could not be defended with the forces under his command, he wiſely determined not to expoſe his troops to the conſequences of their ardour and inexperience, nor to ſacrifice them to the wild and extravagant projects of the court of Naples.

In the mean time a French army, under the command of Joſeph Bonaparte, aſſiſted by Maſſena, Regnier, and other generals of reputation, was advancing towards Naples; and on the 9th of February its head-quarters were at Ferentino, on the frontiers of that kingdom. From this place a proclamation was iſſued by Joſeph Bonaparte, threatening the court of Naples with the ſevereſt vengeance for its breach of faith, and violation of the treaty of Portici; but promiſing to the people, that, if they ſubmitted to the French arms, their religion, laws, and property, ſhould be reſpected. See this proclamation at length under the article FRANCE, vol. vii. p. 888, 9.

Having paſſed the frontiers of the kingdom, the French advanced in three diviſions. The right, commanded by Regnier, marched to Gaeta without oppoſition, and ſummoned the prince of Heſſe Philipſthal, the governor of that place, to ſurrender, offering him honourable terms of capitulation, and warning him of the inefficacy of reſiſtance. The anſwer of the prince of Heſſe was a determined refuſal to capitulate; on which the French attacked and carried the redoubt of St. André, defended by ten pieces of cannon; but loſt in the attack general Gigny, an excellent officer, much lamented by their army. The centre diviſion, under the command of Maſſena, met with no reſiſtance in its march to Naples. Capua ſurrendered on the 12th of February; and on the 15th Joſeph Bonaparte entered Naples, the garriſon left in that city and in the neighbouring forts having previouſly capitulated. Next day he went publicly to maſs, which was celebrated by cardinal Ruffo, archbiſhop of Naples; and, to diſplay his devotion in a manner more gratifying to the populace, he preſented a diamond necklace as an offering to St. Januarius, the tutelary ſaint of Naples.

The unfortunate king of Naples had left his capital on the 23d of January, 1806, to ſeek refuge, a ſecond time, at Palermo; and the queen had followed his example. Part of the Neapolitan army accompanied the king and queen in their flight; and a number of perſons, connected with the court, or obnoxious to the French, made their eſcape along with them. Though the king had been always a favourite with the populace, no effort was made to detain him, nor diſpoſition ſhown, as on a former occaſion, to arm in his defence. The queen was deteſted by all ranks of people, and no ſentiment but exultation attended her flight. Her meddling, intriguing character muſt ever have prevented her from acquiring popularity; but, to have drawn upon her the univerſal abhorrence of her ſubjects, it was neceſſary that ſhe ſhould have diſplayed ſuch a vindictive temper, and ſhed ſuch a profuſion of blood, as had marked her return from her former exile. There was hardly a noble or reſpectable family in Naples which had not to lament ſome victim ſacrificed on that occaſion to her reſentment; and ſuch was the impreſſion left in their minds of her cruel, unrelenting character, that, when ſhe ſailed from Naples, there was but one wiſh in the city, that ſhe might never return to it.

The duke of Calabria, heir-apparent of Naples, to whom the king his father, before his departure, had delegated the regency of the kingdom during his own abſence, remained at Naples till the 7th of February. But, having tried in vain to open a negociation with the French, he abandoned the city on their approach, and retired, with a body of troops, to Calabria, where general Damas, a French emigrant in the Neapolitan ſervice, was at the head of a conſiderable force, endeavouring to organize a levy *en maſſe*, for the defence of that part of the kingdom. The activity of the French, however, left the Neapolitan generals but a ſhort time to complete their preparations. General Regnier was called from before Gaeta, and ſent after the fugitives with part of the army which had entered Naples. No ſtand ſeems to have been made by the Neapolitan generals till they reached the frontiers of Calabria; but, having taken a ſtrong poſition at Lago Negro, they determined to wait there the approach of the enemy. An action enſued, in which the Neapolitans, after attempting in vain to defend the paſſage of a ſmall rivulet, were driven with great loſs from their poſition. This action, which ſeems to have been obſtinately diſputed on the part of the Neapolitans, was fought on the 6th of March. On the two following days Regnier continued to advance, driving ſmall parties of the Neapolitans before him, and on the 9th he attacked their army in its entrenched poſition at Campo Teneſe. According to the French accounts, the Neapolitans behaved moſt ſhamefully on this occaſion. They are ſaid to have fled at the firſt on-ſet, abandoned their cannon and baggage, and about 2000 priſoners, to the enemy; and to have diſperſed after the battle ſo completely, that general Damas was unable, in his flight, to collect together more than 900 infantry and 50 horſes. The battle of Campo Teneſe, if it deſerve the name, put an end for the preſent to the war in Calabria. Regnier advanced to Neggis at the extremity of the peninſula, and placed a French garriſon in the fort of Scylla. Another diviſion of the French army marched, without oppoſition, to Tarento, and took poſſeſſion of that important city, the moſt conveniently ſituated of any in the kingdom for menacing at once both Sicily and Greece.

The whole kingdom of Naples had now ſubmitted to the French arms, except Gaeta and Civitelle del Tranto, in the Farther Abruzzo. Gaeta, which is ſituated on the point of a rocky promontory, waſhed on three ſides by the ſea, and on the fourth joined to the continent by a narrow iſthmus, ſtrongly fortified, was ſtill held by the prince of Heſſe-Philipſthal; and ſuch was the ſtrength of the place and reſolution of the governor, that the French had no chance of becoming maſters of it without a regular ſiege, which, for want of battering-cannon, they were unable for ſome time to commence.

But, though no enemy appeared againſt them in the field, the country they had ſubdued was far from being tranquil. Aſſaſſination, robberies, and other diſorders, inſeparable from a diſſolution of government, broke out at Naples and in other parts of the kingdom, and required, for their ſuppreſſion, the moſt rigorous and vigilant police. Theſe diſorders, which filled the better ſort of Neapolitans with the moſt diſmal apprehenſions, were fomented by the partiſans and emiſſaries of the old government, who thought to diſtreſs the French by exciting diſturbances in the country. But ſuch wretched policy had no other effect than to alienate ſtill farther from the exiled family all perſons of rank, property, or conſideration, at Naples, and to attach them more firmly to the French intereſt, from the predominance of which only they could expect ſecurity and protection.

The knowledge that ſuch were the ſentiments of the principal Neapolitans, determined Napoleon to make known, without further delay, his ultimate intentions with reſpect to Naples. He had already declared that the exiled family ſhould never return to occupy the throne which they had abandoned. He now iſſued a decree, conferring the crown of Naples on his brother Joſeph and his legitimate heirs-male, without prejudice to their eventual claim to the throne of France; but with a proviſo, that the crown of France and that of Naples ſhould never be united on the ſame head.

In purſuance of this decree, which was communicated to the French ſenate on the 30th of March, Joſeph Bonaparte cauſed himſelf to be proclaimed king of Naples, and made all the conſtituted authorities of the kingdom take an oath of fidelity to him. The city of Naples was illuminated on this occaſion, with every demonſtration of joy and ſatisfaction on the part of the nobles, who were eager to ſhow their attachment to their new king, and accept of offices and diſtinctions in his ſervice, in order to mark, not ſo much their devotion to him as their averſion for the exiled family. That thoſe, whoſe families had ſuffered in the former revolution, and who had ſince lived in baniſhment or retirement, ſhould join heartily in ſupport of the new government, is not to be wondered at, nor blamed. But there was a want of decency and propriety in the conduct of thoſe who, having recently held employments under the late government, and enjoyed its favours and confidence, took this early opportunity of renouncing all connexion with it, and of attaching themſelves to the fortunes of their new king. The marquis di Gallo, for example, muſt have offended every man of honour, by the political profligacy he diſplayed in accepting the office of miniſter of foreign affairs from Joſeph Bonaparte, within three days after his return from Paris, where he had been ambaſſador of Naples under the former government. Nor can the duke of St. Theodore, who accepted of a place in the houſehold of the new king, be excuſed for his deſertion of the exiled monarch, on account of his near relationſhip to Caraccioli, when it is conſidered that, ſubſequent to the melancholy fate of his kinſman, he had been ambaſſador of Naples at the court of Madrid, and ſo much in the confidence of their Neapolitan majeſties as to have been ſelected for that poſt, to ſerve as a counſellor and director to their unfortunate daughter, married to the heir-apparent of the Spaniſh monarch.

The aſſumption of the regal dignity in Naples by Joſeph Bonaparte, and the defection of ſo many perſons of diſtinction, excited the livelieſt indignation at the court of Palermo. Inſtead of profiting by their paſt misfortunes, the queen and duke of Calabria liſtened to no counſels but ſuch as flattered their anger with plans of vengeance, or ſoothed their impatience with idle projects for regaining their loſt dominions. Though driven from Naples by their inability to reſiſt the French arms, they were now eager to attempt the recovery of that kingdom, and confident of expelling from it an enemy whoſe invaſion they had not ventured to oppoſe, or even dared to await. No event had happened ſince their flight to encourage them in ſo wild and unpromiſing an enterpriſe. They had no foreign ſuccour to reckon upon, nor proſpect of any diverſion of importance in their favour. To the efforts of their Neapolitan ſubjects alone could they look for aſſiſtance; but, to expect a proſperous iſſue to their attempts without farther aid than their late ſubjects could afford, was to ſuppoſe that Neapolitans fighting to ſubvert their government were more formidable than Neapolitans fighting in its defence. Plans, founded on ſuch expectations, terminated as might have been foreſeen. In ſome of the provinces of Naples, emiſſaries from the court of Palermo were ſucceſsful in exciting inſurrections againſt the French; and in all they produced a ſpirit of reſtleſſneſs and inſubordination which gave to the new government great diſquietude. But no permanent good reſulted from theſe diſturbances to compenſate the preſent evils to which they led. Abruzzo and Calabria were delivered for a ſhort time from the French yoke. But, though the inſurgents fought with unparalleled courage and intrepidity, and were ſucceſsful in many encounters, the numbers and diſcipline of the French prevailed in the end; ſo that, after a fruitleſs waſte of blood, and perpetration of atrocities on all ſides diſgraceful to humanity, theſe provinces were again compelled to acknowledge Joſeph Bonaparte for their ſovereign.

About the middle of April, ſir Sidney Smith had arrived at Palermo, in the Pompée of 84 guns, and taken the command of the Engliſh ſquadron deſtined for the defence of Sicily, conſiſting of five ſhips of the line, beſides frigates, tranſports, and gun-boats. With this force under his command, ſir Sidney ſailed to the coaſt of Italy, and began his operations by introducing into Gaeta ſupplies of ſtores and ammunition, of which its garriſon had been greatly in want. Having performed this important ſervice, and left at Gaeta a flotilla of gun-boats, under the protection of a frigate, to aſſiſt in the defence of the place, he proceeded to the bay of Naples, ſpreading ſuch alarm along the coaſt, that the French conveyed in haſte to Naples part of their battering train from the trenches before Gaeta, in order to protect the capital from inſult, and ſecure it from attack. It happened that, at the moment when ſir Sidney came in ſight of Naples, that city was illuminated on account of Joſeph Bonaparte being proclaimed king of the two Sicilies. It was in the power of the Engliſh admiral to have diſturbed their feſtivity; but, as the ſufferers from his interference muſt have been the inhabitants of Naples, and not the French troops or the new king, he wiſely and humanely forbore, and made for the iſle of Capri, of which he took poſſeſſion after a ſlight reſiſtance, and placed in it an Engliſh garriſon. He then proceeded ſouthward along the coaſt, giving the greateſt annoyance every where to the enemy, obſtructing by land, and intercepting entirely by ſea, their communication along the ſhore, ſo as to retard their operations againſt Gaeta, which was the chief purpoſe for undertaking this expedition.

On the return of ſir Sidney to Palermo, after the concluſion of this ſervice, he was led, from the active turn and ſanguine temper of his mind, to enter with eagerneſs into the projects of the court, and to ſecond its views on Calabria to the utmoſt of his power. Finding him favourably inclined to their ſchemes, and anxious to diſtinguiſh himſelf by ſome great exploit, their Sicilian majeſties inveſted the Britiſh admiral with the moſt ample authority in Calabria, and even conſtituted him their viceroy in that province. But, though active and indefatigable in the duties of his new department, and ſucceſsful in diſtributing money, arms, and ammunition, among the Calabrians, he ſoon found that, unleſs an Engliſh army made its appearance in the country, there was no chance of his producing an inſurrection againſt the French. It became, therefore, neceſſary for the court of Palermo, either to abandon the fruit of all its intrigues and machinations, or to prevail on the commander of the Engliſh forces in Sicily to invade Calabria with part of his army.

After the evacuation of Naples, ſir James Craig had retired with the Engliſh army to Sicily, and eſtabliſhed his head-quarters at Meſſina, as the ſtation beſt adapted for protecting the iſland from invaſion. There he remained till April, when bad health compelled him to reſign his command to ſir John Stuart, who was ſoon after entruſted by his Sicilian majeſty with the defence of the eaſt coaſt of Sicily from Melazzo to Cape Paſſaro, and with the command of the Sicilian troops in that diſtrict. The army continued in its poſition at Meſſina till the end June, without attempting offenſive operations againſt the enemy. It was of the utmoſt importance to England that Sicily ſhould not fall under the dominions of France; and therefore ſir John Stuart, when ſolicited by the court of Palermo to aſſiſt in its ſchemes on Calabria, heſitated long, and deliberated maturely before he complied. He conſidered that an expedition to Calabria, however it might gratify their Sicilian majeſties, could not, on the moſt favourable ſuppoſition, lead to their re-eſtabliſhment at Naples, nor even ſecure to them the poſſeſſion of any part of their continental dominions; whereas, if it failed, it muſt weaken the defence, and endanger the ſafety, of Sicily. He was therefore averſe to ſuch an expedition, and refuſed to engage in it when firſt propoſed to him; but, overcome by the urgent and repeated inſtances of the Sicilian government, encouraged by flattering accounts of the diſpoſition of the Calabrians, and foreſeeing that, if ſucceſs attended his firſt operations, he ſhould be able at any rate to deſtroy the ſtores and ammunition collected in Calabria for the invaſion of Sicily, he conſented at length to land with part of his army on the continent, and make trial of the loyalty and affection of the people to their former maſters. The enterpriſe, which ſir John Stuart thus reluctantly undertook, he conducted with ſingular judgment and ability, and brought to a fortunate concluſion, with infinite glory to the Britiſh arms, but without any of thoſe advantages to the court of Palermo, which it had fondly anticipated from the experiment.

The troops deſtined to this expedition by ſir John Stuart, amounted to about 4800 effective men. With this ſmall force he landed on the morning of the 1ſt of July, in a bay in the gulph of St. Eufemia, near the northern frontier of Lower Calabria. Little oppoſition was made to his landing by the enemy, who had not yet collected their forces. A proclamation was immediately iſſued by the Engliſh general, inviting the Calabrians to join the ſtandard of their lawful ſovereign, and offering them arms and ammunition for their defence. Few or none, however, obeyed the ſummons. Diſappointed in his expectations from the inhabitants, ſir John Stuart was heſitating whether to re-embark his troops, when intelligence was brought to him that general Regnier was encamped at *Maida*, about ten miles off, with an army nearly equal to his own. Underſtanding at the ſame time that the French general was in daily expectation of reinforcements, he determined to advance next morning (July 4, 1806), and attack him before they arrived. The two armies were ſeparated by a plain, from four to ſix miles in breadth, extending from ſea to ſea, and bounded on the north and ſouth by chains of mountains. The French occupied a ſtrong poſition on the ſloping ſide of a woody hill, below the village of Maida, having the river Lamato in front, and their flanks ſtrengthened by a thick impervious underwood. In numbers they were greatly ſuperior to the Engliſh, having received the expected reinforcement before the battle. Their force is ſuppoſed to have been about 7000 men, while that of the Engliſh did not amount to 4800. Had Regnier remained upon the heights, the Engliſh muſt have attacked him with great diſadvantage; and, though the event of the engagement would have been probably the ſame, the loſs on their part muſt have been more conſiderable: but, fortunately, blinded by an exceſs of confidence in his own troops, and an undue and unbounded contempt of the enemy, he quitted his ſtrong poſition, and drew up his army on the plain. The Engliſh, ſurpriſed at the number of his troops, which was greater than they expected, but in no wiſe diſmayed by their appearance, advanced with undiminiſhed alacrity to the attack. The action began on the right of the Engliſh army. After ſome firing, both ſides prepared to charge with the bayonet, and advanced with apparently-equal reſolution; but the French, who had probably imbibed from their general his contemptuous opinion of the enemy, were ſo aſtoniſhed at the firmneſs with which the Engliſh advanced to the charge, that, ſtruck with a ſudden panic, they gave way after the bayonets of the two armies had began to croſs, and endeavoured to ſave themſelves by flight. It was too late, however, to eſcape. They were overtaken with immenſe ſlaughter, and in a ſhort time the whole of the left wing of their army was totally routed and diſperſed. The enemy, being thus completely diſcomfited on their left, made an effort with their right to retrieve the honour of the day; but they were reſiſted with great ſteadineſs by the Engliſh left, and their cavalry being thrown into diſorder, in an attempt to turn the Engliſh flank by an unexpected fire from the twentieth regiment, which landed during the action, and came up at this critical juncture, they abandoned the field of battle with precipitation, and left an undiſputed victory to their opponents. About 700 French were buried on the ſpot and 1000 priſoners taken, among whom were general Compere and ſeveral other officers of rank; but their total loſs from this conflict is eſtimated by ſir John Stuart at not leſs than 4000 men. The Engliſh had only forty-five men killed and 282 wounded in the action.

This glorious victory, which was gained on the 6th of July, was the ſignal for a general inſurrection in both the Calabrias. The peaſants, already prepared to take up arms, roſe in every direction againſt the French, cut off their ſtragglers, purſued their flying parties, and attacked their poſts. The French, provoked by their defeat, and exaſperated by the cruelty of the inſurgents, who gave no quarter to ſuch as fell into their hands, retaliated with a ſavageneſs and ferocity more diſgraceful to their character than the panic terrors which had ſeized them at Maida. The villages, which declared againſt them, were plundered and burned to the ground, and the inhabitants maſſacred without diſtinction of age or ſex. This uſage ſtill farther inflamed the Calabrians, whoſe attacks on their poſts were inceſſant and furious, till, with the aſſiſtance of the Engliſh, they drove them entirely out of their country. Unable to contend with their numerous and exaſperated aſſailants, the French were compelled at length to evacuate both Calabrias, and to abandon all the cannon, ſtores, and ammunition, which they had collected in theſe provinces for the invaſion of Sicily. Not a ſingle place along the coaſt was left in their poſſeſſion from Coohne to Sicoſa. Of 9000 men, which was the amount of their force in Lower Calabria, before the battle of Maida, not above 3000 made good their retreat; and in Upper Calabria their loſs from the inſurgents, for the Engliſh did not penetrate into that province, was by their own confeſſion very conſiderable.

But, glorious and ſucceſsful as this expedition had been, it ſoon appeared how far it was from having opened to the king of Sicily any proſpect of regaining his kingdom of Naples. So ſenſible was ſir John Stuart of his inability to maintain the ground he had won in Calabria, that from the plain of Maida he announced his intention of returning without loſs of time to Sicily. On the 18th of July his head-quarters were at Bagnara near Reggio; and on the 23d, the fort of Scylla, oppoſite to Meſſina, a place of great importance for the ſecure navigation of the ſtraits, ſurrendered to one of his officers. The whole of the Britiſh army was now withdrawn from Calabria, except the garriſon of Scylla, and a detachment of the 78th regiment, under Col. M‘Leod; which had been ſent in the Amphion frigate to the coaſt near Catanzaro, in order to countenance and aſſiſt the inſurgents in that quarter. This ſervice was effectually performed by Col. M‘Leod and Capt. Hoſte of the Amphion. The French under Regnier were ſeverely harraſſed in their retreat along the ſhore from Catanzaro to Cotrone; and the latter place, with all its magazines and ſtores, fell into the hands of the Engliſh.

General Acland was alſo diſpatched to the bay of Naples with the 58th and 81ſt regiments, to make demonſtrations in that direction, which might alarm the enemy, and deter him from ſending reinforcements to Calabria. General Acland was not abſolutely prohibited from landing his troops; but he was directed not to expoſe his ſoldiers to that danger, unleſs he had a proſpect of effecting ſome object of real and permanent utility. Sir Sidney Smith was in the mean time actively, if not judiciouſly, employed along the coaſt, aſſiſting the inſurgents with arms and ammunition, ſupplying them with proviſions, and conveying them from one place to another in the veſſels under his command. By theſe exertions he contributed materially to extend the inſurrection along the coaſt, and to expel the enemy from the watch-towers and caſtles which they occupied upon the ſhore. Theſe operations were, in ſome inſtances, of uſe, by ſecuring a ſafer and better anchorage for his ſhips; but, in others, the blood and treaſure which they coſt exceeded the value of his acquiſitions. No Britiſh troops were ſtationed anywhere to maintain his conqueſts, except in the iſle of Capri, which was kept as a place of refreſhment for the navy: but a number of poſts were occupied and garriſoned by the inſurgents; ſuch as Amantea, Scalea, and the iſle of Dino, on the coaſt of Upper Calabria, and Maratea, Sapei, Camerota, Palinuro, and other places, in the bay of Policaſtro. The chief, or rather ſole, uſe of theſe poſts conſiſted in the protection which they afforded to the anchorage upon the coaſt, and facilities thereby given to the Britiſh and Neapolitan ſmall craft of intercepting the coaſting-communications of the enemy, ſo as to prevent the ſupply of his army in Calabria with cannon, which, from the badneſs of the roads, it was impoſſible for him to convey by land.

The loſs of Gaeta, which ſurrendered to the French ſoon after the battle of Maida, more than counterbalanced theſe trifling ſucceſſes in other parts of the coaſt. While the prince of Heſſe continued to have the command of Gaeta, that place was gallantly defended; and ſallies were repeatedly made with the greateſt ſucceſs, by which the operations of the enemy were impeded, their cannon ſpiked, and their batteries taken and deſtroyed. But the prince of Heſſe having been wounded by a ſplinter, and removed for his recovery to Palermo, and the French having at length brought their artillery to act upon the place, the lieutenant-governor, Col. Hotz, ſaw himſelf forced to capitulate on the 18th of July. The garriſon obtained very honourable terms. The following is the principal article of the capitulation: “In conſideration of the brave defence made by the garriſon, they are permitted to embark with their arms and proviſions; it being underſtood that the troops which compoſe it ſhall not carry arms nor ſerve againſt France and her allies, nor againſt thoſe of his majeſty Joſeph Napoleon, during one year and a day, either upon the continent or in the iſlands. Eight pieces of cannon are granted to the garriſon; the reſt of the artillery, that of the fortreſs, and all the magazines, as well as the ammunition, victuals, and other military effects, ſhall be faithfully delivered up to the French army, without dilapidation. At the ſame time, proviſions for ten days ſhall be granted to the garriſon.”

The ſurrender of Gaeta cut off the communication with the northern parts of the kingdom of Naples, where the ſpirit of diſaffection was as ſtrong as in the ſouth; and ſet at liberty a force of 16,000 men, previouſly employed in that ſiege, to act againſt the Calabrians. A decree was iſſued at Naples on the 31ſt of July, declaring the two Calabrias in a ſtate of war, and ſubjecting them to all the rigours of military law. Maſſena, inveſted with deſpotic authority, was placed at the head of a powerful army, and ſent to reduce them to obedience. The inſurgents were not in ſufficient force to meet him in the field; and were too much divided among themſelves to attempt any enterpriſe of importance, even againſt his outpoſts. The difficulty of tranſporting artillery over the mountains retarded his operations; but his progreſs, though ſlow, was uninterrupted, and his ſucceſſes, though often dearly bought, were not checked by any reverſe. On the 16th of Auguſt, the advanced guard of the French army entered Coſenza, the capital of Upper Calabria; and before the beginning of September they had recovered poſſeſſion of the whole of that province, excepting Amantea, Scalea, and ſome other places upon the coaſt. But it was ſome time before they penetrated in force into the Lower Calabria. Their head-quarters, in December, were ſtill at Coſenza and Fiume Freddo, in Upper Calabria, though their advanced poſts had long before been at Monteleone and Mileto, about thirty miles diſtant from Scylla. Cotrone did not fall into their hands till the end of the year; nor Amantea, the laſt place held by the inſurgents upon the coaſt, till the beginning of the enſuing ſpring.

The Calabrian inſurgents, or *maſſe* as they were called, were compoſed of the loweſt, worſt, and moſt miſerable, of the country-people and villagers. Attracted by pay or the hope of plunder to the ſtandard under which they fought, no confidence could be repoſed on their fidelity; and, though individually brave, when aſſembled in bodies no dependence could be placed on their ſteadineſs. While the French were ſtill at a diſtance, a report was brought to the *maſſe* in Lower Calabria, that the enemy was advancing to attack them, on which the *capi*, or chiefs of the *maſſe*, fled in the moſt ſhameful manner; and the *maſſe*, abandoned by their leaders, after recovering from their firſt panic, broke out in ſuch acts of murder, cruelty, and rapine, that it became neceſſary for ſir John Stuart to croſs over to Scylla, and ſend detachments of Britiſh troops into the interior of the country, to put a ſtop to their exceſſes. Many of the *capi*, or chiefs of the inſurgents, were men of infamous character, who had juſtly forfeited their lives to the laws of their country. Galley-ſlaves, polluted with every crime and prepared for every atrocity, were collected by order of the court of Palermo, and landed among its former ſubjects, in order to keep alive the inſurrection, and render deſperate the hope of accommodation with the enemy. The conſequences of employing ſuch agents to conduct the war may be eaſily imagined. Murder and rapine ſpread univerſally over the country. The lawleſs and vicious combined againſt the orderly and well-diſpoſed. Thoſe who had property were oppreſſed and plundered by thoſe who had none; and many victims were ſacrificed to private reſentment, under the maſk and pretence of public duty. The French, irritated by cruelties which the humanity of ſir John Stuart interpoſed ineffectually to prevent, retaliated on the inſurgents with a barbarity equal to their own. Priſoners taken with arms in their hands were ſhot inſtantly, on the falſe and monſtrous pretext, that they were rebels againſt Joſeph Bonaparte. Villages, which refuſed to admit French troops within their walls, or to pay the contributions demanded from them, were pillaged and burned; and in ſome atrocious caſes, the wretched inhabitants were included, without mercy or diſtinction, in the conflagration, and, with their wives and children, prevented by French ſoldiers from making their eſcape from the flames that conſumed their habitations.

When ſir John Stuart returned to Meſſina from his glorious expedition in Calabria, he found lieutenant-general Fox arrived there from Gibraltar, with a commiſſion of commander-in-chief of the Britiſh forces in Italy. General Fox took upon him the command of the army on the 29th of July; and immediately appointed ſir John Stuart to conduct the war, which he had begun with ſo much ſucceſs, in the two Calabrias. This office ſir John Stuart moſt readily undertook, and in the proſecution of it, made a ſecond expedition to Calabria, for the purpoſe of reſtoring ſome degree of order in that country, and repreſſing the exceſſes of the *maſſe*; but, when ſir John Moore, his ſenior officer, joined the army with reinforcements from England and became, of courſe, ſecond in command, he preferred returning home to England, to continuing third in command in Italy.

Soon after the arrival of ſir John Moore, that gallant and experienced officer was diſpatched along the coaſt to the bay of Naples, to collect information of the ſtate of the country, and to confer with ſir Sidney Smith about operations in which the aſſiſtance of the navy might be wanted. The reſult of ſir John Moore's inquiries was unfavourable to any new expedition to the continent. He found the population of Naples diſcontented and ready to attempt an inſurrection, if encouraged by the preſence of a conſiderable Britiſh army; but, without ſome proſpect of co-operation from the upper part of Italy, he ſaw no advantage to be gained by encouraging theſe diſpoſitions; and, with reſpect to the war in Calabria, he was ſatisfied that, by ſupplying the people with arms and ammunition and exciting them to inſurrection, we were merely organiſing and keeping alive a predatory civil war, ruinous and deſtructive to individuals, while it was unattended with any real or permanent benefit to ourſelves or to our ally. The information collected by general Fox at Meſſina, and the conduct of the *maſſe* in Lower Calabria, coincided with the report of ſir John Moore, and determined general Fox to make no expedition to the continent, unleſs ſome more favourable opportunity preſented itſelf; and in the mean time to withhold from the *maſſe* ſupplies of arms and ammunition, which they were obviouſly employing in other uſes than ſuch as a Britiſh general could approve of.

This determination was far from being acceptable at Palermo, where the court liſtened greedily to every plan propoſed to it for the recovery of Naples, and thought always the laſt project laid before it the ſureſt to ſucceed. The marquis di Circello, who had been appointed miniſter of foreign affairs on the reſignation of ſir John Acton, was a perſon of very middling abilities, but high in favour with the queen, and implicitly devoted to her ſervice. It was natural for *ſuch* a miniſter, deſirous of pleaſing *ſuch* a queen, and indifferent or blind to all other conſequences, to propoſe to the commander of the Britiſh forces, to engage, in conjunction with the troops of his Sicilian majeſty, in a combined attack upon Naples: *A temporary poſſeſſion of that city,* he argued, *though it were for twenty-four hours only, if it did no other good, would at leaſt enable their majeſties to take vengeance on their rebellious ſubjects.* Such a conſideration was not calculated to diſpoſe a Britiſh officer in favour of their plan; but there were other reaſons, beſides the diſguſt ariſing from the diſcloſure of ſuch views, which determined general Fox to expreſs, in the moſt peremptory manner, his decided diſapprobation of the project, and to ſignify that it was totally impoſſible for the Britiſh army to co-operate in *ſuch* an expedition.

Thwarted in its plan of operations by the refuſal of the Engliſh general to co-operate in a project at once uſeleſs and diabolical, the court of Palermo was ultimately compelled to abandon its deſigns upon Naples; though it affected for ſome time an intention of purſuing the enterpriſe with its own forces, the greater part of which it aſſembled on the north coaſt of Sicily, under the prince of Heſſe, on pretence of inſpecting, arming, and clothing, the troops. But, when the reſolution of general Fox not to concur in the expedition was found to be unalterably fixed, the project was entirely given up, though with ſome reluctance and ill-humour againſt the Engliſh.

Naples and Sicily may therefore be conſidered as two diſtinct kingdoms till we come to the year 1815. At the ſame time that Joſeph Bonaparte was made king of Naples, Joachim Murat, Napoleon's brother-in-law, was declared duke of Cleves and Berg. About the middle of the year 1808, it was thought fit to make Joſeph Bonaparte king of Spain, and Murat was then placed on the throne of Naples. Such important changes were continually making about this time, that this alteration paſſed as an ordinary occurrence, and is indeed ſcarcely noticed in our annual regiſters.

In June 1809, a fruitleſs expedition againſt Naples was undertaken by ſir John Stuart, who commanded the Britiſh forces in Sicily. Sir John firſt proceeded againſt Iſchia and Procida, and in a ſhort time captured both theſe iſlands; but this ſucceſs only afforded the means for aſcertaining that the great object of the expedition was unattainable. Murat had recalled a conſiderable force which was on its march to co-operate with the French in the north: he had likewiſe collected a body of national guards, and was further reinforced by the troops which had taken poſſeſſion of the papal ſtates. In addition to the reſiſtance to be expected from this concentrated force, the apathy of the Neapolitans, to any propoſal of *deliverance,* operated as a ſerious obſtacle. They choſe to ſubmit to Joachim the uſurper rather than make any effort to reſtore their legitimate ſovereign, from whom they had not been taught to expect any very earneſt endeavours for the bettering of their condition. Still leſs were they deſirous to taſte of the tender mercies of the queen, *even for though it were for four-and-twenty hours only;* (ſee above.) Some farther particulars of this expedition will be found under the article LONDON, vol. xiii. p. 196.

Sicily, Calabria, and the coaſt of Naples, were the ſcenes of a few gallant actions, though of little importance, in the year 1811. for which ſee the ſame article, p. 265. But both kingdoms, as we may call them, were comparatively tranquil. Joachim of Naples made no attempts to diſturb the Engliſh troops in their occupancy of Sicily; and, on the other hand, the importance of Sicily, the reſources which it might be made to afford, and the means neceſſary to be taken for conciliating the affections of its inhabitants, and rouſing them againſt the enemy, ſeem never to have entered into the contemplation of Ferdinand or his miniſters. When the royal family were driven a ſecond time to Sicily for ſhelter and protection, the Sicilians had vainly imagined, that, in return for their aſſiſtance and fidelity, they would be relieved from jealous and injurious reſtrictions on their commerce and navigation, and raiſed to greater weight and conſideration in the councils of their ſovereign than they had hitherto attained. Their ancient conſtitution, the venerable forms of which were ſtill exiſting, they were deſirous to re-eſtabliſh; and, no leſs attached to the Engliſh by ancient traditions than by hatred of the French, they fondly expected from us aſſiſtance and countenance in this great undertaking. But it has been the misfortune of England, in the long war ſhe has ſuſtained againſt the different rulers of France, that, whether contending with a republic, an oligarchy, or a monarchy, ſhe has never had the people of any country on her ſide. The protectreſs and champion of the old governments of Europe, ſhe has never availed herſelf of her power and influence to mediate between the prejudices and fears of her allies and the juſt claims and expectations of their ſubjects. Kingdom after kingdom has been ſubdued, throne after throne has been ſubverted, without teaching governments that there is no ſafety for them but in the affection of their people, and that the price of affection is to deſerve it and return it. Two expulſions from Naples had not impreſſed theſe leſſons on the court of Palermo. The Sicilians were neglected and deſpiſed; their grievances were not redreſſed; their complaints were not liſtened to; their government was in the hands of ſtrangers, ſurrounded by traitors; and the power of England, inſtead of being extended to their relief, ſerved only to uphold the authority of thoſe who ſlighted and oppreſſed them.

Nothing could be more deteſtable to the Sicilians, than the authority of the court of Palermo, adminiſtered by an intriguing and arbitrary queen of foreign race; and they would gladly have ſeen the ſovereign power aſſumed by the Engliſh, who were in fact maſters of the country; but ſuch an act was prohibited by the faith due to a nominal ally, whoſe rights this nation had undertaken to defend. As long, therefore, as we appeared in the character of ſatellites to ſuch a court, we could not expect the attachment of the people. At the ſame time the queen, who felt her authority circumſcribed by the preſence of the Engliſh, viewed our interference with jealouſy and averſion, and was even ſuppoſed deſirous of making terms with the French court, and eſtabliſhing its influence in the iſland. In ſuch a contrariety of intereſts, it is obvious that nothing but mutual ſuſpicion and ill-will could take place.

At the beginning of the year three royal edicts were iſſued from the Sicilian court which gave much diſſatiſfaction, as affording, it is ſaid, an unprecedented example of levying money on the ſubjects of this iſland without the form of their conſent. One of theſe related to indemnities to be given to eccleſiaſtical communities from whom certain eſtates were alienated; another, to a lottery for the ſale of theſe eſtates; and the third impoſed a tax of one per cent. upon all payments. This laſt being conſidered as extremely detrimental to commerce, a remonſtrance againſt it was preſented by the Britiſh merchants in Palermo, but without effect. The Sicilian barons reſident at Palermo drew up a proteſtation againſt this royal demand upon the properties of the people without a regular application to what is called their parliament; the reſult of which was the arreſt of ſeveral of theſe noblemen, and their exile to the neighbouring iſlands. The great abuſes prevalent in the government of Sicily were ſeverely animadverted upon by ſome members in the houſe of commons, when the chancellor of the exchequer moved for a renewal of the annual ſubſidy of 400,000l. paid to the court. It was ſaid, that, while affording ſuch aid and protection to Sicily, it was but right that we ſhould uſe every endeavour to correct the vices of its government, which was, without heſitation, denominated the moſt profligate in exiſtence, and its people the moſt oppreſſed; and, though the miniſter deprecated the uſe of ſuch language, as of dangerous conſequence, yet the fact was not attempted to be denied.

On the 16th of January, 1812, Ferdinand, by a ſolemn inſtrument, beſtowed on his eldeſt ſon Francis the appointment of "Vicar General of Sicily, with the ample title of *Alter Ego*, and the exerciſe of all the rights, prerogatives, pre-eminencies, and powers, which could be exerciſed by the king himſelf." The reaſon given for this was, that his majeſty might withdraw for a while from ſerious application, and breathe the air of the country by the advice of his phyſicians.

Naples itſelf was at this time ſo tranquil, that Napoleon ventured to take king Joachim with him on his diſaſtrous expedition into Ruſſia this year. His troops ſuffered in common with the reſt. On the 18th of October, a brilliant affair took place between the advanced-guard of the French and Ruſſian armies near Moſcow, in which the former, under Murat, were defeated with great loſs. Marſhal Kutuſoff, having learnt that the corps of Victor had quitted Smolenſko to reinforce the grand army, reſolved to attack the advanced-guard, being 45,000 ſtrong, in order to defeat Murat before the junction of Victor, and before Napoleon could ſupport him with the main body of his army. Thirty-eight pieces of cannon fell into the hands of the Ruſſians, as well as a ſtandard of honour belonging to the 1ſt regiment of cuiraſſiers. They made 1500 priſoners, amongſt whom was a general; and 2000 men were left on the field of battle.

But, after the next campaign, when all was loſt, and Napoleon's fate ſeemed partly decided, Murat joined the confederacy againſt his friend and brother. In Italy, however, the war was ſtill vigorouſly maintained by the viceroy, Eugene Beauharnois. The taſk of this officer was certainly very arduous, as Joachim king of Naples was now acting in concert with the Auſtrian general Bellegarde againſt him. The diſaffection of this ſovereign to Napoleon materially affected the operations of the hoſtile armies in France. It prevented the viceroy (whoſe army was ſuperior to that under Bellegarde) from ſending any reinforcements to Bonaparte; and not only gave confidence to the allies, but enabled them to undertake operations which they otherwiſe never would have ventured upon. According to the treaty of alliance, which was concluded between the emperor of Auſtria and the king of Naples in the beginning of the year 1814, the latter agreed to furniſh 20,000 men, to act in concert with the Auſtrians till the end of the war: in return for which, the emperor guaranteed to the king and his heirs the poſſeſſion of the dominious actually held by him in Italy, and promiſed his mediation to induce the allies to accede to this guarantee.

The French general Grenier, having marched from Reggio by Guaſtalla, in order to effect a junction with the viceroy, the king of Naples, on the 5th of March, after reinforcing the Auſtrian advanced-guard, cauſed an attack to be made on the diviſion of Severoli, in which he drove it back, with conſiderable loſs, under the walls of Reggio; and, on the 7th, his movements threatening to cut off the enemy's retreat on Parma, they evacuated Reggio, and retreated behind the Enza. Nothing of any conſequence, however, occurred in this quarter, the viceroy continuing to maintain himſelf with great firmneſs. The events which had taken place at Paris were ſtill unknown on the right bank of the Po, near the middle of April; (Napoleon's abdication was ſigned on the 6th.) The king of Naples, on the 12th of that month, forced the paſſage of the Taro, and purſued the enemy as far as Firenzuolo. On the next day he renewed his attack, and threw a bridge over the Sacca, in which operation he was vigorouſly oppoſed, but without preventing its execution. Murat then advanced with his army within a league of Placentia. The loſs in theſe actions was very conſiderable on both ſides, and may be reckoned among the uſeleſs expenſes of the war. An armiſtice, which was concluded on the 16th, between the viceroy and the commanders of the allied forces, cloſed all further military operations. By the terms of the armiſtice, the French troops were to croſs the Alps, and the Italian troops to continue to occupy that portion of the kingdom of Italy which had not yet been poſſeſſed by the forces of the allies.

After the departure of Napoleon for Elba, and the eſtabliſhment of a general peace among the greater powers, a congreſs aſſembled at Vienna, on the 25th of September, 1814, to decide on the fate of the ſmaller ones, and to reſtore the balance of Europe, as it was called. Before the cloſe of the year, it was underſtood that the caſe of Murat, as king of Naples, gave riſe to much diſcuſſion at this congreſs; and that the Bourbon government was uſing every effort to get the old family reſtored. Murat was certainly placed in a critical ſituation. A mere ſoldier of fortune, with no other title than his ſword, he could not but be regarded by the regular and hereditary ſovereigns of Europe as an intruder into their dignity, and a remaining exception to that principle of return to the ancient order of things which governed the political movements of the time. Cloſely bordered on one ſide by a perpetual competitor for his dominions in the king of the Two Sicilies, and on the other by the head of the catholic religion, from whom he withheld part of the patrimony of the church, and both of whom had powerful ſupporters, he was obliged to exerciſe conſtant vigilance againſt the attempts of force or policy. In this ſituation, his ſole reliance muſt have been on the attachment of his ſubjects; and he appears not to have been inattentive to the means of acquiring this advantage afforded him by the notorious defects of the former Neapolitan government. The council of ſtate and the court of caſſation having waited on him upon the 8th of May, he made an addreſs to the former, in which he ſaid, "The independence of our country is enſured: I propoſe to enſure its proſperity alſo, by a conſtitution which ſhall be at the ſame time a ſafeguard to the throne and to the ſubject. The baſes of it ſhall be fixed agreeably to the opinions of the moſt enlightened ſtateſmen of the kingdom." He repeated the ſame ſentiments to the court of caſſation; adding, doubtleſs to inſpire confidence, "There are no ſacrifices, no efforts, which I have not made to enſure the independence of the Neapolitans; it is henceforth guaranteed by the peace of Europe, and by my relations with the ſovereigns with whom I am in alliance." At the ſame time there was publiſhed at Ancona an order of the day, conſtituting, for the preſent, the banks of the Metauro the ſeparation of the countries occupied by the Neapolitan army from the dominions of the pope.

In Auguſt it was announced from Rome, that the Neapolitans ſtill kept poſſeſſion of the marquiſate of Ancona, Macerata, and Ferrara; and that the benefits of the revolution in the affairs of Europe were not felt there, the prieſts being impriſoned, reſpectable perſons ill-treated, and their property confiſcated. Joachim, indeed, was not one of the ſovereigns from whom a reſtoration of the church to its former ſplendour was to be expected. In order, probably, to free himſelf from objects of ſuſpicion, he had iſſued a decree relative to ſtrangers, in conſequence of which more than a thouſand foreigners in employment quitted the country, and five hundred petitions for naturalization were preſented to the government, which was directed to examine them with the moſt ſcrupulous attention. The Neapolitans are ſaid to have been much gratified with this meaſure. Some partiſans of the old government were arreſted, who were, doubtleſs, the perſons alluded to in the article from Rome. The official journal of Naples at this time mentioned the arrival of a prince Moliterno at Rome, who, not being able to obtain a paſſport for Naples, had eſtabliſhed himſelf at that capital, in order to foment intrigues in the Neapolitan kingdom. For this purpoſe he had aſſociated to himſelf a few reſtleſs ſpirits, whom he had made the agents of a conſpiracy directed againſt the Marche of Ancona and the Abruzzos. The journal treated theſe machinations with great contempt; but it ſoon afterwards appeared, that the army of Naples had been raiſed to its full complement of 50,000 men, corps of which were daily reviewed by Murat. The military diviſion of Naples, on September 1ſt, preſented a very loyal addreſs to king Joachim, in which they affirmed the ſentiments of the army to be "eternal attachment to his majeſty and his dynaſty, entire obedience to his orders, and inviolable fidelity to his throne;" and they pledged their lives to his ſervice, after the example of all their brothers in arms who had had the honour of ſerving under him. That he might not appear indifferent to thoſe devotional feelings which, in the midſt of the groſſeſt licentiouſneſs, the Neapolitans are ſo fond of indulging, Joachim and his queen, with all the royal family, paid a viſit in great ceremony to the ſanctuary of the Virgin, called the Foot of the Grotto, and diſplayed all the uſual marks of piety on the occaſion.

About the cloſe of September, Neapolitan troops were continually arriving at Ancona by ſea and land. Nothing could now be of greater importance to Joachim than to ſecure the friendſhip of the emperor of Auſtria, with whom their co-operation before the termination of the war had connected him more intimately than with any other power. The duke of Rocca-Romana, his maſter of the horſe, having been ſent on a miſſion to that emperor, arrived at Portici on October 29, on his return, bringing with him a ratification of the treaty of alliance between the two powers, together with the aſſurances of the emperor's conſtant friendſhip, and his unalterable diſpoſition to ſupport, by all the means in his power, the intereſts of his ally, and the tranquillity of Italy. Notwithſtanding, various ſuſpicious movements took place in the Neapolitan army, about the cloſe of the year. The corps of reſerve organized at Naples and Benevento, and 20,000 ſtrong, was put in motion towards the territories of the church; and two diviſions under general Macdonald, which had returned to the Abruzzos, were ordered to advance; three diviſions which occupied the Marche of Ancona were alſo directed to hold themſelves in readineſs.

The iſland of Sicily, which the circumſtances of the war had ſo long almoſt converted into an Engliſh garriſon, naturally returned to its priſtine condition after the peace; and, in the beginning of July, it was announced from Palermo, that his majeſty Ferdinand III. had reſumed the reins of government, and that every thing was changed in the miniſtry and adminiſtration. The ſentiments of the Sicilian court, with reſpect to the poſſeſſor of its former continental dominions, were explicitly expreſſed, by an order communicated in October from the commandant of the diſtrict of Meſſina to the commander of the Neapolitan troops in Calabria, importing, that under no pretext whatever ſhould any veſſel, bearing the flag of king Joachim, be admitted into the ports and on the coaſts of Italy.

While the congreſs was yet ſitting, Napoleon again landed in France; and his wonderful progreſs ſoon changed the nature and object of their deliberations; indeed the moment that he ſet foot on French ground, he exclaimed with exultation, "There is an end of the congreſs!" This was on the 1ſt of March, 1815.

Napoleon ſtill conſidered, or appeared to conſider, Murat as his friend. In the report made by the miniſter of the interior at Paris to the emperor, now again ſeated on his throne, the following apology is made for Joachim: "Amidſt the preparations of Auſtria on the ſide of Italy, the king of Naples could not remain motionleſs. This prince, whoſe aſſiſtance the allies had on a preceding occaſion invoked, whoſe legitimacy they had acknowledged, and whoſe exiſtence they had guaranteed, could not be ignorant that their policy, ſince modified by different circumſtances, would have endangered his throne, if, *too intelligent to truſt their promiſes*, he had not known how to ſtrengthen himſelf on better foundations. Prudence has enjoined him to advance a few ſteps to watch events more cloſely; and the neceſſity of covering his kingdom has obliged him to take up military poſitions in the Roman ſtates."

In theſe few words we believe that Murat's ſituation and character are completely developed. He had about as much honeſty as any of his friends, and as much bravery as any of his enemies, but not ſo much art. He was more a ſoldier than a politician. To Napoleon he owed his crown, and had never ceaſed to participate in his councils. His retention of that crown was obviouſly an anomaly in the political ſyſtem of reſtoring the former ſtate of things in Europe; and, although the ſervices he had rendered to Auſtria, by a powerful aid at the time it was engaged in a hard conteſt with the French armies in the north of Italy, had been returned by a treaty of friendſhip and alliance with the Auſtrian emperor, yet the terms on which he ſtood with the other powers were far from ſatisfactory. The Bourbon ſovereigns had a family-intereſt to replace the crown of Naples on the head of the king of Sicily; and the court of Great Britain, in cloſe alliance with the latter, had never recogniſed the title of king Joachim, and had only agreed to a ſuſpenſion of hoſtilities againſt him, when his co-operation was of advantage to the common cauſe. The Britiſh cabinet did, indeed, conſider that this was preliminary to a treaty with him, but it was upon the condition that a compenſation ſhould elſewhere be found for the king of Sicily. Joachim was long in anxious expectation of the ſignature of ſuch a treaty by the Engliſh miniſter; and, on the 29th of December, 1814, his miniſters at Vienna delivered to lord Caſtlereagh a memorial, requeſting the ſpeedy concluſion of a definitive treaty of peace between the two crowns.

Long before this time, however, Murat had become an object of ſuſpicion; and lord William Bentick, who had cloſely obſerved him, gave, in a letter to lord Caſtlereagh, dated the 7th of January, 1815, the following, among other, remarks on the ſubject:—"There can be no doubt that all the advantages contemplated in the alliance with Murat, by Auſtria and the allies, would have been realized, if he had embarked honeſtly and cordially in the cauſe; but his policy was to ſave his crown, and to do this he muſt always be on the ſide of the conqueror. His firſt agents were ſent to me after his return from Leipſic. He then thought Napoleon's affairs deſperate. His language was plain and ſincere. He ſaid, Give me an armiſtice, and I will march with the whole of the army againſt the French. Give me the friendſhip of England, and I care not for Auſtria, or the reſt of the world! Subſequently, when Auſtria came to ſeek his alliance, he naturally diſcovered both his own importance, and the uncertain iſſue of the conteſt. He then began to entertain views of aggrandiſement; and, by poſſeſſing himſelf of the whole ſouth of Italy, he ſeemed to think he could render himſelf independent, whatever might be the event of the war." His lordſhip proceeds to ſpeak of the counſels by which Murat was governed. He deſcribes him as equally remarkable for his courage in the field, and his indeciſion in the cabinet, which diſpoſition was worked upon by two contending parties in his court, the French and the Neapolitans. His attachment was manifeſtly to the former; and he was anxious to keep with him his French officers, who were continually magnifying the ſucceſs of the French army, and endeavouring to fix him in alliance with their country. It further appears, that lord W. Bentinck entertained ſtrong ſuſpicions of the good faith of Murat even whilſt acting with the allies, and that he had a ſerious difference with him on that account; and alſo that the Auſtrian general Bellegarde was fully of the ſame opinion.

In the latter part of the year 1814, Murat had put in motion a conſiderable body of troops, with the apparent intention of occupying an additional ſhare of the territories of the church; and, at the end of January 1815, a Neapolitan army, conſiſting of about 25,000 men, was poſted near Rome, ſo as in a manner to blockade it on the ſide of Naples. The pope, who had ſent a memorial of his complaints to the Auſtrian court, remained in the city with his cardinals, truſting to the ſanctity of his character for his ſole defence. About this period, the duke of Campochiaro, the Neapolitan miniſter at the congreſs, preſented a note to prince Metternich, in which, after repreſenting that his ſovereign conſidered himſelf as included in the peace of Paris, among the allies of the coaleſced powers, he complained of the delay of his moſt Chriſtian majeſty to recogniſe him, and urged the emperor of Auſtria to exert his influence with the court of France, in order to procure him this juſtice. That the French cabinet had before this time formed the deſign of obliging Murat to reſign the crown of Naples to king Ferdinand, was rendered apparent by the following letter from the prince of Benevente (Talleyrand) to lord Caſtlereagh, propoſing a plan of attack upon him.

"My Lord; You deſire me to make known to you in what manner I conceive the affair of Naples ought to be ſettled in congreſs; for, as there is a neceſſity of ſettling it, it is a point upon which there ought not to be one moment of uncertainty in a mind like your's. It would be for ever a ſubject of reproach, and I will ſay even an eternal ſubject of ſhame, if, the right of ſovereignty over an ancient and fine kingdom, like that of Naples, being conteſted, Europe, united for the firſt time (and probably for the laſt) in general congreſs, ſhould leave undecided a queſtion of this nature, and, ſanctioning in ſome degree uſurpation by its ſilence, ſhould give ground for the opinion, that the only ſource of right is force. I have not at the ſame time to convince your excellency of the rights of Ferdinand IV. England has never ceaſed to recogniſe them. In the war in which he loſt Naples, England was his ally. She has been ſince, and is ſo ſtill. Never has ſhe recogniſed the title that the perſon who now governs at Naples aſſumes, nor the right which this title ſuppoſes; therefore, in concurring to aſſure the rights of king Ferdinand, England has only one plain thing to do—which is to declare in congreſs what ſhe has always recogniſed, that Ferdinand IV. is the legitimate ſovereign of the kingdom of Naples.

"Perhaps England, heretofore the ally of Ferdinand IV. deſires ſtill to be ſo. Perhaps ſhe may believe her honour demands that ſhe ſhould aſſiſt, if need be, with her forces, for his regaining the crown of which he has been recogniſed the ſovereign; but this is not an obligation that can flow from a pure and ſimple acknowledgment of the rights of this prince, becauſe the recognition of a right does not naturally carry with it any other obligation, than that of doing nothing that may be contrary to ſuch right, and of not ſupporting any pretenſion that may be ſet up againſt it. It does not carry with it the obligation of fighting in his defence.

"It may be that I deceive myſelf; but it appears to me infinitely probable, that a frank and unanimous declaration of the powers of Europe, and the certitude of the perſon who now governs at Naples that he would not be ſupported by any one, would render uſeleſs the employment of force; but, if the contrary ſhould happen, thoſe only of the allies of king Ferdinand would be neceſſary who ſhould think proper to lend him their ſupport.

"Is it feared that in this caſe the war ſhould ſpread beyond the limits of the kingdom of Naples, and that the tranquillity of Italy ſhould again be interrupted? Is it feared that foreign troops ſhould again traverſe Italy? Theſe fears may be obviated by ſtipulating that the kingdom of Naples ſhould not be attacked by the Italian continent. Auſtria appears to be engaged towards him who governs at Naples, to guarantee him from all attack on this ſide; and if, as we are aſſured, Auſtria has only engaged herſelf for this, (how can it be ſuppoſed that the emperor has given his guarantee againſt the rights of a prince, at once his uncle and his father-in-law, to the poſſeſſion of a kingdom which he loſt in making common cauſe with Auſtria?) ſhe cannot be embarraſſed in reconciling with juſtice, and with the natural ſentiments of affection, the engagements into which extraordinary circumſtances made her enter.

"It appears to me, therefore, that we may at one and the ſame time ſatisfy all our duties, and all our intereſts, and all our engagements, by an article ſuch as the following:—'Europe, united in congreſs, recogniſes his majeſty Ferdinand IV. as king of Naples. All the powers engage to one another not to favour, nor to ſupport, directly or indirectly, any pretenſion oppoſite to the rights which appertain to him in this title; but the troops which the powers foreign to Italy and the allies of his ſaid majeſty may march to the ſupport of his cauſe cannot traverſe Italy.'

" I perſuade myſelf, my lord, that Y. E. is ſufficiently authoriſed to ſubſcribe ſuch a clauſe, and that you have no need of a more ſpecial authorization; but, if you ſhould think otherwiſe, I ſhall requeſt of you to require this authority without delay, as you have been good enough to promiſe me to do. TALLEYRAND."

It is probable that the king of Naples had received ſome intimation of the deſign of the French government; for the duke of Campochiaro, when he preſented his note, informed the Auſtrian miniſter, that he was directed to aſk for a paſſage for 80,000 men into France through the Auſtrian dominions in Italy, who ſhould pay for all which they conſumed. This requeſt induced the emperor's cabinet to take meaſures for the ſecurity of Italy, and to reinforce their troops in that country.

At this period, alſo, an active correſpondence was carrying on between Naples and the iſle of Elba; but it may be doubted whether Joachim was entruſted with Bonaparte's deſign of landing in France. As ſoon as the intelligence of this event reached Naples, he called together his council, and informed them of his determination to adhere to his alliance with the emperor of Auſtria, and to remain faithful to the ſyſtem of the allied powers. An aſſurance to this purpoſe was communicated to the imperial ambaſſador at his court, and alſo to the plenipotentiaries at the congreſs of Vienna. The whole of the Neapolitan army was now in movement towards the frontier, and it was announced, that Joachim was immediately to follow, and eſtabliſh his head-quarters at Ancona. For ſome days he appeared to be in a ſtate of great agitation. He held frequent interviews with ſome French officers at Naples, ſeveral of whom he diſpatched to France; but he delayed his own departure from Naples, and the advance of his troops, which was attributed to the news of the failure of Bonaparte's attempt to gain poſſeſſion of Antibes. In fact, he ſeems to have been under the impreſſion of all that doubt and fluctuation which naturally attends a man acting a double part, and irreſolute which ſide to take. When, however, the news arrived of Bonaparte's entrance into Lyons, he made known that he conſidered the cauſe of Napoleon as his own, at the ſame time requiring a paſſage through the Roman ſtates for two of his diviſions. The pope proteſted againſt this violation of his territory, and withdrew to Florence.

On the 19th of March, Joachim arrived at Ancona, and put himſelf at the head of his troops. He entered the pope's dominions on the 22d, and with his main body proceeded from the Marches to the Legations, where, on the 30th, he began hoſtilities by attacking the imperialiſts poſted at Ceſena, who retired before him.

On the next day he addreſſed the following proclamation to the Italians: " Italians! The moment is come when great deſtinies may be accompliſhed. Providence calls you at laſt to be an independent people. One cry echoes from the Alps to the ſtrait of Scylla—the independence of Italy! What right have ſtrangers to rob you of independence, the firſt right and bleſſing of all people? What right have they to reign in your fertile plains; and to appropriate to themſelves your wealth, for the purpoſe of tranſporting it to countries where it did not originate? What right have they to carry off your ſons, to make them ſerve, languiſh, and die, far from the tombs of your fathers? Is it that nature has in vain given you the Alps for a bulwark, and the invincible diſcrepancy of your character, a barrier ſtill more inſurmountable? No! no! let every foreign domination diſappear from the ſoil of Italy.

" Formerly maſters of the world, you have expiated that fatal glory by a ſervitude of twenty centuries. Let it now be your glory to have maſters no longer. Every people muſt keep within the limits fixed to it by nature! the ſea and inacceſſible mountains—theſe are your frontiers.—Never think of paſſing them; but expel the foreigner who paſſes them, and force him to confine himſelf within his own. Eighty thouſand Italians at Naples haſten to you under the command of their king; they ſwear never to reſt until Italy be free; and they have proved, more than once, that they know how to keep their oaths.

" Italians of all countries! Second their magnanimous efforts. Let thoſe who have borne arms reſume them: let the raw youth accuſtom themſelves to handle them; let all citizens, friends of their country, raiſe a generous voice for liberty; let the whole force of the nation be drawn forth in all its energy, and in every form. The queſtion to be decided is, whether Italy ſhall be free, or ſhall remain for ages bent under the yoke of ſlavery? Let the ſtruggle be deciſive, and we ſhall have eſtabliſhed, to a diſtant period, the happineſs of our fine country—that country which, though ſtill torn and bleeding, is full of ardour and ſtrength to conquer its independence. The enlightened men of all countries, the nations which are worthy of a liberal government, the princes who are diſtinguiſhed by the greatneſs of their character, will rejoice in your enterpriſe, will applaud your triumphs. England—can ſhe refuſe you her ſuffrage?—that nation which holds out to all others the model of a national and conſtitutional government; that free people, whoſe fineſt title to glory is to have ſhed its blood and treaſures for the independence and liberty of nations.

" Italians! Having long invited and urged us by your wiſhes, you were ſurpriſed at our inaction; but the propitious moment was not come; I had not yet received proofs of the perfidy of your enemies. It was neceſſary that you ſhould be convinced, by recent experience, how falſe was the liberality of your preſent maſters, how deceitful and lying their promiſes. Fatal and deplorable experience! I call you to witneſs, brave and unfortunate Italians of Milan, Bologna, Turin, Venice, Breſcia, Modena, Reggio, and ſo many other famous cities, how many of our brave warriors and virtuous patriots have been torn from their native ſoil! how many groan in dungeons! how many are victims of unheard-of exactions and humiliations!

" Italians! You muſt put a period to ſo many calamities; ariſe, and march in the cloſeſt union. At the ſame time that your courage ſhall aſſert your external independence, let a government of your choice, a true national repreſentation, a conſtitution worthy of you and the age, guarantee your internal liberty and protect your property. I invite all brave men to come and combat with me; I invite all brave men, who have reflected on the wants of their country, that, in the ſilence of the paſſions, they prepare the conſtitution and laws which muſt in future govern happy and independent Italy.

JOACHIM NAPOLEON."

When the news arrived at Vienna of the attack upon the Auſtrian troops by the Neapolitans, the emperor immediately iſſued the following declaration of war: " After the campaign of 1812, the king of Naples left the French army, in which he had commanded a corps. He had ſcarcely arrived in his capital, when he cauſed overtures to be made to the Auſtrian court reſpecting his intention of combining his future political proceedings with thoſe of the Auſtrian cabinet. Shortly after the campaign of 1813 commenced, on the firſt appearance of a favourable proſpect for Napoleon, king Joachim left Naples, and again took a command in the French army; at the ſame time he privately propoſed to the Auſtrian cabinet, his mediation between the allies and the French emperor. The glorious 18th of October decided the fall of the French empire; the king returned to his dominions, and immediately renewed the negociations that had been broken off, reſpecting his acceſſion to the European alliance. He cauſed his army to advance, and propoſed to Auſtria the partition of Italy. The Po was to be the limit of the two ſtates; ſome months elapſed in continued negociations with the allies, and in a no-leſs frequent correſpondence with the commander-in-chief of the French-Italian army. The Neapolitan army did not ſide with either party. Neither could count upon it, but neither had to combat it. For Auſtria, this ſtate of things was the leaſt detrimental. It could direct its chief force againſt the common enemy without attending to Italy.

“On the 11th of January, 1814, the treaty between Naples and Auſtria was at length ſigned; yet the Neapolitan army remained long inactive, under the pretext that the ratifications were not yet exchanged. Written proofs which fell into the hands of the allies left no doubt that the king's ſecret connexions with the enemy ſtill continued: they ſhowed chiefly his intentions of deceiving the French emperor reſpecting the acceſſion of the king to the alliance of the powers which had already taken place. The victories obtained in France itſelf decided the part of the king. Paris was in the hands of the allies, and the Neapolitan army began its campaign. The convention of the 11th of April, 1814, had ended the war againſt Napoleon. The relations between all the powers were to be fixed at the congreſs at Vienna. The branches of the houſe of Bourbon declared againſt the recognition of king Joachim. The ſituation of the latter was yet much changed by the return of the ancient royal family to the throne of France and Spain. An equitable policy could not but preſcribe to him to limit his future views ſolely to the retaining one of the fineſt kingdoms in the world, and wholly to renounce all conqueſts; and the more, ſince conqueſts could not be made but at the expenſe of a neighbour, who, in a military point of view, was wholly inoffenſive, and, in a political point of view, of the higheſt importance. Moderation and good faith are, however, words without meaning in the eyes of the princes of the new French dynaſty. King Joachim, inſtead of thinking on maintaining himſelf, formed in ſilence extenſive proſpects for the future; he prepared the execution of them by taking advantage of all the elements of a political and military revolution. None of his plans, none of his movements, eſcaped the Auſtrian cabinet. This was not the way to bring over to his ſide the opinion of the courts who oppoſed the admiſſion of the king of Naples to a place among the ſovereigns of Europe.

“As the burden of military exertions was too great for the kingdom to bear, the king reſolved to take more deciſive ſteps. In the courſe of the month of February 1815, he expreſſed his deſign of ſending an army to France, for which end he required nothing leſs than the paſſage through Middle and Upper Italy. Such a ſtrange propoſal was rejected, with a ſuitable reproof. On the 25th and 26th of February, his imperial majeſty ſent declarations to the French and Neapolitan governments, announcing his irrevocable determination never to allow the tranquillity of Middle and Upper Italy to be endangered by the marching in or paſſage of foreign troops. His imperial majeſty gave orders for the march of a large reinforcement of troops to his Italian dominions, to ſupport his declaration. This declaration of Auſtria was anſwered on the part of France, with the aſſurance that the king had no ſuch intention. King Joachim kept his declaration back; the time for the diſcovery of his real views was not yet come.

“On the 5th of March the news of Napoleon's eſcape arrived at Naples. The king immediately ſent for his imperial majeſty's ambaſſador, and declared to him that he was and ſhould remain inviolably faithful to the ſyſtem of the alliance. He renewed the ſame declaration to the cabinets of Auſtria and England. At the ſame time he ſent his aid-de-camp, count de Beaufremont, to France, with the commiſſion to look for Bonaparte, and to aſſure him of his ſupport. Scarcely was the news of Napoleon's entry into Lyons received at Naples, when he formally declared to the court of Rome, *that he conſidered the cauſe of Napoleon as his own, and would now prove to him that it had never been foreign to him.* He required at the ſame time a paſſage through the Roman ſtates for two of his diviſions, which, however, far from acting in a hoſtile manner, ſhould not diſturb the holy father in his capital. The pope proteſted againſt this violation of his territory; and, when it took place, his holineſs left Rome and repaired to Florence.

“On the 8th of April the Neapolitan plenipotentiaries at Vienna delivered a note to the cabinet, which, with aſſurances of the moſt friendly ſentiments of their maſter, and of his unalterable wiſh never to ſeparate from Auſtria, announced that his majeſty ſaw himſelf forced, by the altered ſtate of things, and for his own ſafety, and in agreement with the military meaſures which all the powers thought it neceſſary to take, to give likewiſe to his military force a greater development. This development ſhould, however, be within the line of demarcation which was fixed for the Neapolitan army by the armiſtice of 1813. Meantime the Neapolitan army, without any declaration, began, on the 30th of March, 1815, hoſtilities againſt the Auſtrian poſts in the Legations.

“His majeſty the emperor and king, confiding in the perfect juſtice of his cauſe, and relying on the valour of his army, on the tried loyalty of his people, and on his intimate connexions with all the powers in Europe, has cauſed it to be ſignified to the Neapolitan government, by an official note, dated the 10th inſtant, that his imperial majeſty conſiders the ſtate of war between the two ſtates as begun, and leaves the further deciſion to the force of arms.” Vienna; April 12, 1815.

The imperial general Bianchi retired before the Neapolitan army till he reached the Panaro, where, on April the 4th, he made head againſt the enemy, on the road to Modena. The reſult of the action was, that Bianchi continued his retreat to Carpi, and afterwards took a ſtrong poſition on the Po. In the mean time, the Auſtrian forces were collecting under marſhal Bellegarde, who, on the 5th of April, addreſſed a proclamation to the Italians. In this he reminds them that Murat was a foreigner; and yet he affects a language towards the Italians which an Alexander Farneſe, an Andrew Doria, or the great Triniligio, could ſcarcely have held towards them. Had it not been for this enterpriſe of Murat, Italy might have remained at peace; but he, without a declaration of war, for which he was unable to aſſign any juſt motive, againſt the faith of his treaties with Auſtria, to which alone he owes his political exiſtence, threatens again with his armies the tranquillity of this fine Italy. His promiſe of Italian independence is repreſented as quite in uniſon with all the meaſures of the revolution. The proclamation then adverts to the benefits which the north of Italy had received from the houſe of Auſtria: hence it is, that in Lombardy and Tuſcany “the immortal names of Maria Thereſa, of Joſeph, and of Leopold, are ſtill recollected with ſentiments of admiration and gratitude.” In the concluſion, marſhal Bellegarde contraſts the promiſes of the French revolutioniſts, when they firſt entered Italy, with what they actually did. “Your too-ready credulity to the promiſes of French democracy has already cauſed your ruin: be now more prudent, becauſe, with the experience of the paſt, your folly will be more ſerious: and co-operate, under all circumſtances, with the docility of your character—with that reflection, the fruit of intelligence, and that attachment to your ſovereign, ſo worthy of your heart, for the maintenance of order, and the defence of your country and of the throne.”

The grand duke of Tuſcany at this time quitted his capital, and retired to Piſa; and on the 6th the Neapolitans entered Florence, which was evacuated by the Auſtrian general, Nugent, who retired to Piſtoia, whither he was followed by the Neapolitan general, Pignatelli, who made repeated attacks on the Auſtrians, in all of which he was repulſed with loſs; and this was the limit of the advance of the Neapolitans on that ſide.

Their main army, under the immediate direction of king Joachim, was in the mean time puſhing forward towards Ferrara; and, it being conſidered by the Auſtrian generals as of eſſential conſequence to defend this point, baron Frimont ordered the lieutenant-field-marſhal Mohr to advance from the tête-du-pont of Occhio Bello, and make an attack upon the enemy. This was effected on the 12th by Mohr, whilſt count Neipperg threatened the flank of the Neapolitans; and its ſucceſs was ſuch, that they were driven from all their works, and Ferrara was delivered. The retreating Neapolitans were purſued towards Bologna. General Bianchi had at this time driven the invaders from Carpi, and had recovered Modena; ſo that the vicinity of the Po was entirely freed from the Neapolitans. The latter continued their retreat at all points. On the 16th the van of the Auſtrian army entered Bologna, which had been haſtily abandoned by Joachim.

It was now manifeſt, that, whatever were the wiſhes of the Italians for independence, no co-operation could be expected on their parts; and that the grand ſcheme of uniting Lombardy againſt the Auſtrian dominion, and forming a powerful diverſion in favour of Bonaparte in that quarter, was beyond the talents of Murat with a Neapolitan army. From Bologna the purſuit was continued by the Auſtrian diviſion under count Neipperg, which ſucceſſively occupied Imola, Faenza, and Forli. A large corps of Neapolitans being entrenched at Ceſena, the count made an attack upon it on the 21ſt, and a briſk action enſued; after which the poſition was abandoned, and the troops haſtily retreated.

The Neapolitan army, under Murat, continued to retreat; and, on the 27th of April, it had fallen back as far as Peſaro. The Auſtrian general, Bianchi, was now marching with celerity from Bologna through Florence and Foligno, in order to occupy the direct road from Ancona to Naples, and thereby to turn the poſitions of the Neapolian army. On the 2d of May he took a poſition in front of Tolentino, which rendered it neceſſary for Murat to venture a battle for the purpoſe of ſecuring a retreat to the Neapolitan frontier. Advancing from Macerata with a much ſuperior force, on the ſame day he attacked the poſitions of Bianchi, and the conteſt continued till the approach of night. On the following morning, the attacks were renewed with great vigour, and were reſiſted with equal obſtinacy, till night again put an end to the combat. The arrival of count Niepperg at Jeſi now obliged the Neapolitans to commence a precipitate retreat in the direction of Ferino, in order to gain the road along the ſea-coaſt to Peſcara. General Nugent, who had entered Rome, marched from that capital in the beginning of May, towards the Neapolitan frontier on that ſide, the enemy retiring before him. They were at length driven beyond the Garigliano to San Germano, to which they were followed by the Auſtrian advanced-guard. On the 14th, Murat arrived at San Germano; and, his troops being conſiderably reinforced, he drove back the advanced-guard, and afterwards attacked all the Auſtrian out-poſts. On the 15th, he began again to retire; and, returning with a ſmall eſcort to San Germano, he ſoon left that place. Nugent, reſuming the offenſive, advanced againſt the enemy, who were poſted on the banks of the Melfa, which they quitted on his approach. They afterwards left San Germano to their purſuers, and fell back to Mignano, where they drew up in force. In that poſition they were attacked and put to the rout; and thus the Neapolitan army, named that of the interior, was entirely broken up. On the 18th, a junction was formed at the Auſtrian camp, near Calvi, of Bianchi's army with that of Nugent, who had now no opponents in the field, the wretched remains of the Neapolitan army being reduced, chiefly by deſertion, to a diſpirited band of about 16,000 effective ſoldiers of all kinds.

Meanwhile, in conſequence of arrangements made between lord Burgherſh, the Engliſh miniſter at Florence, and captain Campbell, of the Tremendous man-of-war, the latter, in the beginning of May, ſailed with his ſhip, accompanied by a frigate and a ſloop-of-war, to the Bay of Naples. On his arrival he declared to the Neapolitan government, that, unleſs the ſhips of war were ſurrendered to him, he would bombard the town. Madame Murat immediately ſent prince Carrati to negociate for the ſurrender. The terms dictated by captain Campbell were, that the ſhips of the line in the bay ſhould be given up; that the arſenal of Naples ſhould be delivered over, and an inventory taken of its actual ſtate; and that theſe captures ſhould be at the joint diſpoſal of the Engliſh government and of Ferdinand IV. of Naples. The ſhips were then taken poſſeſſion of, and ſent off to Sicily.

The war was now near to a concluſion, the final cloſe of which is thus related by lord Burgherſh to lord Caſtlereagh, in a diſpatch, dated Teano, May 21: "After the ſucceſſes obtained by general Nugent, and ſtated in my laſt diſpatch, general Bianchi received, on the 18th, a meſſage from the duke de Gallo, requeſting an interview, to communicate to him propoſitions he was charged with from *Marſhal Murat*. A meeting for the next day was appointed: general Bianchi requeſted me to attend it on the part of England; and, in the abſence of the Britiſh commanders-in-chief both by ſea and land, I conſented. I met therefore the duke de Gallo with general Bianchi, on the morning of the 19th. The converſation which enſued with that miniſter led to no other reſult than in having given the allies an opportunity of ſtating to him the grounds on which alone they would engage to arreſt their military movements. Having ſtated that he had no authority to treat on any baſis of the nature ſo announced to him, the duke de Gallo returned to Naples, having received, however, an aſſurance, that any propoſitions general Carraſcoſa might wiſh to make ſhould, in the courſe of the following day, be received. The meeting with general Carraſcoſa took place this morning. General Niepperg on the part of Auſtria, general Colletta on that of Naples, and myſelf in the abſence of the Britiſh commander-in-chief, negociated the military convention. On the part of Naples, propoſitions were at firſt made totally inadmiſſible; on our part, the abdication of Marſhal Murat was inſiſted upon. General Colletta wiſhed to ſecure for that perſon a ſafe retreat to France; but, finding that ſuch was totally impoſſible, and having declared that he had no authority from Murat to treat with regard to him, the convention, ſuch as your lordſhip will receive it, was agreed to. It is impoſſible to conclude this diſpatch without calling your lordſhip's attention to the manner in which the campaign, now terminated, has been carried on by general Bianchi. The activity with which he has puſhed his operations is almoſt without example. The conſtant ſucceſſes which have attended his arms are crowned in the ſatisfaction of his being able to re-eſtabliſh the authority of the legitimate ſovereign, without thoſe misfortunes to the country attendant on protracted military operations."

Military Convention.

Art. 1. From the day in which the preſent military convention ſhall have been ſigned, there ſhall be an armiſtice between the allied troops and the Neapolitan troops, in all parts of the kingdom of Naples.

2. All fortified places, citadels, and forts, of the kingdom of Naples, ſhall be given up in their actual ſtate, as well as the ſea-ports and arſenals of all kinds, to the armies of the allied powers, at the periods fixed upon in the following article, for the purpoſe of being made over to his majeſty king Ferdinand IV. excepting ſuch of them as may before that period have already been ſurrendered. The places of Gaeta, Peſcara, and Ancona, which are already blockaded by the land and ſea forces of the allied powers, not being in the line of operations of the army under the general-in-chief Carraſcoſa, he declares himſelf unable to decide upon their fate, as the officers commanding them are independent, and not under his orders.

3. The periods for the ſurrender of the fortreſſes, and for the march of the Auſtrian army upon Naples, are fixed as follows:—Capua ſhall be given up on the 21ſt of May, at noon: on that day the Auſtrian army will take its poſition on the Canal de Reggi Lagui. On the 22d day of May, the Auſtrian army will occupy a poſition in the line of Averſe, Fragola, Meleto, and Juliano. The Neapolitan troops will march on that day upon Salerno, which place they will reach in two days, and concentrate their head-quarters in the town and its environs, in order to wait the deciſion of their future deſtiny. On the 23d of May, the allied army will take poſſeſſion of the city, citadel, and all the forts, of Naples.

4. All the other fortreſſes, citadels, and forts, (the above-mentioned excepted,) ſituated within the frontiers of the kingdom of Naples, ſuch as Scylla, Omandea, Reggio, Brindiſi, Manfredonia, &c. ſhall be likewiſe ſurrendered to the allied armies, as well as all the depôts of artillery, arſenals, magazines, and military eſtabliſhments, of every kind, from the moment that this convention ſhall reach the ſaid places.

5. The garriſon will march out with all the honours of war, arms and baggage, clothing of the ſeveral corps, the papers relative to the adminiſtration; without artillery. The engineers and artillery-officers of theſe places ſhall make over to officers of the allied armies, named for this purpoſe, all papers, plans, and inventories of effects, belonging to both departments dependent thereon.

6. Particular arrangements will be concluded between the reſpective commandants of the ſaid places, and the generals or officers commanding the allied troops, as to the manner of evacuating the fortified places, as well as for what regards the ſick and wounded, who will be left in the hoſpitals, and for the means of tranſport which will be furniſhed to them.

7. The Neapolitan commandants of the ſaid places are reſponſible for the preſervation of the magazines within them, at the moment of their being made over; and they ſhall be given up, in military order, as well as every thing which is contained within the fortreſſes.

8. Staff-officers of the allied and Neapolian armies ſhall be immediately diſpatched to the different places above mentioned, in order to make known to the commandants theſe ſtipulations, and to convey to them the neceſſary inſtructions for putting them into execution.

9. After the occupation of the capital, the remainder of the territory of the kingdom of Naples ſhall be wholly ſurrendered to the allies.

10. His excellency the general-in-chief, baron de Carraſcoſa, engages, until the moment of the entry of the allied army into the capital of Naples, to ſuperintend the preſervation of all the public property of the ſtate without exception.

11. The allied army engages to take meaſures in order to avoid all kind of civil diſorder, and to occupy the Neapolitan territory in the moſt peaceable manner.

12. All priſoners of war that have reciprocally been made during this campaign, as well by the allied armies as by the Neapolitan army, ſhall be given up on both ſides.

13. Permiſſion will be granted to all, foreigners or Neapolitans, to leave the kingdom, with legal paſſports, during the ſpace of a month from the preſent date. The ſick or wounded muſt make a ſimilar application within the ſame period.

The diſturbances which broke out in Naples, cauſed the poſſeſſion of it by the allies to be anticipated by one day. By the convention they were to have been placed in poſſeſſion of it on the 23d; but the popular feeling had ſo ſtrongly manifeſted itſelf againſt the then exiſting government, on the 20th and 21ſt, that Murat left the town in diſguiſe, and his wife ſought the ſecurity which had been aſſured her on-board a Britiſh man-of-war. General Carraſcoſa ſent to general Bianchi, requeſting he would prevent the miſfortunes with which the town was menaced, by entering it immediately; and madame Murat, by the ſame requeſt to admiral lord Exmouth, who had arrived in the bay, prevailed upon him to land a body of 500 marines to maintain tranquillity. General Bianchi's cavalry occupied Naples on the night of the 22d; and, on that day, prince Leopold of Sicily entered at the head of the Auſtrian troops in the midſt of general acclamations. He requeſted all the authorities of the kingdom, the miniſters of ſtate, and the officers of the army, to remain at their poſts until they received the orders of king Ferdinand. Madame Murat ſailed in the Tremendous for Gaeta, to receive her children, who had been ſent thither for ſafety. She was afterwards conveyed into the Auſtrian territories.

On the 23d, the Engliſh and Sicilian expedition, conſiſting of about 6000 troops, under the command of general Macfarlane, appeared in the Bay of Naples. King Ferdinand had previouſly iſſued a proclamation to the Neapolitans from which we extract the following paſſages: "At length I re-aſcend the throne of Naples. Every thing concurs to make my return happy. Your unanimous wiſhes recall me. The general wiſh of the great powers renders juſtice to my rights. The firm and vigorous aſſiſtance of my auguſt allies animates and ſupports me. I put myſelf in march at the head of an army, not like uſurpers, to deceive and diſturb nations; or like adventurers, to carry off, in the diſorder of the tempeſt and the ſhipwreck, that which the calm could not procure for them. I return to the boſom of my dear family: I bring to it conſolation and peace: I come to reſtore its ancient ſerenity, and to efface the recollection of all paſt evils. I promiſe you that I will not preſerve the leaſt recollection of all the faults committed by whatever perſon, without any exception, againſt the duties of fidelity towards me, during my abſence from this kingdom, at whatever time committed, whether after my firſt or ſecond departure. An impenetrable and eternal veil ſhall cover all paſt actions and opinions. With this view I promiſe, in the moſt ſolemn manner, and on my ſacred word, the moſt complete, moſt extenſive, and general, amneſty, and an eternal oblivion. I promiſe to preſerve to all individuals, Neapolitan and Sicilian, who ſerve in the armies by land or ſea, all the pay, the rank, and military honours, which they now enjoy. May God, the witneſs of the rectitude and ſincerity of my intention, deign to bleſs them with ſucceſs! FERDINAND."

"Palermo, May 1, 1815."

The king of the Two Sicilies, after an abſence of nine years, made his entrance into Naples on the 17th of June, and was greeted with a popular enthuſiaſm, which apparently was not the mere temporary homage paid to exiſting power. His manners, however void of dignity, had always ingratiated him with the Neapolitan people; and the vices of the government were not attributed to him, who, in fact, took little part in it, having been chiefly employed as we have noticed at p. 545. But it gives us very great pleaſure to obſerve, that the humane terms of the above proclamation were ſtrictly adhered to; and we have heard of no perſon being put to death, or even baniſhed, after the ſecond reſtoration of Ferdinand.

Mr. Euſtace happened to be at Naples at the point of time when the court returned from Palermo; and hence he takes occaſion to elucidate the characters of the principal perſonages. The king, Ferdinand IV. he repreſents as conſiderably more amiable than intelligent. His manners are eaſy, his converſation affable, and his whole deportment is that of a thorough gentleman. His mental endowments, it ſeems, are in the ſtate beſt fitted, according to this author's ideas, for his ſituation and office, that of mediocrity, without either defect or excellency. For Mr. Euſtace is of opinion, that, if a monarch is one degree below this happy mark, "he becomes the tool of every deſigning knave about his perſon, whether valet or miniſter; if only one degree above it, he becomes reſtleſs, and unintentionally miſchievous; if curſed with genius, he turns out a conqueror and a deſpot." Now, Ferdinand's intellect being the golden mean recommended for all ſovereigns, we ſhall ſee in what light it places him. His ignorance, it appears, is exceſſive; ſuch as frequently to come out in a way that ſtartles even well-trained courtiers. Thus, mention being made one day of the magnitude of the Turkiſh power in former times, his majeſty was graciouſly pleaſed to obſerve, that "it was no wonder, as all the world were Turks before the birth of our Saviour." Upon another occaſion, the converſation turned on the murder of Louis XVI. and, a courtier having alluded to the execution of Charles I. as a parallel caſe, the king treated it as a pure fiction, having never before heard of that portion of hiſtory: "Depend upon it," ſaid he, "it is a mere tale trumped up by the Jacobins at Paris to excuſe their own guilt." Mr. Euſtace mentions ſome circumſtances which tend to ſhow, that the king was purpoſely kept in this ſtate of deplorable ignorance, by thoſe who had the charge of his education; and once, in particular, the French ambaſſador having attempted to draw his mind towards reading, and perſuaded him to try the experiment upon the Life of Henry IV. his majeſty returned it untouched after a month, ſaying, "There is your book untouched; they don't wiſh me to read, ſo I have given it up." With all poſſible veneration for the royal office, and affection for the perſon of our illuſtrious ally, one may be permitted to doubt whether this is really the moſt perfect condition of a kingly underſtanding. We ſhould remember, however, that, if a prince is but one degree above that level, "he becomes reſtleſs and miſchievous." Of the queen our author ſays little, probably out of reſpect for royalty. He admits, however, that a royal conſort taking her place at the board of council, was for the firſt time witneſſed in Naples, when the beſt of poſſible kings married this clever and violent Auſtrian archducheſs. Probably a prince "one degree above mediocrity" would not have ſubmitted to this interference of his helpmate. A love of ſhow and fêtes ſeems to prevail among the princes of the true ſtandard, as well as thoſe whoſe abilities are too great. Accordingly, Mr. Euſtace has given us a long account of the feſtival, with its immenſe illuminations, occaſioned by the happy event of the court's return.

Murat, in the mean time, eſcaped to France, as appears from the following article, which appeared in the French papers ſoon afterwards: "The king of Naples landed at Cannes on the 25th of May. That prince owes his misfortunes entirely to the cowardice of the Neapolitan troops. They advanced as long as the Auſtrians were not in ſufficient force to oppoſe them; but, when victory was to be purchaſed by efforts, inſtead of fighting, they fled. Had the king been able to advance into Lombardy, his cauſe, and that of Italy, would have triumphed. The officers and ſoldiers of prince Eugene would have flocked to his ſtandard, and formed the ſtrength of his army; but, he had ſcarcely eſtabliſhed himſelf on the Po, when the Auſtrians received reinforcements and reſumed the offenſive. The Neapolitans, being then intimidated by the preſence of an enemy who did not fly, took to flight themſelves. The king could not rally the wreck of his army until he reached Macerata. He wiſhed to give battle, and the Auſtrian corps was inferior to that which he commanded; but the Neapolitans fled at the firſt muſket-ſhot, and diſperſed on all ſides. None remained faithful to the king, except a battalion of Italian and French officers, and it was with this handful of brave men that he accompliſhed his retreat to Naples, conſtantly followed by the Auſtrians. On entering his capital, he ſoon found it was impoſſible to maintain himſelf there. He left it on horſeback on the 20th of May; and, having proceeded along the coaſt in front of the iſland of Itri, he embarked on-board of a veſſel belonging to the Iſle of Elba, which conveyed him in five days to Cannes. After his departure from Naples, the Auſtrians entered the city, and the Engliſh the port. The queen retired to one of the fortreſſes, where ſhe capitulated with the Engliſh. She embarked on the 21ſt for Toulon, on-board of an Engliſh veſſel."

Murat afterwards fixed his reſidence at Toulon, where he continued till the reſtoration of the Bourbons, when he was perſecuted and proſcribed. He had hired a veſſel at Toulon on the intelligence of their arrival, by which he might effect his eſcape, but the ſhip ſailed without him, carrying away all his effects and attendants. He was left completely deſtitute, and wandered about more than a fortnight in the woods, ſubſiſting on a few pieces of brown bread, which he obtained from the humanity of the neighbouring ſhepherds. He at length threw himſelf on the mercy of the inmates of a ſmall villa near Toulon, where he remained concealed more than a month, indebted for his daily food to the benevolence of two naval officers. While he remained in concealment, he wrote repeatedly and ineffectually to ſome friends at Paris, claiming their interference and protection. His letters were either intercepted or neglected. The place of his retreat was now diſcovered. A band of more than ſixty armed men ſurrounded the houſe, and he had ſcarcely time to eſcape to an adjoining vineyard, carrying with him two brace of piſtols, and reſolved to ſell his life as dearly as poſſible, and to die, rather than fall into the power of his enemies. They paſſed him, threatening vengeance, as he lay concealed in the thick foliage. The ſearch was continued ſeveral days without ſucceſs, and a reward was ſet upon his head. He tremblingly ſtole from his retreat every night, and received ſome ſcanty and precarious ſubſiſtence from the officers, who would not even now deſert him; and, at length, he was enabled, by their means, to eſcape to Baſtia in Corſica. The officers were immediately caſhiered, and thrown into priſon.

From Baſtia he removed to Ajaccio, where he was joined by many of his friends. An offer was here made, by the court of Auſtria, to grant him an honourable and ſafe retreat in any part of the Auſtrian dominions, on condition of his renouncing for ever the Neapolitan throne. To this he pretended to conſent, that he might better conceal his real intentions. He had been informed of the unpopularity of Ferdinand; he knew that he was beloved by every claſs of his former ſubjects, and he had received many invitations to return and reſume his kingdom. In vain his confidential friends endeavoured to diſſuade him from the raſh enterpriſe; in vain they repreſented the improbability of his firſt ſucceſs, and the total impoſſibility of reſiſting the overwhelming force which Auſtria and England would bring upon him. He replied that "he could not ſubmit to the humiliating conditions impoſed upon him; that there was neither moderation nor juſtice in compelling him to live in perpetual captivity under the arbitrary laws of a deſpotic government; that this was not the reſpect due to an unfortunate monarch, who had been formally acknowledged by all Europe, and who, in a moſt critical period, had undertaken the campaign of 1814 in favour of thoſe very powers that now, contrary to their own intereſts, conſpired to cruſh him; that England and Auſtria would have nothing to fear from him; that he would not have driven the Auſtrians beyond the Po, had he not known that it was their determination to attack him; that it could not now be attributed to him, that he would unite himſelf with Napoleon, who was an exile on the rocks of St. Helena; that England and Auſtria might expect from him many advantages, for which they would in vain look from the perſon by whom he was ſupplanted; that the majority of his ſubjects ardently expected his return, and that he was reſolved to place himſelf at their head; that he had often expoſed himſelf to death in its moſt frightful forms, and that he was not afraid once more to defy it in the attempt to regain his rights, and deliver himſelf from undeſerved oppreſſion; and, that his only fears were for his beloved family."

He diſpoſed of all his jewels and effects, and, purchaſing ſix gondolas, ſet ſail from Baſtia, September 28th, 1815, with two hundred ſoldiers and thirty officers. On the night of the 30th a violent tempeſt aroſe, and diſperſed the little fleet; and, on the 5th of October, rejoining another of his veſſels, he was compelled to land at Pizzo, on the coaſt of Calabria, with fifty men. Few troops were quartered on this part of the coaſt, but no preparation had been made for his reception. He immediately iſſued proclamations, inviting his former ſubjects to join his ſtandard, and promiſing them the aſſiſtance of Auſtria. From the coaſt he marched quietly to the village. When he arrived there, he attempted to excite the ſtir of a civil war, by crying out to the people, "I am your king, Joachim Murat: you ought to acknowledge me." Theſe words were the ſignal of a general commotion: they ran to arms. Murat and his ſuite, who were proceeding towards Monteleone, ſeeing themſelves purſued by the populace, threw themſelves precipitately among the mountains; whence they attempted to open for themſelves a way to the coaſt, in order to find the veſſel which awaited them: but, overcome by the number and courage of their purſuers, they were made priſoners, and conducted, in ſpite of the moſt active reſiſtance on their part, to the fort of Pizzo. In the heat of the encounter, Capt. Pernice was killed, and Gen. Franceſchetti wounded, as well as ſeven other perſons in the ſuite of Murat; who was then, after a deſperate reſiſtance, taken priſoner. A court-martial was immediately aſſembled; he was brought before it, and tried on one of his own laws, which decreed, that any perſon, landing in the country with an intent of diſturbing the public tranquillity, ſhould be ſhot. Ferdinand at firſt refuſed to ſign the warrant for his death; but, being at length prevailed on by his miniſters, orders were given for the immediate execution of the priſoner. When Murat was informed that his fate was decided, he expreſſed ſome ſurpriſe and indignation; but, immediately recollecting himſelf, requeſted a pair of ſciſſars to cut off his hair, in order to ſend it to his wife, but this was cruelly refuſed. He then intreated that he might be ſhot by the ſmall detachment of his guard which was at Pizzo; this was alſo refuſed. His requeſt that the execution might take place in the Great Hall of the commandant of Pizzo was acceded to. Twelve Sicilian ſoldiers were then placed cloſe to the door of the apartment. Murat took leave of the prieſt who accompanied him, entered reſolutely the hall, uncovered his breaſt, gave the word "Fire!" and immediately fell, pierced by eight balls. His execution took place on the 15th of October, 1815. We are told, that, after being buried at Pizzo, his body was dug up by the populace, in the December following, and that the ſyndic, who oppoſed them, was murdered, and then conſumed in the ſame fire.

Murat was born at an inn near Cahors; where, even when a child, he was remarkable for his courage and addreſs in riding the moſt ſpirited horſes. The ſame traits were afterwards eminent in his character when he entered the army as a ſoldier of fortune; and his early habits induced him particularly to cultivate the ſcience of cavalry-manœuvres, for which he became highly diſtinguiſhed. His marriage with Bonaparte's favourite ſiſter gave him a crown; and, as if fortune reſolved that he ſhould wear it, his cauſe, by the moſt unforeſeen and proſperous events, was ſevered from that of Napoleon; ſo that he appeared even to triumph in the downfall of his maſter. But the reſtleſſneſs of his ambition, and the contemptible chicanery of his politics, worked his ruin. Not ſatisfied with what the Auſtrian miniſter, in his remonſtrance to him, juſtly called "one of the moſt ancient, compact, and beautiful, kingdoms in Europe," impelled by the principles he learned in the ſchool of Napoleon, he ſighed after the patrimony of the papal ſee, and attempted to ſeize on the three legations. Succeſs had rendered Murat an enthuſiaſt; he fancied that Italy panted for liberty; that ſhe would hail him as her regenerator, and reward him with her diadem. With theſe hopes, he encountered the power of Auſtria with about 30,000 men, after having ſeverally deceived every court in Europe, and forfeited the bribe for which he ſold his patron, by joining him again before the bargain was completed. The loſs of his throne was the juſt puniſhment of his perfidy; and the loſs of his life can be regarded in no other light than as the ſacrifice of an incendiary, offered to the ſafety of his intended victims. At the ſame time it is but juſtice to him to remark, that, during the ſhort period of his reign over Naples, he did much to benefit that fine portion of Italy. The great faults and vices of the Neapolitan character were extreme indolence, the want of enterpriſe and ambition, exceſſive ignorance and ſuperſtition, and a large portion of Italian cowardice and cruelty. To eradicate theſe he uſed all his endeavours; and, by the teſtimony of travellers who had ſeen Naples under Ferdinand and under him, he had been tolerably ſucceſsful. If, therefore, he could have reſted content, and had not ſuffered himſelf to have been made the tool of Bonaparte, it is highly probable, not only that he would have been ſuffered to retain the throne of Naples, but that he would have effected a great reform in the character of the Neapolitans. Great Britain had no reaſon to exert herſelf in favour of the old dynaſty, ſince the conduct of the queen of Naples in Sicily had for many years been hoſtile to the views of the allies, and even ſtrongly favourable to Bonaparte: and there was reaſon to believe, that even Ferdinand and his ſubjects did not feel all the gratitude towards Great Britain, which her exertions and ſacrifices on their behalf juſtly intitled her to expect.

The particulars detailed above, have been collected chiefly from Mant's Hiſt. of the Wars of England; Le Blois's Hiſt. of France; Annual Regiſter, 1806–1815; Stephens's Hiſt. of the Wars ariſing out of the French Revolution; Gifford's Hiſtory of the Wars, 2 vols. 4to. 1817. to which we beg to refer our readers for farther particulars; as alſo to the articles ENGLAND, FRANCE, GERMANY, ITALY, and LONDON, in the preſent work.

STATISTICAL HISTORY.

The kingdom of Naples is divided into twelve provinces, called *Giuſtizierati*, or juriſdictions, containing 2067 *univerſita*, under the denomination of cities, towns, and villages. This diviſion is commonly attributed to the emperor Frederic II. The provinces are—Terra di Lavora, Principato Citra, Principato Ultra, Capitanata, Moliſe, Abruzzo Citra, Abruzzo Ultra, Bari, Otranto, Baſilicata, Calabria Citra, and Calabria Ultra. An eſtimate of the population of this kingdom is publiſhed annually by authority. In the year 1767, there were 1,819,267 males, 1,886,875 females, and 107,612 eccleſiaſtics ſecular and religious; 81,898 males and 76,770 females were born, and 123,041 of both ſexes died: in 1777, 2,092,745 males, 2,124,030 females, and 94,728 eccleſiaſtics: in 1778, the number of inhabitants amounted to 4,564,445; in 1779, to 4,651,293; in the preſent year 1818, to 5,117,362.

Government.—The king of Naples and of the Two Sicilies is an hereditary monarch. The latter title, which has lately been revived, was firſt uſed in the 12th century, when Roger II. earl of Sicily, was alſo king of Naples. The king, in acknowledgment of the pope's feudal right, ſends every year to him a white palfrey, and a purſe of 6000 ducats. The king's eldeſt ſon is ſtyled Prince of Calabria.

The nobility of various ranks conſtitute a very numerous body. "I am aſſured," ſays Dr. Moore, (View of Society in Italy,) "that the king of Naples counts among his ſubjects 100 perſons with the title of prince, and a ſtill greater with that of duke. Six or ſeven of theſe have eſtates which produce from 10 to 13,000l. a-year; a conſiderable number have fortunes of about half that value; and the annual revenue of many is not above 1000l. or 2000l. The inferior orders of the nobility are much poorer: many counts and marquiſſes have not above 300l. or 400l. a-year of paternal eſtate; many have ſtill leſs; and not a few enjoy the title without any eſtate whatever. Theſe nobles, however, are exceſſively fond of ſplendour and ſhow, which appears in the brilliancy of their equipages, the number of their attendants, the richneſs of their dreſs, and the grandeur of their titles. The fineſt carriages are painted, gilt, varniſhed, and lined, in a richer and more beautiful manner than has yet become faſhionable either in England or in France. They are often drawn by ſix, and ſometimes by eight, horſes. Before the carriage, it is the mode to have two running footmen, and behind three or four ſervants in the richeſt liveries. The ladies and gentlemen within the coaches glitter in all the brilliancy of lace, embroidery, and jewels. This finery is not confined to the perſons within and without the coaches; it is extended to the horſes, whoſe heads, manes, and tails, are ornamented with the rareſt plumage, and ſet off with ribbons and artificial flowers." We ſhall mention a circumſtance from which an idea may be formed of the grandeur of a Neapolitan palace, and the number of domeſtics which ſome of the nobility retain. "I dined (continues our author) at the prince Iacci's, where we paſſed through twelve or thirteen large rooms before we arrived at the dining-room. There were thirty-ſix perſons at table ſerved by the prince's domeſtics, and each gueſt had a footman behind his chair, while other domeſtics belonging to the prince remained in the adjacent rooms and in the hall. No eſtate in England could ſupport ſuch a number of ſervants, paid and fed as Engliſh ſervants are; but in Naples the wages are very moderate indeed, and the greater number of men-ſervants, belonging to the firſt families, give their attendance through the day only, and find beds and proviſions for themſelves. It muſt be remembered alſo, that few of the nobles give any entertainments; and thoſe who do not are ſaid to live very ſparingly; ſo that the whole of their revenue, whatever it may be, is expended on articles of ſhow."

The hereditary juriſdiction of the nobles over their vaſſals, ſubſiſts, both in the kingdom of Naples and Sicily, in the full rigour of the feudal government. The peaſants therefore are poor; and it depends altogether on the perſonal character of the maſters, whether their poverty is not the leaſt of their grievances. If the land was leaſed out to free farmers, whoſe property was ſecure, and the leaſes of a ſufficient length to allow the tenant to reap the fruits of his own improvements, the eſtates of the nobility would, without doubt, produce much more. The landlord might have a higher rent paid in money, inſtead of being collected in kind, which ſubjects him to the ſalaries and impoſitions of a numerous train of ſtewards; and the tenants would be enabled to live much more comfortably, and to lay up every year a ſmall pittance for their families. But ſuch is the love of domineering, that many perſons would rather ſubmit to be themſelves ſlaves to the caprices of an abſolute prince than become perfectly independent, on the condition of giving independence to their vaſſals. Although the Neapolitan nobility ſtill retain the ancient feudal authority over the peaſants, yet their perſonal importance depends, in a great meaſure, on the favour of the king; who, under pretext of any offence, can confine them to their own eſtates, or impriſon them at pleaſure; and who, without any alleged offence, and without going to ſuch extremes, can inflict a puniſhment, which they will ſenſibly feel, by not inviting them to the amuſements of the court, or not receiving them with ſmiles when they attend on any ordinary occaſion. The government of this kingdom is nearly deſpotic. The laws of it are contained in the "Codex Carolinus," publiſhed in 1754. The parliament, or general aſſembly of the ſtates, is ſummoned every two years, to meet at the capital, where the ſeſſions are held in the Minorite convent, near St. Lawrence's church. There are only two ſtates, conſiſting of nobles and commons, the clergy not making a diſtinct claſs, but being intermingled with the other two. The chief buſineſs is to deliberate on the cuſtomary free-gift to the king, which has often amounted to upwards of 1,500,000 crowns.

The religion of Naples is the Roman Catholic, but the Neapolitans have always reſolutely oppoſed the introduction of the inquiſition; and, independently of this, no papal bulls or mandates can be made public without the king's *exequatur*. The number of monaſteries and convents is very great; and the clergy, who are very numerous, are wealthy, whilſt the laity are poor. The number of archbiſhoprics in the kingdom is no leſs than 21, and that of biſhoprics 125; but here is no univerſity of any reputation. The eccleſiaſtics are computed at 200,000; and it is ſuppoſed that about one-half of the lands is in their poſſeſſion.

The Jews came into this kingdom about the year 1200, but in 1540 were expelled; however, in 1740, they were allowed to ſettle in the kingdom during the term of fifty years, and ſeveral privileges were granted them during that period; at the expiration of which, the grant was ſuppoſed to be renewed, unleſs they were expreſsly ordered to quit the country.

The revenue of the kingdom is generally computed at 3,000,000 of crowns; but, as Mr. Addiſon obſerves, there is no country in Europe which pays greater taxes, and where, at the ſame time, the public is leſs the better for them, moſt of them going to the enriching of the private perſons to whom they are mortgaged. The military force of this kingdom is ſaid to conſiſt of about 30,000 men, of which the Swiſs regiments are the beſt. As to the marine, it conſiſts only of a few galleys.

The inhabitants of this country have at all times borne but an indifferent character among other nations. From the few hints dropped by claſſic authors, we collect, that the ancient Neapolitans were a race of epicures, of a ſoft indolent turn, averſe from martial exerciſes, paſſionately fond of theatrical amuſements and muſic, expert in all the refined arts that adminiſter to the caprices of luxury, extravagant in their expreſſions and geſtures, and dupes to various ſorts of ſuperſtition. If we make allowance for a quantity of northern blood which has joined the original Grecian ſtream, and imparted a roughneſs not yet worn off by the mildneſs of the climate, we ſhall find the modern Neapolitans very like the ancient. Proviſions being here plentiful and cheap, the lower claſs of people work but little. Their delight is to baſk in the ſun, and do nothing. Perſons of a middle rank frequent places of public reſort; and very few of any rank attend to their proper buſineſs with the zeal and activity we are wont to meet with in the profeſſional men of colder countries. Gluttony is a predominant vice, while inſtances of ebriety are comparatively rare. In the female ſex, the paſſion for finery is almoſt ſuperior to every other; and, though chaſtity is not the characteriſtic virtue of the country, Mr. Swinburne doubts whether a Neapolitan woman would not nine times out of ten prefer a preſent to a lover. That furious jealouſy for which the nation was once ſo remarkable, is now greatly abated. The breach of the conjugal vow ſometimes occaſions quarrels and aſſaſſinations among people of an inferior ſtation; and, in the metropolis, aſſaſſinations are often perpetrated from much leſs cogent motives. Of theſe vices, many are doubtleſs owing to that ſlavery and oppreſſion under which they groan, and to a radical defect in the adminiſtration of juſtice.

Climate and Produce.—A conſiderable degree of heat prevails throughout theſe kingdoms, which diſorders foreigners, unleſs they take great care of themſelves. In the lower part of the kingdom, little of winter is felt; and in the plains it is very extraordinary to ſee ice, or even ſnow. The ſnow that ſometimes falls in the mountainous parts, is gathered and kept for cooling liquors in ſummer-time, inſtead of ice. Even ſo early as April, the ſun darts a very great heat; but the nights are cold. The fertility of the ſoil of this country is ſo extraordinary, that it is juſtly termed an earthly paradiſe; for it abounds with all ſorts of grain, the fineſt fruit and garden-productions of every kind, with rice, flax, oil, and wine, in the greateſt plenty and perfection. It affords alſo ſaffron, manna, alum, vitriol, ſulphur, rock-cryſtal, marble, and ſeveral ſorts of minerals, together with fine wool, and ſilk. The horſes of this country are famous, and the flocks and herds very numerous. Beſides theſe products, of which a conſiderable part is exported, there are manufactures of ſnuff, ſoap, and glaſs ware. Waiſtcoats, caps, ſtockings, and gloves, are alſo made of the hair or filaments of a ſhell-fiſh, which are warmer than thoſe of wool, and of a beautiful gloſſy green. The ſilk, woollen, and other manufactures, together with the improvement of arts, owe their firſt eſtabliſhment to Ferdinand of Arragon, who patroniſed them in a very liberal manner.

Among the natural curioſities of this country, the Phrygian ſtone, or *pietra fungifera*, as it is called, may alſo be claſſed. It has neither the hardneſs of ſtone, nor the properties of earth, but conſiſts of an indurated mixture of earth, rotten beech-wood, and fibres of ſeveral plants. From this ſtone, laid in a ſhady and damp place, muſhrooms grow in a few days. The ſeed lies in the ſubſtance of the ſtone, and is diſtinguiſhable only by a good microſcope from duſt.

A great inconvenience, but common to all Italy, are the ſwarms of lizards, whereof great numbers of the green kind are every-where to be met with; but they are rather troubleſome than hurtful, as they creep up and down the walls, and, if a door or window be left open, make their way into the chambers. A much greater nuiſance are the ſcorpions; but the tarantulas are moſt talked of; theſe are a ſpecies of ſpiders, ſo called from the city of Tarento, in which diſtrict they are in great number, and alſo more venomous than elſewhere. See the article ARANEA, vol. ii. p. 33.

Trade.—The exports of the kingdom of Naples are wheat, barley, legumes, Indian corn; hemp, linſeed, cummin, fennel, and anniſeeds; wool, oil, wine, cheeſe, fiſh, ſalt-fleſh, honey, wax, freſh and dried fruit, manna, ſaffron, liquorice, feccia brucciata, gums, locuſt-beans, capers, lupins, paſte, macaroni of various ſorts, ſalt, pot-aſh, brimſtone, nitre, argal, pitch, tar, ſumach, ſkins, cattle, oranges, lemons, brandy, vinegar, metals, minerals, marble, ſilk, hemp, flax, cottons, and divers ſorts of manufactures. All theſe products might be ſent out in very great quantities, if proper encouragement were given; and both horſes and cattle might become valuable articles of exportation, if the breed were attend to. The chief exportation of corn is made from the provinces of Capitanata, Bari, Otranto, Abruzzo, Moliſe, Calabria, and Baſilicata; they ſupply the internal conſumption of the kingdom, and foreign markets. The product of the Terra di Lavora, and Salerno is reſerved for the uſe of the capital. The provinces moſt abundant in oil are Bari, Otranto, Calabria, and Abruzzo. The produce of ſilk in the kingdom is computed at about 800,000lbs. weight annually, of which half is ſuppoſed to be worked at home, and the other half exported raw; double the quantity may be ſold unwrought, and double might be manufactured, were it not prevented by the high duties on exportation and importation into the capital, together with the tyranny and exactions of the exciſe-officers of the provinces. The exportation of thrown ſilk, upon an average of many years, amounts to 148,217lbs. The exportation of raw ſilk from the Calabrias, through the cuſtom-houſe, is about 53,000lbs. but perhaps double that quantity is ſmuggled by Leghorn, and other parts. No ſmall quantity of cotton is gathered in the Terra di Bari, and the diſtricts of the cities of Turſi and Gravina; but the beſt is in the province of Otranto. Venice takes off annually a conſiderable quantity of cotton, alſo of wool; almonds abound in the territories of Bari, Otranto, and the Abruzzi; but the beſt come from Bari, whence they are exported to Venice and Trieſte; a high duty ruins this trade. In Calabria, there are natural mountains of ſalt, ſtronger and more active than ſea-ſalt; but the mines are ſhut up not to hurt the revenue, which reaps great benefit by the high duties upon that article. At Naples the gabel is almoſt five times more than the firſt coſt of the commodity in Sicily.

Among the chief articles imported into Naples, are: From England, woollen goods of all ſorts, ſilk and worſted ſtockings, hats, tanned hides, lead, tin, pepper, hardware, linens, handkerchiefs, fans, canes, gums, dying woods, drugs, watches, clocks, mathematical inſtruments, houſehold furniture, ſalt cod, pilchards, herrings, coffee, tea, cocoa, ſugar, and occaſionally callicoes, and Eaſt-India goods. From Holland, cinnamon, cloves, nutmegs, pepper, medicinal drugs from the Eaſt and Weſt-Indies, fine cloths, particularly the black, called Segovia, linen for ſhirts and other uſes, muſlin, chintz, callicoes, ſeveral ſorts of cocoa, whalebone, tobacco, ſilk ſtuffs, and velvet. From France, an immenſe quantity of ſugar, indigo, coffee, dying woods, verdigris, Levant drugs, cocoa, hardware, ſilk ſtuffs, gold and ſilver ſays of Le Mans, duroys, cloths of Elbeuf, and all ſorts of women's apparel. From Spain, cochineal, dying woods, cocoa, hides ſalted and in the hair, medicinal American drugs, Jeſuits bark, ſarſaparilla, jalap, balſam of Peru, ipecacuhana, cloths of divers ſorts, wine, tobacco, ſnuff of Seville and Havanna, lead, gun-barrels, honey, &c. From Portugal, Braſil ſugars, tobacco, cocoa, drugs, hides, &c. From Venice, books, cordovans, looking-glaſſes, cryſtals, and glaſſes of all ſorts, luſtres, coach and window glaſſes, Padua cloths, called Venetian ſays, for the conſumption of the provinces, fine Verona cloths, equal to Engliſh ſcarlet, ſtockings, caps made of wool, fine hats, uſed in the provinces, wax candles, white loaf-ſugar, fine linen, medicinal and Levant drugs, all ſorts of paints, ſublimate, cinnabar, quickſilver, turpentine, dragons blood, copper, iron of divers ſorts of the manufactures of Germany and Breſcia, paper, &c. From Genoa, American goods from the Spaniſh Main, and the Portugueſe Eaſt-Indies, velvets, iron in great quantity, nails, ordinary hats, wax from Tunis, and the African coaſt. From Leghorn, all ſorts of goods, at ſecond hand from the Levant, Barbary wools, linens of Egypt, wax, and many ſilk manufactures. From Peterſburgh, hides, wax, iron, furs, &c. From Sardinia, an immenſe quantity of tunny fiſh, and cheeſe. From Germany, Sileſia linens of all ſorts, white and painted, iron of divers manufactures, vitriol of Hungry, cryſtals of Bohemia, large glaſſes for coaches and windows, hats, and goods of the new Vienna fabric, turpentine, quickſilver, hardware, manufactures of Oſnaburg and Nuremberg, copper, tin plates, boards, cloth, &c. The duties in general upon goods imported into the city of Naples, amount to about 25 per cent. upon the cuſtom-houſe eſtimation, paying *ad valorem*; ſugar and wax, by the new impoſitions, pay 40 or 50 per cent. upon the market-price. The duty upon ſugar produces about 80,000 ducats annually.

Rivers, Mountains, &c.—Of rivers there is not any one of note in the kingdom; but ſmall ſtreams deſcend, in every direction, with rapidity from the interior parts, and loſe themſelves in the ſea. Among the chief mountains of Naples are the Apennines, which extend through the whole length of the country, and terminate at the ſtraits of Sicily. A conſiderable part of this country, as well as other provinces in Italy, has been at remote periods affected by fire. This fact is ſufficiently teſtified by the preſent appearance of the country. Naples, Rome, and moſt of the ancient Roman highways, are paved with lava, and the foundations of the houſes in the ſubterraneous city of Herculaneum, are compoſed of the ſame materials. All the mountains and hillocks in the vicinity of Naples, are merely a maſs of various ſorts of matter vomited forth by volcanos which no longer exiſt, and whoſe eruptions, anterior to hiſtory, have probably formed the ports of Naples and Puzzuoli. The Apennine mountains exhibit a conſiderable number of viſible fires under different forms; and the earthquakes to which this country is ſubject,

ject, have diſtreſſed its inhabitants with frequent apprehenſions and calamities. A hiſtory of Naples would not be complete, if it did not include that of the famous mountain from which theſe wonderful ſtreams of lava proceed.

Mount Veſuvius, as is well known, is a celebrated volcano, about ſix miles ſouth-eaſt of the city of Naples. It appears an inſulated mountain, ſtanding in the middle of a plain, but is conſidered as connected with the Apennines. The baſe of the mountain is about 40 miles in circumference; the height is ſtated at from 3700 to 3900 Engliſh feet. Veſuvius has two ſummits; the moſt northern is called *Somma*, the other is properly called *Veſuvius*. Somma is ſuppoſed, with much reaſon, to have been part of the cone of a larger volcano, in which the preſent volcanic cone of Veſuvius was formed. "It is impoſſible," ſays ſir James Hall, "to ſee the mountain of Somma, which, in the form of a creſcent, embraces Veſuvius, without being convinced that it is a fragment of a larger volcano, nearly concentric with the preſent cone; which in ſome great eruption has deſtroyed all but this fragment. In our own times, an event of no ſmall magnitude has taken place in the ſame ſpot: the inner cone of Veſuvius having undergone ſo great a change during the eruption in 1794, that it now bears no reſemblance to what it was in 1785." *Tranſ. of the Royal Society of Edinburgh*, vol. vii.

The ſide of this mountain next the ſea yields wine, particularly the two famed wines called *Vino Greco* and *Lachrymæ Chriſti*. One of the greateſt inconveniencies to which this kingdom is expoſed, is earthquakes; which the eruptions of Mount Veſuvius contributes, in ſome meaſure, to prevent.

From the building of Rome to the year 79 of the Chriſtian era, a period of ſeven centuries, Veſuvius appears to have been in a ſtate of profound repoſe, as no mention is made of any eruption during the whole of that time; and the ancient writers who refer to this mountain always ſpeak of its extraordinary beauty and fertility. There were, however, certain appearances near the ſummit which left no doubt of its prior volcanic ſtate, and the cities in its vicinity were paved with the lavas of ancient eruptions.

Vitruvius, who flouriſhed in the reign of Auguſtus, ſays (lib. ii. cap. 6.) "that Veſuvius had formerly been burning, and had covered all the adjacent country with its fires." Diodorus Siculus, who wrote at the latter end of the ſame reign, refers to a tradition of a volcanic eruption of Veſuvius ſeen by Hercules. Strabo, a contemporary writer, deſcribing this mountain, ſays, "here riſes Veſuvius, inhabited through all its delicious fields, the ſummit alone excepted, which ſpreads into a barren plain, diſplaying aſhes and caverns formed of burnt rock;" whence it may be conjectured, that this ſummit was formerly in a ſtate of conflagration, and preſented fiery craters, which became extinguiſhed when the materials were exhauſted. Silius Italicus, in the time of Nero, ſays, "Veſuvius, by its fires, had formerly cauſed great ravages both on the land and at ſea."

The firſt great eruption on authentic record took place in the reign of Titus, on the 24th of Auguſt, A.D. 79; and on the ſame day the towns of Herculaneum, Pompeii, and Stabiæ, were buried under ſhowers of volcanic ſand, ſtones, and ſcoriæ. Such was the immenſe quantity of volcanic ſand (called aſhes) thrown out during this eruption, that the whole country was involved in pitchy darkneſs; and, according to Dion, the aſhes fell in Egypt, Syria, and various parts of Aſia Minor. The particulars of this eruption are deſcribed in a letter from the younger Pliny to Tacitus: his uncle, the elder Pliny the naturaliſt, loſt his life by this event. He had the command of the Roman fleet on the coaſt of Campania; and, wiſhing to ſuccour thoſe perſons who might deſire to eſcape by ſea, and alſo to obſerve this grand phenomenon more nearly, he left the Cape of Miſenum, and approached the ſide of the bay neareſt to Veſuvius. He landed and advanced towards it; but was involved in whirlwinds of ſulphureous vapour, in which he expired.

After this period, Veſuvius continued a burning mountain for nearly a thouſand years, having eruptions of lava at intervals. The fire then appeared to become entirely extinct, and continued ſo from the beginning of the twelfth century to the beginning of the ſixteenth, a period of about 400 years. Woods were growing on the ſides of the crater, and pools of water were collected in its centre. In the year 1538, a mountain, three miles in circumference and a quarter of a mile in perpendicular height, was thrown up in the courſe one night. Since the eruption of 1538, it has remained burning to the preſent time, having violent eruptions of lava and aſhes at intervals. Theſe have been more frequent during the laſt century and the beginning of the preſent, than at any former period. Of twenty-nine eruptions which took place from the time of Titus to 1800, fourteen occurred in the laſt century: ſeveral have taken place ſince the commencement of the preſent century, and the volcano is at this time in a ſtate of activity.

The eruptions of Veſuvius are always preceded by earthquakes more or leſs violent and extenſive, and by a ſucceſſion of ſubterranean exploſions, growing louder before the ſtones or lava are ejected. Sir William Hamilton, the Engliſh ambaſſador to the court of Naples from the year 1766 to the latter end of the century, has given ſeveral intereſting deſcriptions of the eruptions that took place under his own obſervation, which are publiſhed in the Tranſactions of the Royal Society. From 1769 to 1779 there were nine eruptions, many of them conſiderable. Moſt of the eruptions of Veſuvius take place from the crater at the ſummit; but the eruption of 1794, which deſtroyed Torre del Greco, a city containing 10,000 inhabitants, flowed from a large opening made near the bottom of the cone.

The volcanic products of Veſuvius differ conſiderably from thoſe of Etna, and ſtill more from thoſe of the volcanoes in the Lipari Iſlands, more immediately in its vicinity. White pumice and obſidian, a volcanic glaſs, have not been found among the lavas of Veſuvius; but they contain imbedded cryſtals of leucite, veſuvian, and ſommite, which are almoſt peculiar to this volcano. The lavas of Veſuvius, beſides iron, contain alſo copper; and ſome of them are ſaid to contain a portion of gold, ſilver, and other metals.

The firſt great eruption taken notice of by ſir William Hamilton was that of 1767, which, though very violent, was mild in compariſon with that of 1538. However, in the month of Auguſt, 1779, an eruption took place, which, for its extraordinary and terrible appearance, may be reckoned among the moſt remarkable of any recorded concerning this or any other volcano. During the whole month of July, the mountain continued in a ſtate of fermentation. Subterraneous exploſions and rumbling noiſes were heard; quantities of ſmoke were thrown up with great violence, ſometimes with red-hot ſtones, ſcoriæ, and aſhes; and towards the end of the month, theſe ſymptoms increaſed to ſuch a degree, as to exhibit, in the night-time, the moſt beautiful fire works that can be imagined.

On Thurſday the 5th of Auguſt, the volcano appeared moſt violently agitated; a white and ſulphureous ſmoke iſſued continually and impetuouſly from its crater, one puff ſeeming to impel another; ſo that a maſs of them was ſoon accumulated, to appearance four times the height and ſize of the volcano itſelf. Theſe clouds of ſmoke were exceedingly white, ſo that the whole reſembled an immenſe accumulation of bales of the whiteſt cotton. In the midſt of this very white ſmoke, vaſt quantities of ſtones, ſcoriæ, and aſhes, were thrown up to the height of 2000 feet; and a quantity of liquid lava, ſeemingly very heavy, was lifted up juſt high enough to clear the rim of the crater, and take its way down the ſides of the mountains. This lava, having run violently for ſome hours, ſuddenly ceaſed juſt before it had reached the cultivated parts of the mountain, near four miles from the ſpot whence it iſſued. The heat, all this day, was intolerable at the towns of Somma and Ottaiano; and was ſenſibly felt at Palma and Lauri, which are much farther off. Reddiſh aſhes fell ſo thick on the two former, that the air was darkened, and objects could not be diſtinguiſhed at the diſtance of ten feet. Long filaments of a vitrified matter, like ſpun glaſs, were mixed and fell with theſe aſhes; ſeveral birds in cages were ſuffocated, and the leaves of the trees in the neighbourhood of Somma were covered with white and very corroſive ſalt.

About twelve at night, on the 7th, the fermentation of the mountain ſeemed greatly to increaſe. Our author was watching the motions of the volcano from the mole at Naples, which has a full view of it. Several glorious pictureſque effects had been obſerved from the reflection of the deep red fire within the crater of Veſuvius, and which mounted high amongſt thoſe huge clouds on the top of it: when a ſummer-ſtorm, called in that country a *tropea*, came on ſuddenly, and blended its heavy watery clouds with the ſulphureous and mineral ones, which were already like ſo many other mountains piled up on the top of the volcano. At this moment a fountain of fire was ſhot up to an incredible height, caſting ſo bright a light, that the ſmalleſt objects were clearly diſtinguiſhable at any place within ſix miles or more of Veſuvius. The black ſtormy clouds, paſſing ſwiftly over, and at times covering the whole, or a part, of the bright column of fire, at other times clearing away and giving a full view of it, with the various tints produced by its reverberated light on the white clouds above, in contraſt with the pale flaſhes of forked lightning that attended the tropea, formed ſuch a ſcene as no power of art can expreſs. One of his Sicilian majeſty's gamekeepers, who was out in the fields near Ottaiano whilſt this ſtorm was at its height, was ſurpriſed to find the drops of rain ſcald his face and hands; a phenomenon probably occaſioned by the clouds having acquired a great degree of heat in paſſing through the above-mentioned column of fire.

On the 8th, the mountain was quiet till towards ſix o'clock in the evening, when a great ſmoke began to gather over its crater; and about an hour after a rumbling ſubterraneous noiſe was heard in the neighbourhood of the volcano; the uſual throws of red-hot ſtones and ſcoriæ began and increaſed every inſtant. The crater, viewed through a teleſcope, ſeemed much enlarged by the violence of laſt night's exploſions, and the little mountain on the top was entirely gone. About nine o'clock, a moſt violent report was heard at Portici and its neighbourhood, which ſhook the houſes to ſuch a degree as made the inhabitants run out into the ſtreets. Many windows were broken and walls cracked by the concuſſion of the air on this occaſion, though the noiſe was but faintly heard at Naples. In an inſtant a fountain of liquid tranſparent fire began to riſe, and, gradually increaſing, arrived at laſt at the amazing height of ten thouſand feet and upwards. Puffs of ſmoke, as black as can poſſibly be imagined, ſucceeded one another haſtily, and accompanied the red-hot tranſparent and liquid lava, interrupting its ſplendid brightneſs here and there by patches of the darkeſt hue. Within theſe puffs of ſmoke, at the very moment of emiſſion, a bright but pale electrical fire was obſerved playing briſkly about in zig-zag lines. The wind was ſouth-weſt, and, though gentle, was ſufficient to carry theſe puffs of ſmoke out of the column of fire; and a collection of them by degrees formed a black and extenſive curtain behind it; in other parts of the ſky it was perfectly clear, and the ſtars bright. The fiery fountain of ſuch immenſe magnitude, on the dark ground juſt mentioned, made the fineſt contraſt imaginable; and the blaze of it, reflected from the ſurface of the ſea, which was at that time perfectly ſmooth, added greatly to this ſublime view. The lava, mixed with ſtones and ſcoriæ, having riſen to the amazing height already mentioned, was partly directed by the wind towards Ottaiano, and, partly falling, ſtill red-hot and liquid, upon the top of Veſuvius, covered its whole cone, part of that of the ſummit of Somma, and the valley between them. The falling matter, being nearly as inflamed and vivid as that which was continually iſſuing freſh from the crater, formed with it one complete body of fire, which could not be leſs than two miles and a half in breadth, and of the extraordinary height above mentioned, and caſt a heat to the diſtance of at leaſt ſix miles round. The bruſhwood on the mountain of Somma was ſoon in a blaze, and the flame of it, being of a different colour from the deep red of the matter thrown out by the volcano, and from the ſilvery blue of the electrical fire, ſtill added to the contraſt of this moſt extraordinary ſcene. The black cloud, increaſing greatly, once bent towards Naples, and threatened the city with ſpeedy deſtruction; for it was charged with electrical fire, which kept conſtantly darting about in bright zig-zag lines. This fire, however, rarely quitted the cloud, but uſually returned to the great column of fire whence it proceeded; though once or twice it was ſeen to fall on the top of Somma, and ſet fire to ſome dry graſs and buſhes. Fortunately the wind carried back the cloud juſt as it reached the city, and had begun to occaſion great alarm. The column of fire, however, ſtill continued, and diffuſed ſuch a ſtrong light, that the moſt minute objects could be diſcerned at the diſtance of ten miles or more from the mountain. Mr. Morris informed our author, that at Sorrento, which is twelve miles diſtant from Veſuvius, he read the title-page of a book by that volcanic light.

Some time after the eruption had ceaſed, the air continued greatly impregnated with electrical matter. The duke of Cottonano told our author, that having, about half an hour after the great eruption had ceaſed, held a Leyden bottle, armed with a pointed wire, out at his window at Naples, it ſoon became conſiderably charged. But, whilſt the eruption was in force, its appearance was too alarming to allow one to think of ſuch experiments. He was informed alſo by the prince of Mileto, that his ſon, the duke of Popoli, who was at Monte Mileto the 8th of Auguſt, had been alarmed by the ſhower of cinders that fell there; ſome of which he had ſent to Naples, weighing two ounces; and that ſtones of an ounce weight had fallen upon an eſtate of his ten miles farther off. Monte Mileto is about thirty miles from the volcano. The abbé Cagliani alſo related that his ſiſter, a nun in a convent of Manfredonia, had written to inquire after him, imagining that Naples muſt have been deſtroyed, when they, at ſo great a diſtance, had been alarmed by a ſhower of aſhes which fell on the city at eleven o'clock at night, ſo much as to open all the churches, and go to prayers. As the great eruption happened at nine o'clock, theſe aſhes muſt have travelled 100 miles in the ſpace of two hours.

Nothing could be more diſmal than the appearance of Ottaiano after this eruption. The houſes were unroofed, and half buried under the black ſcoriæ and aſhes; all the windows towards the mountain were broken, and ſome of the houſes themſelves burnt; the ſtreets choked up with aſhes, in ſome narrow places not leſs than four feet thick; and a few of the inhabitants, who had juſt returned, were employed in clearing them away, and piling them up in hillocks, to get at their ruined houſes. The palace of the prince of Ottaiano is ſituated on an eminence above the town, and nearer the mountain. The ſteps leading up to it were deeply covered with volcanic matter; the roof was totally deſtroyed and the windows broken, but the houſe itſelf, being ſtrongly built, had not ſuffered much. The habitations of about 12,000 perſons were deſtroyed; a vaſt number of perſons were bruiſed, but only two lives were loſt. The damage was eſtimated at 300,000 ducats.

An incredible number of fragments of lava were thrown out during the eruption, ſome of which were of immenſe magnitude. The largeſt, meaſured by ſir William Hamilton, was 108 feet in circumference and 17 in height. This was thrown at leaſt a quarter of a mile clear of the mouth of the volcano. Another, 66 feet in circumference and 19 in height, being nearly of a ſpherical figure, was thrown out at the ſame time, and lay near the former. This laſt had the marks of being rounded, nay almoſt poliſhed, by continual rolling in torrents or on the ſea-ſhore. Our author conjectures that it might be a ſpherical volcanic ſalt, ſuch as that of 45 feet in circumference mentioned by M. de St. Fond in his Treatiſe of Extinguiſhed Volcanoes. A third, of 16 feet in height and 92 in circumference, was thrown much farther, and lay in the valley between Veſuvius and the Hermitage. It appeared alſo, from the large fragments that ſurrounded this maſs, that it had been much larger while in the air.

From the time of this great eruption to the year 1784 our author kept an exact diary of the operations of Veſuvius, with drawings, ſhowing, by the quantity of ſmoke, the degree of fermentation within the volcano. The operations of the ſubterraneous fire, however, appear to be very capricious and uncertain. One day there is the appearance of a violent fermentation, and the next every thing is tranquil; but, whenever there has been a conſiderable ejection of ſcoriæ and cinders, it has been a conſtant obſervation, that the lava ſoon made its appearance, either by boiling over the crater, or forcing its way through the crevices in the conical part of the mountain. An eruption took place in the month of November 1784, and continued for ſome time, but without any remarkable circumſtance.

Breiſlak, an Italian geologiſt, has given an account of the preſent ſtate of Veſuvius, and an intereſting deſcription of the very remarkable eruption of 1794; the moſt important particulars of which we ſhall ſelect. This eruption was ſo great as to change the very form of Veſuvius, as we have before obſerved.

“ The preſent cone of Veſuvius is truncated, ſo as to form an inclined plane, ſloping from the north-eaſt to the ſouth-weſt. The circumference of the ſummit, which forms the brim of the cauldron, is about 3000 feet; and at the bottom is diſtinguiſhed an oblong plain, the greateſt diameter of which is from eaſt to weſt. Having ſince aſcended ſeveral times to the top of the cone, I perceived that its depth had gradually diminiſhed, and that the bottom of the crater became higher daily, owing to the different matter which falls down, eſpecially from the almoſt-perpendicular ſides on the eaſt and north. One can at this time eaſily ſcan the extent and depth of its mouth, but occaſionally it is much encumbered, and ſometimes totally clogged. In 1755, the bottom of the funnel roſe ſo conſiderably, that it preſented a vaſt plain only twenty-three feet beneath the brim; and in the midſt of this plain was another cone from eighty to ninety feet high, with a ſmall crater, from which the eruptions proceeded. Braccini has left us a curious deſcription of the ſtate of Veſuvius after a long period of reſt, and before the grand eruption of 1631. The whole of it, or at leaſt the greater part of it, had become acceſſible. Having himſelf deſcended into the crater, he ſays, he found it covered with plants and trees, and that a road down it was practicable for the ſpace of a mile; at this depth a very deep cavern was ſeen, which having paſſed, the way was again open two miles by a very ſteep, but at the ſame time very ſafe, road, owing to the trees growing near to each other. At length a large plain preſented itſelf, ſurrounded by a number of grottoes and caverns, which might be entered, but which the party were deterred from on account of their darkneſs. This plain, which was not acceſſible otherwiſe than by a very rapid ſlope, nearly three miles in length, muſt aſſuredly have been much beneath the level of the ſea.

“ When the volcano is at reſt, vapours are ſeen to riſe from the cauldron's brim, or from the interior of its ſides, which are very perceptible. When the mouth of Veſuvius is obſerved from any diſtance, and during the prevalence of moiſture in the atmoſphere, a maſs of vapour ſeems to riſe from it which mingles with the clouds.

“ The weſtern portion of Somma muſt be conſidered as connected with the cone of Veſuvius by a hill of ſmaller eminence, denominated Monte Cantaroni, on which is the hermitage del Salvatore. This hill is interſected by three valleys, that deſerve to be examined with attention on account of the quantity of primitive ſubſtances which the volcano has thrown thither during old eruptions. The northern valley is that termed La Foſſa di Pharaone near the plain, and Vallone della Vetrana in its more elevated part, where the current of lava flowed in 1785. This vale, hollowed by rains, is the only interval between Mount Somma and Mount Cantaroni. South of this vale are two others, nearly parallel, the firſt called Rio Cupo, the ſecond Foſſa Grande, which, taking a direction from eaſt to weſt, emerge in the plain of St. Jorio. Its northern ſide, nearly perpendicular, riſes to a conſiderable height above the valley; and, being compoſed only of cemented fragments of porous lava, called capillo, of maſſes of ſpongy lava, and other ſubſtances of an inadheſive quality, is ſubject frequently to crumble and fall in large quantities. Along the whole extent of the ſouthern ſide, at its upper part, is ſeen an ancient current of lava, which at firſt ſight appears to be ſeveral ſtrata of lava impoſed one on the other, but which a little attention ſhows is but one current, in which horizontal chaſms have been occaſioned by refrigeration, and into which the wind has ſince introduced a ſlight quantity of vegetable earth. This lava is hard and compact; it contains but few fragments of augite or pyroxene, and ſeems to be an aſſemblage of leucites, the ſuperficial cryſtalline luſtre of which, having been impaired by decompoſition, makes it reſemble variolite in its exterior. Many detached maſſes of this current have fallen to the bottom of the valley. Each fall of matter brings down calcareous ſtones, mica, and mixtures of felſpar and veſuvian. The lava of 1767, which threatened the villages of La Barra and St. Jorio, diſcharged itſelf into this valley, which it filled to a certain height, and afterwards flowed farther, ſpreading itſelf to the plain. As it is already covered by the crumblings from the ſides, in order to examine it, the inquirer muſt repair to the plain of St. Jorio, in the neighbourhood of the chapel of St. Vito. The lava of La Scala paſſes beneath the garden of La Favorita. It is of the colour of aſhes, whitiſh, and of a cryſtallized grain. It contains many cryſtals of pyroxene, few of leucite, and ſmall pieces of felſpar, in groups in its cavities. This lava, where it is hewn on the ſea-ſhore near La Cavalleria, is worthy of attention. Under an uniform bed, from fifteen to twenty feet in thickneſs, the lava is found divided into ſtrata of from three to four feet: theſe diviſions are formed by parallel and horizontal lines; and, where theſe are dug down to, the lava is found to have ſeparated itſelf ſpontaneouſly into beds. Below them are large priſms, commonly hexagonal, which are disjoined with great eaſe: in ſome places theſe priſms, inſtead of the lower, are found in the upper, part of the current. The ſame tendency to a baſaltic conformation, which is noticed in the lava of La Scala, is obſerved again in the neighbouring current of Calaſtro. This, after paſſing through a defile below Vallelonga, ſpreads to a broad front on reaching the ſea. What moſt deſerves obſervation in the lava here, are the ſmall cryſtallizations it preſents, which ſeem to be the olivine of Werner. It is moreover of a deeper colour than the lava of Scala, more porous, and like that contains many cryſtals of augite and fragments of felſpar.

“ Next to this lava is found that of the eruption of 1794. Of the different eruptions of Veſuvius, that is the moſt recent, and was one of the moſt conſiderable. Veſuvius had continued tranquil for a long time. On the 12th of June, 1794, towards eleven in the evening, a very violent ſhock of an earthquake was felt, which induced many of the inhabitants of Naples to leave their houſes for the night. The tranquillity of the mountain did not, however,

ever, appear diſturbed, either on the 13th, 14th, or 15th, nor did it exhibit any ſymptoms of an approaching eruption; but towards nine in the evening of the laſt day many ſymptoms were manifeſted. The houſes about the mountain experienced violent ſhocks, which gradually increaſed in force: a very powerful one was felt at ten o'clock in Naples and its environs. At this inſtant, on the weſtern baſe of the cone, at the ſpot called La Pedamentina, and from the midſt of ancient torrents, a new mouth diſgorged a ſtream of lava. This opening was 2375 feet in length, and 237 in breadth. Scarcely had the ſtream of lava begun to flow, before four conical hills, each having its ſmall crater, (the third alone excepted, which had two diſtinct mouths,) aroſe out of the ſtream itſelf. From theſe different mouths ſtones were darted into the air with great noiſe, and in a ſtate ſo highly ignited, that they reſembled real flames; the exploſions indeed were ſo quickly repeated, that they ſeemed but one, and formed a continued ſheet of fire in the air, which received no other interruption than what was occaſioned by the inferiority of force of ſome of the ejections. They ſometimes vomited ſubſtances, I may ſay, in a fluid ſtate, for they expanded in the air like a ſoft paſte; ſo that one may imagine they were either a part of the running lava, or maſſes of old lava fuſed and projected. Some of theſe hills were contiguous one to the other; and it ſeems as if the force by which they were produced had met with obſtruction to the diſgorgement of the ſubſtances at one point, and conſequently effected ſeveral iſſues in the ſame line. The lava flowed in one body for ſome time, and at intervals flaſhes of light aroſe from the ſurface of it, produced by jets of hydrogenous gas, which diſengaged itſelf from the lava preciſely in the ſame manner as the gaſes expand from the ſurface of a fluid. Its firſt direction was towards Portici and Reſina, ſo that the inhabitants of Torre del Greco already bewailed the fate of their neighbours, and began their thankſgivings to the Almighty for their eſcape. Collected together in the church, they were ſtill ſinging hymns of joy, and expreſſing their gratitude, when a voice announced to them the fatal news of their altered deſtiny. The ſtream of lava, on flowing down a declivity it met in its way, divided itſelf into three branches; one, bearing towards Sta Maria de Pugliano, traverſed a ſpace of 2063 feet; another, directing its courſe towards Reſina, flowed to the diſtance of 3181 feet; while the remainder of the ſtream, falling into the Valley of Malomo, flowed towards La Torre. On reaching the chapel of Bolzano, it formed a branch towards the ſouth-eaſt, which terminated in the territory of Aniello Tirone, after having run the length of 1490 feet; the reſidue of the lava, purſuing its courſe, flowed upon Torre, preſenting a front from 1200 to 1500 feet in breadth, and filling ſeveral deep ravines.

"On reaching the firſt houſes of the town, the ſtream divided according to the different ſlopes of the ſtreets, and the degrees of oppoſition preſented by the buildings. An idea may eaſily be formed of the accidents conſequent on ſuch a flood of fire; accidents which bear relation to the ſcite of the manufactories, the thickneſs of their walls, and the manner in which they were aſſailed by the lava. Had not the maſs of the ſtream ſuffered a diminution from the different divergencies noticed, not a ſingle houſe would have been left ſtanding in Torre del Greco. The lava, after a ſerpentine courſe through the town, at length reached the ſea-ſhore. The contact with the water diminiſhed the ſpeed of its courſe: ſtill the current flowed into the ſea in a body 1127 feet in breadth, and advanced into it a diſtance of 362 feet. Its entrance into the ſea was not marked by any ſingular phenomenon; it began to iſſue from the volcano at ten at night, and reached the ſea-ſhore by four in the morning; continuing a very ſlow progreſſive movement into the ſea throughout the whole of the 16th, and the following night. The main ſtream, from the point where it iſſued from the volcano to that at which it ſtopped in the ſea, meaſured 12,961 feet. Its breadth varied greatly; in ſome places it ſcarcely exceeded 322 feet, but in the plain it ſpread to 1111; and at a medium, without riſk of any great error, it may be computed to have been 725 feet broad. In thickneſs alſo it differed according to the depth of the hollows it filled; in the plain it was conſtantly from twenty-four to thirty-two feet thick: and, if its mean thickneſs be reckoned at the latter number of feet, it may poſſibly be neareſt the truth. According to theſe data, the maſs of molten matter is 1,869,627 cubic fathoms. During the eruption the convulſion of the mountain was ſo great, that even the houſes in Naples were ſhaken by it. Still it was not conſtantly alike. At the beginning the trembling was continual, and accompanied by a hollow noiſe, ſimilar to that occaſioned by a river falling into a ſubterranean cavern. The lava, at the time of its being diſgorged, from the impetuous and uninterrupted manner in which it was ejected, by ſtriking againſt the walls of the vent, occaſioned a continual oſcillation of the mountain. Towards the middle of the night this vibratory motion ceaſed, and was ſucceeded by diſtinct ſhocks. The fluid maſs, diminiſhed in quantity, now preſſed leſs violently againſt the walls of the aperture, and no longer iſſued in a continual and guſhing ſtream, but only at intervals, when the interior fermentation elevated the boiling matter above the mouth. About four in the morning the ſhocks began to be leſs numerous, and the intervals between them rendered their force and duration more perceptible. One might compare them to the thunder heard in Italy during ſtorms in ſummer, the loudeſt claps of which are ſucceeded by rumbling ſounds, which gradually die away.

"While I was making my obſervations on this grand eruption at the foot of Veſuvius, its ſummit was tranquil, and no phenomena were viſible about its crater. I paſſed the night at ſea, between Calaſtro and La Torre, to have a nearer view of this great operation of nature, and to prove the truth of the opinion generally received, that great eruptions are accompanied by extraordinary phenomena in the ſea. A more grand ſpectacle there could not be. On one of thoſe ſerene and brilliant nights, known only in the delightful climate of Naples, a majeſtic ſtream of fire, 11,868 feet in length, and 1483 in breadth, was ſeen at the foot of Veſuvius; its reflected ſurface formed in the atmoſphere a broad and brilliant aurora borealis, regularly ſpread and terminated at its upper part by a thick and dark border of ſmoke, which, dilating itſelf in the air, covered the diſc of the moon; the ſhining ſilvery light of which was enfeebled and obſcured. The ſea again reflected the illuminated ſky, the ſurface of it, correſponding with this portion of the atmoſphere, appearing as red as fire. At the ſource of this river of fire inflamed matter was inceſſantly ſpouted out to a prodigious elevation, which, as it diverged on all ſides, reſembled an immenſe fire-work. On the ſea-ſhore, finally, the mournful ſpectacle of the conflagration of La Torre completed the picture. The vaſt clouds of thick black ſmoke which roſe from the town, the flames which occaſionally crowned the ſummits of the houſes, the ruins of the buildings, the noiſe of the falling palaces and houſes, the rumbling of the volcano—theſe were the principal incidents of this horrible, yet ſublime, ſcene. The ruins of Pompeia, buried beneath heaps of droſſes and powders, did not certainly preſent a ſpectacle near ſo ſtriking. To theſe objects, ſo powerfully calculated to fix the ſenſes, was added another, which forcibly touched the heart: this was a doleful group of fifteen thouſand perſons, bewailing the deſtruction of their city and property, who had had but a moment's notice to flee and abandon their homes for ever, and were reduced to become wanderers, and dependent on the world for refuge.

"About dawn, the ſummit of Veſuvius ceaſed to be viſible: it was covered with a thick cloud, frequently furrowed with lightning. This cloud gradually ſpread itſelf, and in a little time overſhadowed the gulf, the city of Naples, and its vicinage. It was formed of a large quantity of that fine ſand called aſhes, and prevented all ſight of the fire of the volcano. The ſun, as it appeared above the horizon, preſented a ſtill more diſmal picture. From the abundance of aſhes in the air, it ſeemed more pale than during the ſtrongeſt eclipſe; and a black ſcarf appeared to be ſpread over the whole of the gulf and the country. At the extremity of the horizon, towards the weſt, the day was more clear, while the light at Naples was fainter than twilight; and, with Pliny the younger, one might have ſaid, *Jam dies alibi illic nox omnibus nigrior denſiorque.*

"While one current of lava flowed over the weſtern ſide of Veſuvius, ſpreading ruin and deſolation; another fell down its eaſtern ſlope, from an opening of inferior height, and a greater diſtance from the ſummit. This current was not viſible at Naples: all that was perceived of it was a great light in the atmoſphere, produced by reflection from the rolling fire. At firſt it took an eaſtern direction, turned afterwards to the ſouth, and deſcended to the ſpot called Cognolo. There it fortunately found the valley of Sorienta, 65 feet wide, 121 deep, and 1627 long. This valley the lava filled; but, as the volcano ſtill continued to emit freſh matter, the current afterwards ſpread into the plain of Forte, near to Pozzelle, where it divided into three branches: one proceeded towards Boſco, another towards Mauro, and the third to the plain of Mulara. The length of this current of lava was not leſs than an Italian mile; but, as it flowed conſtantly over old lavas, it did but little harm, merely laying waſte and occupying a ſmall extent of vineyard. From the ſpot where it diverged from its firſt direction, it projected a ſmall branch in a continued line: falling to this point over a very rapid ſlope, the ſpeed with which it flowed muſt have been conſiderable; and a portion of its maſs, preſerving its firſt impulſe, naturally fell in this ſmall ſtream, in which were four mouths in the ſhape of an inverted cone, the baſe of which is in the ſurface of the lava. This ſtream terminates in a ſmall and regular hill of a conical figure, on the ſummit of which are two mouths in the form of inverted cones. The dimenſions of this ſecond current are nearly half thoſe of the firſt; conſequently the maſs of the whole is adequate to 2,804,440 cubic fathoms.

"The coincidence and perfect reſemblance of theſe two currents of lava ſufficiently prove that they had but one common origin, and but one cauldron in which the matter was fuſed of which they were compoſed. How great then muſt that recipient be in which ſuch an enormous maſs could be contained! and what powerful exertion of ſtrength muſt have been required to break through the mountain in ſuch oppoſite directions! The lava agitated by the expanſion of elaſtic fluids made its firſt efforts to liberate itſelf on the eaſtern ſide, and found a paſſage; but the reſiſtance it met with from the mountain no doubt occaſioned its reflux or rebound againſt the oppoſite ſide. The weſtern current, taking its departure from a more elevated mouth, more quickly terminated its courſe; but the cauldron chiefly emptied itſelf by the eaſtern opening. The lava iſſued from it very ſlowly, compared with the celerity with which that flowed which proceeded from the eaſtern mouth, becauſe it was no longer driven forward, or compreſſed by the total maſs, which was already greatly diminiſhed. On the morning of the 16th, the lava ceaſed to flow over the weſtern ſide, and the mouth of the volcano began to reſume activity. The whole of its cone was covered with a very thick rain of aſhes or duſt, which totally hid it from ſight, ſo that nothing could be diſtinguiſhed on Veſuvius, which was wholly inacceſſible. In this ſtate it continued four days, during which many ſhocks of earthquakes were felt, and loud claps of thunder were heard. Thunders raged in every part of the adjacent country, and the flaſhes of lightning, by which they were accompanied at intervals, for an inſtant allowed a view of the mountain through the darkneſs in which it was involved by the rain of aſhes. This darkneſs was ſo prodigiouſly great, that at Caſerto, and other places ten or twelve miles from Veſuvius, it was impoſſible to walk the ſtreets at mid-day without torches; and that circumſtance was renewed which is related by Pliny on the occaſion of the eruption in the time of Titus; *Faces multæ, variaque lumina ſolvebant obſcuritatem.* It is utterly impoſſible to determine with preciſion the quantity of aſhes or ſand that fell in the courſe of theſe days, as it was different in different places, according to the direction of the wind; it is, however, computed, on the baſis of obſervations at different places, that fourteen inches and ſix lines in depth fell on an area, the radius of which is three miles, the ſummit of Veſuvius being the centre."

It would be erroneous to conclude, that all this maſs of matter proceeded from the entrails of the mountain; the greater part was the offspring of the ruins of the crater, which during the three laſt days fell into the abyſs. For, after the rain of volcanic ſand had ceaſed, and the mountain became viſible, its appearance excited much ſurpriſe: the ſummit had fallen, and its mouth was conſiderably enlarged.

Inceſſant rains followed this eruption, which continued to the 3d of July. Whenever a cloud appeared above the horizon, it ſeemed attracted by the volcano; and ſcarcely did it reach its ſummit ere immenſe ſtreams were viſible, precipitating themſelves with horrible roarings to the baſe of the mountain. Theſe impetuous torrents of water, mingled with volcanic powders, overturned the bridges, harrowed up the roads, tore up the trees, and utterly devaſtated the fields of one of the moſt rich and flouriſhing countries in the world. Mephitic vapours were alſo exhaled, which deſtroyed all other vegetation, except the olive and the pear trees, which retained their verdure and ſtrength. It is remarkable, that during the whole of this eruption the barometer at Naples was not ſenſibly affected, and exhibited no change, although the temperature and moiſture of the atmoſphere experienced conſiderable variation.

We ſhall next mention the earthquake and eruption that took place in July and Auguſt 1805. On the morning of the 26th of July the heat was much greater than on the preceding days. About ſix in the evening a north-weſt wind aroſe, bringing with it ſome thick clouds, which threatened a ſtorm, but which inſenſibly diſperſed. At half paſt eight the wind began to blow from the north, which is called at Naples a land-wind, and which is cold and dry in winter, and hot in ſummer. It was on that day much colder than uſual, and continued for about an hour. At three quarters paſt nine, the ſea, which had been extremely tranquil during the day, began to be diſturbed. Several perſons who were bathing felt the earth fail them under their feet, and the fiſh came up to the ſurface of the water, and appeared agitated in an extraordinary manner. At length, at three minutes before ten, a ſhock of an earthquake was felt, at firſt with a ſlight trembling, and afterwards with a ſtrong undulation, in a direction from north to ſouth, and which laſted from forty-five to fifty ſeconds. At eleven there was another ſhock, but weaker; and at three quarters paſt twelve a third, ſtill ſlighter. The ſky was perfectly ſerene; but on the ſurface of the earth there was a ſort of fog, from which emanated a ſtrong ſmell of ſulphur. From the ſummit of Veſuvius an immenſe and very thick column of ſmoke aroſe; and between the firſt and ſecond ſhock two exploſions were heard, ſimilar to thoſe which precede volcanic eruptions, but weaker. The firſt ſhock ſhook all the bells, which rang ſpontaneouſly. All the clocks and dials in the city, as well public as private, ſtopped at three minutes before ten, the preciſe moment of the firſt ſhock.

Baſſano was the centre of the earthquake, which extended 150 miles in circuit: this city became a lake, and 672 perſons periſhed. At Capua, twenty ſoldiers periſhed under the ruins of the barracks of Santa Maria; ſeveral horſes were alſo killed. In the province of Salerno, and in the three provinces of La Pouille, the ſhock was much ſlighter; but in the county of Moliſe the damage done was very conſiderable. The town of Iſerno was entirely deſtroyed: it contained about ſeven thouſand inhabitants, a ſixth part of whom are ſuppoſed to have periſhed. Campobaſſo, Baſſano, Loppizuto, Pierabondante, Macchia, and ſome other ſmall places in the province of Moliſe, were alſo nearly deſtroyed. It is ſuppoſed that 20,000 perſons periſhed in theſe different places. Great damage was alſo done at Piedimonte di Aliſe, Cajazzo, Caſerta, Santa Maria, Capua, and Roccaromana; but no one was killed.

From an obſervation of the places where damage was done, it appears that the earthquake took a direction from ſea to ſea, in a line which might be drawn from the crater of Veſuvius to that of Pozzuoli. Great damage was done at Briano, the ancient capital of the Samnites, which had already been ſeveral times deſtroyed by the ſame misfortune.

As to the city of Naples, the regiſters of the police only ſtate the number of deaths to be four; that of wounded was conſiderable; a circumſtance which is almoſt a miracle in the midſt of ſo many ruins and ſo much tumult amongſt the inhabitants. The queen, the princeſſes, and prince Leopold, after the firſt ſhock, took refuge in the king's ſtables, and paſſed the night in different carriages. The king, who was at Portici, did the ſame thing. The prince royal and the princeſs were at Caſerta, and experienced no accident. More than two hundred houſes were rendered uninhabitable, and thoſe the moſt ſolidly built, as if nature had taken pleaſure in triumphing over the efforts of art. It is obſervable, that the buildings which ſuffered leaſt were thoſe elevated upon arches. But even in thoſe which ſuffered leaſt, there was not a beam which remained in its place, a gate which would ſhut, or a pillar which retained its ſituation.

A correſpondent gives an account of an eruption which followed, in a letter dated Aug. 13. "Although I expreſſed to you in a former letter my regret that no eruption of Mount Veſuvius took place, and how deſirable it was that a vent ſhould be given by an eruption to the inflammable matter that ſeemed to exiſt in the bowels of the earth, I did not expect to have this day to announce to you, that my wiſhes were accompliſhed laſt night, by an abundant eruption of lava from Mount Veſuvius, which now relieves us, in my humble opinion, from any further apprehenſion of new ſhocks. In the courſe of yeſterday, till ſeven o'clock in the evening, Veſuvius was very quiet, emitting but little ſmoke; it then increaſed, with flames at intervals; after nine o'clock they became frequent; and at ten the eruption took place. We were going to viſit the crater, when the cries of the people, and a volume of flame, informed us that the volcano had opened. The lava precipitated itſelf in three ſeconds from the laſt peak of the mountain, and took a direction towards the valley ſituated between Torre del Greco and Torre del Annunziata, two towns on the ſea-coaſt beyond Portici, and ſeven or eight miles from Naples.

"We ſet off immediately to ſee this wonderful and tremendous phenomenon nearer. From the place of our departure we ſaw the whole courſe of the lava, which extended already two miles from the crater to the houſes that join the two towns. The ſight was the moſt magnificently frightful that could be ſeen. I contemplated the caſcades of flame pouring from the top of the mountain, and ſhuddered at ſeeing an immenſe torrent of fire ravage the fineſt fields, overthrow houſes, and deſtroy, in a few minutes, the hopes and reſources of a hundred families. A line of fire marked the profile of the mountain; a cloud of ſmoke, which ſeemed to ſend forth from time to time flaſhes of lightning, hung over the ſcene; and the moon appeared to be pale. Nothing can adequately deſcribe the grandeur of the ſcene, or give an accurate idea of the horror of it.

"The moment we arrived, the lava was croſſing the great road below Torre del Greco. To ſee it better, we got into a beautiful houſe on the road-ſide. From the terrace we ſaw the fire at no more than fifteen paces from us: in a minute we deſcended, and twenty minutes afterwards there remained of the houſe but three large walls. I approached as near as the heat and flow of the current would permit me. The lava does not run in liquid waves: it reſembles an immenſe quantity of coals on fire, which an invincible ſtrength had heaped up, and puſhed on with violence. When it met with a wall, it collected to the height of ſeven or ten feet, burnt it, and overthrew it at once. I ſaw ſome walls get red-hot, like iron, and melt, if I may uſe the expreſſion, into the lava. In its greateſt ſpeed, and on an horizontal road, I reckoned that the torrent travelled at the rate of eighteen inches a minute. Its ſmell reſembled that of iron red-hot.

"Many very valuable vineyards and farm-houſes have been deſtroyed; and, as the lava ruſhed out with very little noiſe and great rapidity, ſome habitations on the brow of the hill were ſurrounded before the people were aware of the danger, or had time to eſcape; but a great part of the lava ran on that of the year 1779, which renders the miſchief leſs."

The next eruption we have to notice will make the year 1810 an epoch in the annals of Veſuvius, on account of the manner in which it began, and the diſaſters it produced.

It is conſidered as a very extraordinary circumſtance that this eruption was not preceded by the uſual indications; every convulſion of Veſuvius being previouſly announced by the drying up of the wells of Naples. This phenomenon did not take place on this occaſion; and, to the great ſurpriſe of the inhabitants, Veſuvius began to emit flames on the night of the 10th of September. On the morning of the 11th the flames became more intenſe, and the lava began to flow from the eaſt and ſouth-eaſt ſides of the mountain. Towards evening the conflagration increaſed, and about twilight two grand ſtreams of fire were ſeen to flow down the ridge of the volcano: night produced no change in this ſtate of things. On the morning of the 12th a hollow ſound was heard, and continued increaſing; the fire and ſmoke equally augmented in intenſity, and towards evening the horizon was obſcured. The breeze, uſual in theſe parts, having blown from the ſouth-eaſt, diſſipated the accumulated clouds. The mountain continued to vomit lava and a denſe ſmoke, which even at a diſtance was ſtrongly ſulphureous; the hollow noiſe in the ſides of the mountain continued to increaſe.

"Curious to witneſs as near as poſſible one of the moſt aſtoniſhing phenomena of nature, and forgetting the miſfortune of Pliny, I ſet out from Naples, and at eight in the evening I reached Portici. From thence to the ſummit of the mountain the road is long and difficult. About half way there is a hermitage, which has long ſerved for refuge and ſhelter to the traveller; a good hermit has there fixed his reſidence, and takes care to furniſh, for a moderate ſum, refreſhments, which to the fatigued traveller are worth their weight in gold. The environs of this hermitage produce the famous wine called *Lachryma Chriſti*. From the hermitage to the foot of the cave, there is a long quarter of a league of road, tolerably good; but, in order to reach from thence the crater, it is neceſſary to climb a mountain of cinders, where at every ſtep you ſink up to the mid-leg. It took my companions, myſelf, and our guides, two hours to make this aſcent; and it was already midnight when we reached the crater. The fire of the volcano ſerved us for a torch; the noiſe had totally ceaſed for two hours; the flame had alſo conſiderably decreaſed; theſe circumſtances augmented our ſecurity, and ſupplied us with the neceſſary confidence in traverſing ſuch dangerous ground. We approached as near as the heat would permit, and we ſet fire to the ſticks of our guides in the lava, which ſlowly ran through the hollows of the crater. The ſurface of this inflamed matter nearly reſembles metal in a ſtate of fuſion; but as it flows it carries a kind of ſcum, which hardens as it cools, and then forms maſſes of ſcoria, which daſh againſt each other, and roll, all on fire, with noiſe, to the foot of the mountain. Strong fumes of ſulphuric-acid gas ariſe in abundance from theſe ſcoriæ, and by their cauſtic and penetrating qualities render reſpiration difficult. We ſeemed to be pretty ſecure in this ſituation, and were far from thinking of retiring, when a frightful exploſion, which launched into the air fragments of burning rocks to a diſtance of more than an hundred toiſes, reminded us of the danger to which we were expoſed. None of us heſitated a moment in embracing a retreat; and in five minutes we cleared in our deſcent a ſpace of ground which we had taken two hours to climb. We had not reached the hermitage before a noiſe more frightful than ever was heard; and the volcano, in all its fury, began to launch a maſs equal to ſome thouſand cart-loads of ſtones, and fragments of burning rocks, with a projectile force which it would be difficult to calculate. As the projection was vertical, almoſt the whole of this burning maſs fell back again into the mouth of the volcano, which vomited it forth anew to receive it again, with the exception of ſome fragments which flew off, to fall at a diſtance, and alarm the inquiſitive ſpectator.

"The 13th commenced with nearly the ſame appearances as thoſe of the preceding day. The volcano was tranquil, and the lava ran ſlowly in the channels which it had formed during the night; but, at four in the afternoon, a frightful and continued noiſe, accompanied with frequent exploſions, announced a new eruption; the ſhocks were ſo violent, that at Fort de l'Œuf, built upon a rock, where I then was, at the diſtance of near four leagues, I felt oſcillations ſimilar to thoſe produced by an earthquake. About five in the evening the eruption commenced, and continued during great part of the night. This time the burning matter flowed down all the ſides of the mountain, with a force hitherto unprecedented; all Veſuvius was on fire, and the lava has cauſed the greateſt loſſes; houſes and whole eſtates have been overwhelmed; and at this day families in tears and reduced to deſpair ſearch in vain for the inheritance of their anceſtors, buried under the deſtroying lava. At ten at night, the hermitage was no longer acceſſible; a river of fire had obſtructed the road. The diſtricts ſituated on the ſouth-eaſt quarter of the mountain had ſtill more to ſuffer. Mount Veſuvius was no longer any thing but one vaſt flame; and the ſeaman, at a great diſtance, might contemplate, at his leiſure, this terrific illumination of nature."

On Chriſtmas-day, 1813, an alarming eruption commenced at five in the evening, and continued till about two the next afternoon. The exploſion began with a ſhower of volcanic gravel, which was followed by a violent eruption of lava. This ignited matter, having divided itſelf into two torrents, flowed over the ancient lava towards the Torre del Greco. At ten in the evening the firſt torrent ſtopped, but the ſecond continued to flow towards Boſco Reale and Boſco Tre Caſe. Next morning the apparent calm of the volcano was followed by an exploſion reſembling a violent diſcharge of cannon, or the blowing-up of powder-mills. A column of volcanic aſhes roſe in the air, and obſcured the horizon. Redoubled ſhocks made all the houſes in the city of Naples ſhake; but no material damage was done; and about two in the afternoon all was quiet again.

On the 7th of Auguſt, 1816, another eruption took place, preceded, as uſual, by ſhocks of earthquake. Two dreadful and diſtinct torrents of lava iſſued from the crater, and poured down the ſides of the mountain; but we do not hear that any material damage was done.

A gentleman, writing from Naples, under the date of July 20, 1817, ſays, "The preſent eruptions are of a very ſurpriſing nature: copper, iron, alkaline acid, ſulphur, ſulphuric acid, chalk, and frequently ammoniac, form ſalts, that are ſometimes in a maſs, and ſometimes divided. It is obſerved that copper is very much mixed with the volcanic matter; quantities of it are found among the different kinds of lava. This volcano, which ſince the year 1813 has been more or leſs in a ſtate of commotion, has entirely covered its former crater with a thick cruſt, over which the new eruptions have thrown two little mountains, from which come ſmoke, aſhes, and vitrified ſtones. This cruſt is ſo conſiderable, that, if not propped up, the ſinking of the matter compoſing it may produce an effect like that of the eruption which took place in the time of Titus."

Conſidering, then, the danger that attends the neighbourhood of this mountain, we may be ſurpriſed that it ſhould be ſo populous. From Naples to Caſtel-a-Mare, about fifteen miles, the country is ſo thickly ſpread with houſes, that they form one continued ſtreet; and on the Somma ſide of the volcano the towns and villages are ſcarcely a mile from one another: ſo that for thirty miles, which is the extent of the baſis of Mount Veſuvius and Somma, the population may be perhaps more numerous than that of any ſpot of a like extent in Europe, in ſpite of the variety of dangers attending ſuch a ſituation. And one cannot but regret that ſuch a beautiful country as this, bleſſed with an admirable ſoil, fine ſituation, healthy climate, and pure ſky, ſhould be liable to ſuch drawbacks and convulſions of Nature.

NA'PLES, anciently *Parthenope*, afterwards *Neapolis*, the capital of the above kingdom, lies in the province called Terra di Lavora, which is the richeſt and beſt-inhabited of the whole kingdom, and comprehends a part of the ancient *Campania Felix*, or "Happy Country." According to Diodorus Siculus, Hercules was the founder of Naples. This was likewiſe the notion of Oppian. Others declare that it was built by Phocæans, and others again by Ulyſſes, who named it *Parthenope*. To give an air of the greater probability to this laſt ſtory, we are told it was ſo called in memory of one of the Sirens, who, not being able to detain that Greek hero by the harmony of her voice, was ſo fired with rage and deſpair, that ſhe threw herſelf from a precipice, and was buried on the very ſpot where now ſtands the church of St. Gio Maggiore. Other authors aſſert, that it took its name from Parthenope, daughter to a king of Theſſaly, who conducted thither a colony from the iſland of Eubœa, now called Negropont. Dionyſius Alexandrinus affirms, that it owes its origin to one Phalerus, tyrant of Sicily; which is confirmed by Tzetzes, the commentator on Lycophron. Strabo makes it much older; he laying it down as a fact, that Naples was founded by the Rhodians long before the inſtitution of the Olympic games. Be this however as it may, it ſeems clear that Naples exiſted long before Rome itſelf, and that it was founded by the Greeks; and their choice of its ſituation is one proof, among many others, of the fine taſte of that ingenious people. Auguſtus gave it the name of *Neapolis*. The bay is about thirty miles in circumference, and twelve in diameter; it has been called "Crater" from its ſuppoſed reſemblance to a bowl; which bowl is ornamented with the moſt beautiful foliage, with vines, olive, mulberry, and orange, trees, with hills, dales, towns, villas, and villages. At the bottom of the bay the town is built in the form of an amphitheatre, ſloping from the hills towards the ſea. Independently of its ſituation, Naples is a very beautiful city. Although the ſtyle of architecture is inferior to that of Rome, and Naples cannot vie with this city in the number of palaces, or in the grandeur and magnificence of the churches, the private houſes in general are better built, and are more uniformly convenient: the ſtreets are alſo broader and better paved. No ſtreet in Rome equals in beauty the Strada di Toledo at Naples; and ſtill leſs can any of them be compared with the beautiful ſtreets which are open to the bay. This, ſays Dr. Moore, is the native country of the zephyrs; here the exceſſive heat of the ſun is often tempered with ſea-breezes, and with gales, wafting the perfumes of the Campagna Felice. The houſes, in general,

ral, are five or ſix ſtories in height, and flat at the top; on which are placed numbers of flower-vaſes, or fruit-trees, in boxes of earth, producing a very gay and agreeable effect. The fortreſs of St. Elmo is built on a mountain of the ſame name, and the garriſon ſtationed in it has the entire command of the town. A little lower on the ſame mountain is a convent of Carthuſians, upon which a large ſum has been expended in order to render the buildings and gardens equal in point of beauty to the ſituation.

The walls of Naples form a circuit of nine Italian miles; but, including the ſuburbs, the entire circumference cannot be leſs than eighteen or twenty Italian miles. It is embelliſhed by a conſiderable number of fountains, furniſhing indifferent water; and water is alſo conveyed to the city, from the foot of Mount Veſuvius, by a very grand aqueduct.

For the defence of the city, and at the ſame time to keep it in ſubjection, are five caſtles; but, according to the old method, conſiſting only of very ſtrong walls. The Caſtello Nuovo has a communication by a covered way with the king's palace, and on one ſide is contiguous to the ſea. Its ſubterraneous works and mines are admirable. At its entrance ſtands a triumphal arch, of very curious ſculpture. The arſenal is ſaid to contain complete ſets of arms for 50,000 men. The Caſtello del Uovo, ſo called from its oval figure, is of ſome ſtrength, and ſtands on a rock in the ſea. St. Elmo, or St. Eramo, is ſituated on a mountain, towards the weſt, and reſembles a ſtar of ſix rays, which are hewn out of the rock; its ſubterraneous works are wide, lofty, and bomb-proof. It has eight reſervoirs for water. The harbour is ſpacious, and for its greater ſecurity has a canal, and a mole near 500 paces in length; but is by far leſs commodious and ſecure than that of Gaeta, eſpecially in a hard gale at ſouth-weſt.

The ſtreets are in general well-paved, and of a convenient width; but the great number of balconies with latticed windows, and of ſtalls whereon eatables are expoſed to ſale, make them appear to leſs advantage; for every one fixes his ſtall in the ſtreet in the direction that beſt pleaſes his fancy, without the leaſt attention to the convenience of paſſengers; and any one may ſee, with half an eye, that no ſuch regulation as "Mr. Taylor's ſtreet-act" has ever been thought of here. Yet the ſtreets are cleaner than the porticos, the ſtair-caſes, and antichambers, of the palaces; becauſe the filth flows into the ſea by vaſt ſubterraneous ſewers whenever rain falls. Many ſtreets are inhabited by artiſans of the ſame trade; thus the ſhoe-makers, cabinet-makers, ſmiths, coach-makers, &c. have each their ſtreets allotted to them. The Strada di Toledo is appropriated to grand proceſſions, and to maſks at the time of Carnival; at which period, the traveller will be really convinced of the exceſs of jovial delirium that fills the Neapolitan; who, forgetting all his madonnas and acts of piety which occupied him through the year, then conducts himſelf like an actual madman. The ſtreets, till a very few years ago, had neither watchmen nor lamps; but of late years darkneſs was diſpelled in many ſtreets, by the piety of father Rocco, a Dominican, who perſuaded the people to ſubſcribe oil for lamps, to burn before images; he fixed them up in the moſt convenient places, and thus turned their devotion to public account. But, while this city was under the dominion of the French, namely, on the 16th of December, 1806, the ſtreets were regularly lighted with lamps: theſe lamps are reflectors, and hung acroſs the middle of the ſtreets, high enough for the carriages to run under them, as at Paris. The crowds of people to witneſs this ſpectacle were immenſe.

There are five *piazzas*, or ſquares, appropriated to the nobility: they are called Capuana, Nido, Montagna, Porto, and Porto Nova. The commonalty have alſo their peculiar piazza. Each of theſe ſix piazzas chooſes its deputies, who ſuperintend the police of the city, and hold a court for the examination of ſuch public concerns as fall under their cognizance.

Of all the palaces, that of the king is not only the moſt auguſt, but alſo of the neweſt architecture. Near the palace was the theatre of St. Charles, one of the largeſt and moſt ſplendid in Europe. It was entirely deſtroyed by fire on the 17th of February, 1816; and it was with great difficulty that the king's palace was ſaved.

Naples is the ſee of an archbiſhop, whoſe cathedral, called Il Duomo, is a fine Gothic building. The greateſt curioſity in it is the magnificent chapel, called Il Teſoro, where Januarius's head and ſome of his blood are kept. (See Januarius, vol. x.) The unproductive wealth, which is lodged in the churches and convents of this city, amounts to a very large ſum; and, though the churches and convents of Rome ſurpaſs thoſe of Naples in point of architecture, yet the latter are ſuperior to the former in riches, in the value of their jewels, and in the quantity of ſilver and golden crucifixes, veſſels, and implements of various kinds. The monaſteries and convents of both ſexes are computed at 149; beſides which, here are 34 houſes for poor boys, girls, and women, 11 hoſpitals, 4 capital churches, 32 pariſh-churches, 70 other chapels and churches, and upwards of 130 oratories or chapels of religious fraternities. Indeed, the abundance of charitable foundations, well endowed and well adminiſtered, is the moſt ſtriking feature in the portrait of this city. Theſe exiſt among the moſt profligate people in Europe, in a variety and extent almoſt wholly unknown elſewhere. They have founded inſtitutions, the idea of which never entered into the leſs-refined conceptions of more pure and ſober-minded communities. There are above ſixty public charities in the city, of which about thirty are receptacles for orphans, foundlings, magdalens, &c. and five banks for relieving the induſtrious poor by ſmall loans on pledges, at low intereſt, or without any: one of theſe banks, called the Mount of Piety, has a revenue of 50,000 ducats. The nunnery for ladies of quality is ſaid to be the largeſt in the world, containing no leſs than 350 nuns, beſides ſervants. The two principal hoſpitals contain two thouſand and eighteen hundred patients, reſpectively. Theſe have villas annexed to them in the country for thoſe patients whoſe diſeaſes, ariſing from confinement in a crowded town, require free air and exerciſe; and it ſeems to be the general practice, when a patient is diſcharged, to give him as much money as he would have earned during the period of his confinement, had he been in health. In the *conſervatorii*, or charity-ſchools, an immenſe number of poor children are maintained, educated, and trained to handicrafts of various kinds. There are ſome ſchools devoted to muſic alone; and, among the fruits of theſe, the Neapolitans are juſtly proud to reckon Paeſielli, Caffarelli, and Pergoleſe. Of the numerous confraternities, we may mention the one whoſe province is to provide for the comfort of capital convicts, and take care of their families; the Congregation of St. Ivone, compoſed of lawyers, who manage the ſuits of poor clients, and defray all their expenſes; and that of the nobles *for the relief of the baſhful poor;* a ſingular inſtitution, and one of the refinements of charity above alluded to. "The object of this aſſociation, (ſays Mr. Euſtace,) is to diſcover and relieve ſuch induſtrious perſons as are reduced to poverty by misfortune, and have too much ſpirit, or too much modeſty, to ſolicit public aſſiſtance. The members of this aſſociation, it is ſaid, diſcharge its benevolent duties with a zeal, a ſagacity, and, what is ſtill more neceſſary for the accompliſhment of their object, with a delicacy and kindneſs, truly admirable." The want of chaſtity has generally been conſidered as a prevailing vice of the Neapolitans. Yet is it not for want of hoſpitals directed to this object. There are, as the ſame author obſerves, "more retreats opened to repentant females, and more means employed to ſecure the innocence of girls expoſed to the dangers of ſeduction, than are to be found in London, Paris, Vienna, and Peterſburgh, united." He gives, as an inſtance, one *conſervatorio*, where four hundred are educated, and, when marriageable, portioned out.

The *Regi Studii*, or Royal Muſeum of Antiquities, is a very tall and ſpacious edifice. It was originally built for cavalry-barracks, as is ſtill evident from the arrangement of the ground-floor, notwithſtanding the alterations that have ſince been made in it. This was about the commencement of the 17th century, when the city was yet ſurrounded with walls, on the outſide of which it was ſituated, near the Conſtantinople-gate. Thoſe who fixed upon this ſite, however, had overlooked the circumſtance that the ſpot was deſtitute of freſh-water; on which account its firſt deſtination was relinquiſhed. It was then appropriated by the viceroy, count Lemos, to the purpoſes of an academy or univerſity; and the other ſtories, provided with a great number of lecture-rooms and other apartments, were built by his command. A parallel ſtructure was erected for the ſame uſe, and the two wings connected by a centre; all which are reported to have coſt 200,000 ſcudi. The buſineſs of academical inſtruction was committed to the Jeſuits. During the government of the duke of Oſſuna, towards the end of the ſeventeenth century, the firſt arrangements were made for depoſiting here the antique works of art and inſcriptions diſcovered at ancient Cumæ, which formed the firſt little gallery of antiques poſſeſſed by Naples. At the general expulſion of the Jeſuits, they were obliged to evacuate this edifice; upon which, the univerſity founded there was transferred to the college of St. Salvador. About this time, or rather a little earlier, it was reſolved to unite the works of ancient art, dug up at Pompeii, Herculaneum, and in other parts of the kingdom, and collected in different places in the city, with the admirable Farneſe Collection brought from Rome, and to depoſit them all here, together with the Cumæan monuments, in a place enlarged for their reception. With the works in bronze and marble, it was intended to unite the Campanian vaſes, the antique paintings from Portici, the modern pictures from Capo di Monte, the Herculaneum papyri, and a copious public library. In this grand idea, ſtrenuouſly encouraged by ſir William Hamilton and the German artiſt Philip Hackert, Ferdinand IV. cheerfully acquieſced; but only part of this laudable plan was carried into execution before Ferdinand's expulſion from his continental dominions. But little was done for this inſtitution during the brief reign of Joſeph Bonaparte. Under him, indeed, a cabinet of natural curioſities was begun here; but of the kind of patronage beſtowed upon it by this ruler, who was as ſuddenly precipitated from his elevation as he was raiſed to it by fortune, ſome idea may be formed from the well-authenticated fact, that he ordered the teeth to be ſawed away from the fine ſkeleton of an elephant in this cabinet, that he might have a dozen balls turned out of them for his billiard-table. It was not till the time of Murat, who rendered conſiderable ſervice to the arts and ſciences in general at Naples, that the firſt intentions with regard to this edifice were carried ſo far into effect, that it is now entitled to very honourable diſtinction.

The approach to this building prepoſſeſſes a ſtranger in its favour. A very lofty and ſpacious gateway, within which carriages are admitted, receives the viſitor, who diſcovers between the colonnades of the covered court-yard ſome exquiſitely-preſerved ſtatues and other valuable antiques. On the right of the entrance are the apartments of the keepers, and on the left thoſe of the perſons appointed to ſhow the different muſeums. To theſe a ſtranger muſt of courſe apply, and, upon giving in his name, if he be a foreigner, he is furniſhed once for all with a ticket which procures admiſſion to all the treaſures preſerved here.

The lower part is of courſe appropriated ſolely to the reception of the antiques of marble and bronze, vaſes of all kinds of ſtone, ſarcophagi, cippi, altars, columns, and inſcriptions. On the left of the entrance you are conducted to this muſeum through a corridor adorned with buſts, and alſo with antiques in terra cotta, among which a Jupiter and a Juno are particularly worthy of notice. You paſs ſucceſſively into ſeven ſpacious rooms, which are well lighted, and in this reſpect are far ſuperior to thoſe of the Louvre and the unſcientific arrangement of the antiques there. Here you find almoſt all the curioſities that have been diſcovered in Cumæ, Herculaneum, Pompeii, and at other parts of the kingdom, as well as whatever has been purchaſed abroad, and the Farneſe Collection, or at leaſt the moſt valuable works that belonged to it when at Rome. We can notice only a few of the principal articles of this collection.

The firſt and largeſt of the ſeven rooms contains nothing but antique bronzes, a collection indiſputably unique in its kind. Moſt, if not all, of theſe were found at Herculaneum or Pompeii; and this circumſtance alone would render them peculiarly intereſting. The chief of the bronzes, arranged in this apartment, are the ſtatues larger than life of Auguſtus, Mammius Maximus, Calatorius, Caracalla, Annius Verus, Druſus Nero, and a Pietas with wonderfully-beautiful drapery, and on that account unique in bronze. All of them are not only tolerably free from injury, but their ſurface is ſo exquiſitely reſtored, that they appear to have but recently iſſued from the mould. The connoiſſeur will regret the abſence of the admirable Sitting Hermes, the Lottatore, and the Drunken Faun, which have been carried to Palermo; but of which, as of many other figures and buſts, well-executed plaſter caſts, bronzed, are to be ſeen here. Here is ſtill, however, one of the fine large horſes in bronze, belonging to the quadriga found at Herculaneum, and alſo the head and part of the neck of the coloſſal horſe, conſidered as the ancient ſign of the city of Naples, which, by Murat's order, was removed hither from the Palazzo del Cavallo. Many antique weapons from Pæſtum, and bronze vaſes from Herculaneum, are likewiſe depoſited in this apartment. In the ſecond room are a large Atlas, exquiſitely wrought in marble; a fine Ariſtides; a ſtatue of beautiful workmanſhip, completely covered with the toga, and given out to be a genuine Cicero; two Sybils; and a remarkable buſt of Apollonius of Tyana. In the third room is ſeen the far-famed Farneſian Hercules alone. This maſter-piece of Glycon is ſo placed, that you may go round it, and view and admire it on all ſides. In the fourth room are ſeen the graceful Adonis; the celebrated Venus Callipygi, among upwards of nine other ſtatues of the goddeſs in various attitudes; and a Cupid riding on a dolphin, which adorned a fountain in Pompeii. The centre of the fifth room is decorated with the grand vaſe of Salpion, repreſenting the birth of Bacchus. It was formerly uſed as a baptiſmal font in the principal church at Gaeta. An admirable frame for a fountain from Pompeii ſerves it for a pedeſtal, upon which the ſeven deities, Jupiter, Mars, Apollo, Æſculapius, Bacchus, Hercules, and Mercury, are repreſented in baſſo-relievo. Other remarkable objects in this apartment are, the Muſes, a ſmall beautiful Bacchus, and an Apollino recently diſcovered at Herculaneum. In the ſixth room another large Apollo Muſagetes, in bronze, attracts notice; as does likewiſe an Apollo in porphyry. Among the moſt diſtinguiſhed works in the ſeventh room, the beautiful Flora, already ſufficiently known, a female torſo, another of Bacchus, and two baſſo-relievos of Bacchanals are particularly worthy of notice. Laſtly, in the gallery our attention is more eſpecially engaged by a coloſſal Bacchus, in the Antinous form; Pallas throwing the javelin, in what is termed the Hetrurian ſtyle; Juno; Venus victrix; Bacchus and Eros; and a Satyr. It contains likewiſe ſeveral large vaſes.

The area of the inner court is filled with a great number of ſepulchral urns, &c. and the columns of Herodes Atticus. Here, too, are found ancient *dolia*, or wine-veſſels, one of which is of ſuch ſize as to hold eighteen buckets. All of them are of burned clay.

On aſcending the ſtaircaſe from the ground-floor, you come to the recently-erected picture-gallery, which contains many valuable performances. It is compoſed partly of the treaſures of the Capo di Monte, many exquiſite pieces of which have however been removed to Palermo, and partly of works that belonged to the ſuppreſſed convents and churches, and to various palaces of king Ferdinand's. Though not very rich in productions of the moſt eminent maſters, it nevertheleſs contains at leaſt a few good pieces of each of the celebrated ſchools; but it ſurpaſſes every other gallery in this particular, that it poſſeſſes a complete ſeries of all the works of the Calabrian and Sicilian painters, who are univerſally diſtinguiſhed by boldneſs of compoſition and force of execution. Here you meet with works and names of extraordinary merit, to which our catalogues of artiſts, and hiſtories of the arts, are total ſtrangers. Here are the grandeſt and moſt valuable performances of Lanfranco, in which he has repreſented the romantic wildneſs of his native country with the greateſt energy and in the moſt finiſhed manner. This gallery is alſo aſſerted to poſſeſs the cartoons executed by Coreggio himſelf for his vaſt painting for the cupola at Parma. They are certainly beautiful in every reſpect, and well worthy of notice for this reaſon, becauſe the painting of the cupola is become ſo very dark, that ſcarcely any of the objects can be diſcriminated; but whether theſe cartoons are really from the pencil of that maſter is yet doubted. The collection of cork-models of the Temple of Pæſtum and other ruins, placed in the anti-chamber of this gallery, is likewiſe deſerving of attention.

From this gallery you proceed into the cabinet of Campanian vaſes and all kinds of houſehold utenſils of earthenware and other materials, diſtributed in ſeveral ſpacious and well-arranged apartments. Here you find the greateſt part of the treaſures of Nola, Taranto, Herculaneum, Pompeii, and other places of antiquity, which have become celebrated for the numerous remains diſcovered there. No other ſimilar cabinet can ſtand any compariſon with this in regard to copiouſneſs. The reſearches at Pompeii have furniſhed almoſt daily contributions; and though theſe ſeverally conſidered may ſeem unimportant, yet each article is of value to thoſe who love to contemplate the domeſtic uſages of antiquity, as tending to render the whole more complete.

Another door leads from the ſtaircaſe to the great public library. It is compoſed of the Farneſe library, particularly valuable on account of its manuſcripts; of the library of the Jeſuits, of that of the palace, and latterly of additions from many of the ſuppreſſed convents. There is not yet any complete catalogue of the whole library; but catalogues of the various parts of which it is compoſed, though very defective, are ſhown. The total number of works to which places have been aſſigned, as well as of thoſe to which they have not, was ſtated at 160,000. Of the more ancient, extenſive, and coſtly, works, there is no want; but here, as in all the libraries of any conſequence in Italy, the funds aſſigned by the ſtate for the purchaſe of modern books are inadequate to the purpoſe. But Dr. Sickler obſerves, that "very few, excepting the profeſſed literati, ever think of reading for information; indeed the number of thoſe who read for amuſement only is very ſmall. In the Roman as well as in the Neapolitan ſtates there are towns and villages, where, with the exception of the prieſts and two or three perſons in official ſituations, not a creature can read. In the larger towns the moſt poliſhed circles ſeek amuſement in muſic and dramatic exhibitions alone. The extent of the reading of females of the higheſt rank and diſtinction is confined to their prayers and the legends of their ſaints; and the ignorance of the other ſex, in the higher as well as in the lower claſſes, is equally deplorable. Two princes of the houſe of B. at Rome, one of whom not long ſince acted a conſpicuous political part, were twenty years old before they learned to read, and the elder was twenty-ſix when he was taught to write by his wife at Paris. For theſe reaſons the exiſting public libraries are but little frequented. The farther you proceed from the Alps, the more they are neglected. There is ſtill ſome deſire of information at Florence; leſs at Rome; but ſcarcely any at Naples. In this city I went almoſt every day to the copious and indeed unique library in the Studi; but in general I was the only viſitor, and a kind of phenomenon to the librarians, as they are only accuſtomed to attend inquiſitive ſtrangers through their rooms, like conductors through a cabinet of curioſities; ſo that all theſe treaſures lie diſregarded, buried in duſt, and conſumed by inſects."

"A ſeparate entrance conducts to another collection—the only one of its kind in the world—the invaluable collection of the Herculaneum manuſcripts. It is well known how theſe are arranged in glaſs caſes, how they are unrolled and deciphered, and what little ſucceſs has hitherto attended theſe operations."

Although Naples is excellently ſituated for commerce, and no kingdom produces the neceſſaries and luxuries of life in greater profuſion, yet trade languiſhes; the beſt ſilks come from Lyons, and the beſt woollen goods from England. The chief articles manufactured here are ſilk ſtockings, ſoap, ſnuff-boxes of tortoiſe-ſhell and of the lava of Mount Veſuvius, tables, and ornamental furniture of marble. They are thought to embroider here better than in France; and their macaroni is preferred to that made in any other part of Italy. The Neapolitans excel alſo in liqueurs and confections. Proviſions are plentiful and cheap; poultry, game, and fiſh, are abundant; fruit and vegetables are to be had all winter in ſo favourable a climate. The wants of Nature are ſo eaſily ſatisfied here, that the lower claſs of people work but little; their greateſt pleaſure is to baſk in the ſun, and do nothing. Many of the ſtreets are more crowded than even thoſe of London or Paris; the people doing little or nothing, and having no public walks or gardens to reſort to. In the midſt of all this idleneſs, fewer riots or outrages happen than may be expected. This is owing partly to the national character of the Italians; and partly to the common people here being univerſally ſober. The great luxury is iced water; and nothing would be ſo likely to raiſe a mutiny in Naples as a ſcarcity of ice. The king grants the monopoly of this commodity to certain perſons, who are obliged to furniſh the city all the year, at a certain price, which is about three farthings a pound. There is not, perhaps, a city in Europe, in which ſo few of the inhabitants contribute to the wealth of the community by uſeful or productive labour, as Naples. The number of nobility, prieſts, monks, nuns, lawyers, muſicians, footmen, and lazzaroni, ſurpaſſes all reaſonable proportion.

The *lazzaroni* form a conſiderable part of the inhabitants of Naples; and theſe have, on ſome occaſions, had the government for a ſhort time in their hands; (ſee p. 542.) They are computed at about 30,000; moſt of them have no fixed habitations, but ſleep every night under porticos, piazzas, or any kind of ſhelter they can find. Thoſe of them who have wives and children live in the ſuburbs, near Pauſilippo, in huts, or in caverns or chambers dug out of that mountain. Some of them gain a ſubſiſtence by fiſhing, others by carrying burdens to or from the ſhipping; many walk about the ſtreets ready to run on errands, or to perform any labour for a ſmall recompenſe. They have generally been repreſented as a lazy, licentious, and turbulent, claſs of people; but Dr. Moore has a more favourable opinion of their character; aſcribing their idleneſs to want of employment. And Mr. Euſtace, a more recent obſerver, gives a very favourable account of them, probably becauſe, during the revolutionary troubles, they exerted themſelves moſtly in favour of king Ferdinand, a king whoſe mental endowments are exactly upon that ſcale that a king's ought to be (ſee p. 557). "The fact is (ſays Mr. Euſtace) that this peculiar tribe is neither more nor leſs than the poorer part of the labouring claſs, ſuch as are attached to no particular trade, but willing to work at all, and to take any job that is offered. If in London, where there is a regular tide of commerce, and a conſtant call for labour, there are ſuppoſed to be at leaſt twenty thouſand perſons who riſe every morning without employment, and rely for maintenance on the accidents of the day, it is but fair to allow Naples, teeming as it is with population, and yet deſtitute of ſimilar means of ſupporting it, to have in proportion a greater number of the ſame deſcription, without incurring the cenſure of lazineſs. The *lazzaroni* are the porters of Naples; they are ſometimes attached to great houſes, under the appellation of *facchino della caſa*, to perform commiſſions for ſervants, and give aſſiſtance where ſtrength and exertion are requiſite; and in ſuch ſtations they *are ſaid* to have given proofs of ſecrecy, honeſty, and diſintereſtedneſs, very unuſual among ſervants. Their dreſs is often only a ſhirt and trowſers; their diet maccaroni, fiſh, water-melon, with iced water, and not unfrequently wine; and their habitation the portico of a church or palace. Their athletic forms, and conſtant flow of ſpirits, are ſufficient demonſtrations of the ſalutary effects of ſuch plain food and ſimple habits. Yet theſe very circumſtances, the conſequences or rather the bleſſings of the climate, have been turned into a ſubject of reproach, and repreſented as the reſult of indifference and indolence, in a people either ignorant of the comforts of life, or too lazy to procure them. It would be happy, however, if the poor in every other country could ſo well diſpenſe with animal food and warm covering. The name, or rather nickname, by which this claſs is deſignated, naturally tends to prejudice the ſtranger againſt them, as it ſeems to convey the idea of a ſturdy beggar. Its derivation is a ſubject of conjecture; the moſt probable ſeems to be that adopted at Naples itſelf, which ſuppoſes it to originate from the Spaniſh word *lacero*, derived from *lacerus*, ſignifying tattered, torn, or ragged, pronounced by the Spaniards as by us, *laſſero*, and converted by the Neapolitans into, *lazzero, lazzaroni*. It ill became the Spaniards, after all, to give contemptuous appellations to a people whom they oppreſſed, pillaged, and degraded; and to ground thoſe appellations on the miſery, nakedneſs, and general poverty, produced by their own injuſtice. Several anecdotes are related of the *lazzaroni* that redound much to their credit, and imply feelings which do not ſuperabound in any rank, and would do honour to the higheſt. They are ſaid to have ſhown a rooted averſion to the inquiſition; and, by their reſolute and unabating oppoſition, prevented its eſtabliſhment in the kingdom of Naples; while the other inhabitants ſubmitted to the meaſures of the court, and received it without reclamation. They have manifeſted, whenever an opportunity enabled them to expreſs their feelings with energy, a warm attachment to the cauſe of liberty, and an abhorrence of oppreſſion and injuſtice, which have more than once checked the career of government in its way to deſpotiſm. In theſe exertions they had the danger and the glory entirely to themſelves; and may with reaſon boaſt, that, where the nobles yielded, they made a ſtand, and, by their perſeverance, ſaved from utter hopeleſs ſlavery that country which their ſuperiors were ready to betray. Even in the late invaſion, they generouſly came forward, and offered their perſons and lives to their ſovereign; and, finding neither chiefs to command, nor officers to lead them on, they reluctantly ſubmitted to inaction; but with a ſurly ſilence and threatening aſpect, that awed the invaders, and checked for once the inſolence and rapacity of a French army. Such is their public ſpirit: their private feelings have ſometimes been diſplayed with equal advantage." He adds, that ſome Neapolitan writers aſſert that the *lazzaroni*, properly ſo called, are the moſt laborious and diſintereſted part of the population; *attached to religion and order*, ſimple and ſincere in their manners, and faithful to their employers; rather than wrong whom, they would ſhed their blood. This eulogium they qualify, however, by confining it to the *true-born Neapolitan lazzaroni*, as diſtinguiſhed from a ſet of beggars who infeſt the churches and public places, for the moſt part foreigners, and who, being always ready to impoſe on travellers at the hotels, have brought diſgrace on the *regular lazzaroni!*

In a delightful climate, beneath an unclouded ſky, the manners and character of a people are to be collected from their appearance out of doors; not, as with us, from domeſtic circles and fire-ſide parties. "Naples, in its interior," ſays Mr. Forſyth, "has no parallel on earth. The crowd of London is uniform and intelligible: it is a double line in quick motion; it is the crowd of buſineſs. The crowd of Naples conſiſts in a general tide rolling up and down, and in the middle of this tide a hundred eddies of men. Here you are ſwept on by the current, there you are wheeled round by the vortex. A diverſity of trades diſpute with you the ſtreets. You are ſtopped by a carpenter's bench, you are loſt among ſhoemakers' ſtools, you daſh among the pots of a maccaroni-ſtall, and you eſcape behind a *lazarone*'s night-baſket. In this region of caricature every bargain ſounds like a battle: the popular exhibitions are full of the groteſque; ſome of their church-proceſſions would frighten a war-horſe. The mole ſeems on holidays an epitome of the town, and exhibits moſt of its humours. Here ſtands a methodiſtical friar preaching to one row of lazzaroni; there, Punch, the repreſentative of the nation, holds forth to a crowd. Yonder, another orator recounts the miracles which he has performed with a ſacred wax-work on which he rubs his agnuſes, and ſells them, thus impregnated with grace, for a grano a-piece. Beyond him are quacks in huſſar uniform, exalting their drugs and brandiſhing their ſabres, as if not content with one mode of killing. The next *profeſſore* is a dog of knowledge, great in his own little circle of admirers. Oppoſite to him ſtand two jocund old men, in the centre of an oval group, ſinging alternately to their crazy guitars. Farther on is a motley audience ſeated on planks, and liſtening to a tragi-comic *filoſofo*, who reads, ſings, and geſticulates, old Gothic tales of Orlando and his paladins."

The ſame picture is drawn by a lively Frenchman, M. Petit Radel, as follows: "The ſtreets are filled with a noiſy and geſticulating populace, ever in motion. Here are venders of fiſh, fruits, vegetables, and melons, which are ſold by the ſlice, the ſellers being always provided with a large knife, and deafening the paſſenger by their clamorous invitations to purchaſe. There are the *aquaioli*, or ſellers of lemonade, ſurrounded by piles of lemons, who invite you at every corner by tilting a barrel full of iced water ready for drinking. Next is a beggar, who harraſſes you by his importunity, and from whom it is difficult to eſcape. Here are mendicant monks of all orders, who carry home their pittance to their convent, ſome in wallets, others on aſſes, which they lead by a halter; Capuchins and Franciſcans, with their gowns tucked up, ſhort fat figures who idly ſaunter along, and piouſly preſent their hands to be kiſſed by the poor; prieſts in black mantles, with ſpectacles on their noſes; devotees, who tramp along, ſome after having paid their vows, and others contented with a promiſe, which they revoke at convenience; companies of women in black ſilk cloaks, with ſmart head-dreſſes, but deſtitute of ſhoe or ſtocking; children, who ſurround the ſellers of maccaroni, in hopes of a few ſpoonfulls; a rabble of infants ſcreaming to their utmoſt; jugglers, players on the bagpipe and hautbois, who jig their puppets by the leg; walking virtuoſi, who ſing or play on the violin or harp, in a wretched manner, before the madonnas of the ſtreets, or before the ſhops; ſoldiers and officers in calaſhes or on foot; barking dogs; advocates and attorneys, with their parchments under their arm, haſtening to the vicaria; proceſſions, funerals, and oxen loaded with leathern panniers full of manure, which are taken to the gardeners in the ſuburbs. Such is a ſketch of the picture of animation with which moſt of the ſtreets of Naples are enlivened."

The number of inhabitants is 350 or 400,000. Of theſe perhaps the lazzaroni may amount to 40,000; the lawyers are as numerous as 8000; there are not fewer than 10,000 religions of different kinds; and Keyſler ſays, that the *donne libere*, or courtezans, amount to 18,000. Naples ſtands about one hundred miles ſouth-eaſt from Rome, 164 north-eaſt from Palermo in Sicily, 217 ſouth-eaſt from Florence, and 300 from Venice. Lat. 40. 54. N. lon. 13. 30. E.

NA'PLES, Star of. See ORNITHOGALUM.

NA'PLES YEL'LOW. See the article PIGMENT.

NAPLOU'SE, NAPOLOSE, or NABLOUS, a town of Syria in Aſia, and capital of a hilly country, anciently celebrated under the name of the *Kingdom of Samaria*, but at preſent called the Country of Naploſa. This town, ſituated near to Sichem, and on the ruins of the Neapolis of the Greeks, is the reſidence of a ſheik, who farms the tribute, for which he is accountable to the pacha of Damaſcus. Its inhabitants are ſuch zealous Mahometans, as not willingly to ſuffer any Chriſtians to reſide among them. They are diſperſed in villages among the mountains; the ſoil of which is fertile, and produces a great deal of corn, cotton, olives, and ſome ſilks. The town has ſeveral moſques; and carries on a conſiderable traffic with Damaſcus and the coaſt. Jews of the Samaritan ſect are numerous here. It is twenty miles north of Jeruſalem. Lat. 32. 16. N. lon. 35. 22. E.

Dr. Clarke's obſervations on viſiting this place, and on the face of the country between it and Jeruſalem, are extremely intereſting.

" The view of Napoloſe much ſurpriſed us, as we had not expected to find a city of ſuch magnitude in the road to Jeruſalem. It ſeems to be the metropolis of a very rich and extenſive country, abounding with proviſions, and all the neceſſary articles of life, in much greater profuſion than the town of Acre. White bread was expoſed for ſale in the ſtreets, of a quality ſuperior to any that is to be found elſewhere throughout the Levant. The governor of Napoloſe received and regaled us with all the magnificence of an Eaſtern ſovereign. Refreſhments, of every kind known in the country, were ſet before us; and when we ſuppoſed the liſt to be exhauſted, to our very great aſtoniſhment, a moſt ſumptuous dinner was brought in.

" There is nothing in the Holy Land finer than the view of Napoloſe from the heights around it. As the traveller deſcends toward it from the hills, it appears luxuriantly emboſomed in the moſt delightful and fragrant bowers, half-concealed by rich gardens, and by ſtately trees collected into groves, all around the bold and beautiful valley in which it ſtands. Trade ſeems to flouriſh among its inhabitants. Their principal employment is in making ſoap; but the manufactures of the town ſupply a very widely-extended neighbourhood, and they are exported to a great diſtance upon camels. In the morning after our arrival, we met caravans coming from Grand Cairo; and noticed others repoſing in the large olive-plantations near the gates. The traveller, directing his footſteps towards its ancient ſepulchres, as everlaſting as the rocks wherein they are hewn, is permitted, upon the authority of ſacred and indelible record, to contemplate the ſpot where the remains of Joſeph, of Eleazar, and of Joſhua, were ſeverally depoſited. If any thing connected with the memory of paſt ages be calculated to awaken local enthuſiaſm, the land around this city is pre-eminently entitled to conſideration. The ſacred ſtory of events tranſacted in the fields of *Sichem*, from our earlieſt years is remembered with delight; but, with the territory before our eyes where thoſe events took place, and in the view of objects exiſting as they were deſcribed above three thouſand years ago, the grateful impreſſion kindles into ecſtaſy. Along the valley we beheld *a company of Iſhmaelites coming from Gilead*, as in the days of Reuben and Judah, *with their camels bearing ſpicery and balm and myrrh*, (Gen. xxxvii. 25.) who would gladly have purchaſed another Joſeph of his brethren, and conveyed him, as a ſlave, to ſome Potiphar in Egypt. Upon the hills around flocks and herds were feeding, as of old; nor in the ſimple garb of the ſhepherds of Samaria was there any thing repugnant to the notions we may entertain of the appearance preſented by the ſons of Jacob. It was indeed a ſcene to abſtract and to elevate the mind; and, under emotions ſo called forth by every circumſtance of powerful coincidence, a ſingle moment ſeemed to concentrate whole ages of exiſtence.

" In the time of Alexander the Great, Sichem was conſidered as the capital of Samaria. Its inhabitants were called *Samaritans*, not merely as people of Samaria, but as a ſect at variance with the other Jews. They conſiſted principally of deſerters from Judæa. They have continued to maintain their peculiar tenets to the preſent day. The inhabitants, according to Procopius, were much favoured by the emperor Juſtinian, who reſtored their ſanctuaries, and added largely to the edifices of the city. The principal object of veneration among them is *Jacob's Well*, over which a church was formerly erected. This is ſituated at a ſmall diſtance from the town, in the road to Jeruſalem; and has been viſited by pilgrims of all ages, but particularly ſince the Chriſtian æra, as the place where our Saviour revealed himſelf to the woman of Samaria. The ſpot is ſo diſtinctly marked by the evangeliſt, and ſo little liable to uncertainty, from the circumſtance of the Well itſelf and the features of the country, that, if no tradition exiſted for its identity, the ſite of it could hardly be miſtaken.

" We left Napoloſe one hour after midnight, that we might reach Jeruſalem early the ſame day. We were, however, much deceived concerning the diſtance. Our guides repreſented the journey as a ſhort excurſion of five hours: it proved a moſt fatiguing pilgrimage of eighteen. The road was mountainous, rocky, and full of looſe ſtones; yet the cultivation was every-where marvellous; it afforded one of the moſt ſtriking pictures of human induſtry which it is poſſible to behold. The limeſtone rocks and ſtony valleys of Judæa were entirely covered with plantations of figs, vines, and olive-trees; not a ſingle ſpot ſeemed to be neglected. The hills, from their baſes to their upmoſt ſummits, were entirely covered with gardens: all of theſe were free from weeds, and in the higheſt ſtate of agricultural perfection. Even the ſides of the moſt barren mountains had been rendered fertile, by being divided into terraces, like ſteps riſing one above another, whereon ſoil had been accumulated with aſtoniſhing labour. Among the ſtanding crops we noticed millet, cotton, linſeed, and tobacco, and occaſionally ſmall fields of barley. A ſight of this territory can alone convey any adequate idea of its ſurpriſing produce: it is truly the Eden of the Eaſt, rejoicing in the abundance of its wealth. The effect of this upon the people was ſtrikingly pourtrayed in every countenance: inſtead of the depreſſed and gloomy looks of Djezzar Pacha's deſolated plains, health, hilarity, and peace, were viſible in the features of the inhabitants. Under a wiſe and beneficent government, the produce of the Holy Land would exceed all calculation. Its perennial harveſt; the ſalubrity of its air; its limpid ſprings; its rivers, lakes, and matchleſs plains; its hills and vales;—all theſe, added to the ſerenity of its climate, prove this land to be indeed *a field which the Lord hath bleſſed: God hath given it of the dew of heaven, and the fatneſs of the earth, and plenty of corn and wine.*" Gen. xxvii. 27. *Clarke's Travels*, Part II.

NA'PO, a river of South-America, which riſes about twenty miles ſouth of Quito, and, after a ſouth-eaſterly courſe of about 360 miles, runs into the river of Amazons in lat. 3. 30. S. lon. 71. 10. W.

NA'PO, a town of South-America, on the above river, in the audience of Quito: thirty-five miles ſouth-eaſt of Archidona, and 200 ſouth-eaſt of Quito.

NA'PO-BRAS'SICA. See BRASSICA.

NAPO'LI DI MALVA'SIA. See MALVASIA.

NAPO'LI DI ROMA'NIA, anciently *Nauplias*, a ſea-port town of European Turkey, in the Morea, ſituated on a peninſula, in a bay of the Mediterranean; hence called the Gulf of Napoli. This town was anciently called *Nauplias;* and was founded by Nauplius king of Eubœa, and father of Palamedes, who fell a ſacrifice to the malignant revenge of Ulyſſes. From the excellency of its harbour and ſituation, it obtained the epithet of *Navale.* The harbour is good and ſpacious, but the entrance narrow, and defended by a ſtrong caſtle. It is the ſee of a Greek archbiſhop. The inhabitants are Turks, Jews, and Chriſtians, who all follow their devotions as they like, without control. This town was taken by the Turks in 1715. It is eight miles ſouth of Argos, twenty-eight ſouth of Corinth, and ſixty ſouth of Livadia. Lat. 37. 39. N. lon. 22. 48. E.

NAP'PA, a town of Hindooſtan, in Guzerat: twenty-ſeven miles ſouth of Amedabad.

NAP'PY, *adj.* [from *nap.* Lye derives it from nappe, Sax. a cup. *Dr. Johnſon.*—Serenius has given the ſame derivation, *nape,* Germ. *nap,* Goth. a cup; defining *nappy,* inebriating. So Sherwood renders *nappy* ale, *bien forte,* i. e. very ſtrong. Dr. Johnſon calls it, from *nap,* frothy, ſpumy; whence apples and ale are called lambs'-wool. So we ſay the *foaming* bowl, i. e. having the liquor in it frothing, raiſing as it were with a head. Some have thought it referring to *nap,* in another ſenſe, as producing ſleep.] An old epithet applied to ale:

Nappy ale, good and ſtale, in a browne bowle,
Which did about the board merrilye trowle.
Old Ballad. The King and Miller of Manſfield.

When I my threſher heard,
With *nappy* beer I to the barn repair'd. *Gay's Paſt.*

Hairy; full of down. *Cotgrave and Sherwood.*

NAP'PY, *ſ.* Strong ale. See above.

Contented he work'd, and he thought himſelf happy,
If at night he could purchaſe a jug of brown *nappy.*
Song of the Cobler.

NAP'RUNG, a town of Meckley: twenty-five miles weſt of Munnypour.

NAP'TON, a ſmall town in Warwickſhire, with a market on Thurſday; and a fair for three days, at the Aſſumption of the Virgin Mary. In this pariſh was formerly St. Lawrence's chapel.—Near this is Ladbroke, where was formerly a bridge over the river Ichene to Herberbury. *Wilkes's Directory.*

NA'PUS, *ſ.* in botany. See Brassica.

NAR, now *Nera,* a river of Umbria, whoſe waters, famous for their ſulphureous properties, paſs through the lake Velinus, and iſſuing from thence with great rapidity fall into the Tiber.

NAR, a town of the duchy of Warſaw: eighty miles eaſt of Warſaw.

NA'RA, a town of Japan, in the iſland of Niphon: twenty-four miles from Meaco.

NA'RA, a town of Hindooſtan, in Golconda: twenty-eight miles ſouth-weſt of Indelavoy.

NARACAL'LY, a town of Hindooſtan, in the circar of Aurungabad: fifty-three miles eaſt-ſouth-eaſt of Aurungabad.

NARADUCON'DA, a town of Hindooſtan, in the circar of Mahur: fourteen miles north of Neermul.

NARAGAN'SETT BA'Y, a bay of the Atlantic, on the coaſt of United America, which contains Rhode Iſland, and ſeveral ſmaller iſlands.

NARAGUN'TLA, a town of Hindooſtan, in the Carnatic: five miles eaſt-ſouth-eaſt of Chittoor.

NARA'HA, a town of Hindooſtan, in Bahar: forty-five miles eaſt of Bettiah.

NARAIDIPET'TA, a town of Hindooſtan, in the Carnatic: eight miles ſouth of Chittoor.

NARAINGUM', a town of Hindooſtan, in Dowlatabad: ten miles ſouth-eaſt of Junere.

NARAINPOU'R, a town of Bengal: five miles ſouth of Koonda.

NARAKAPAL'LY, a town of Hindooſtan, in the Carnatic: four miles ſouth of Chittoor.

NARAMPU'KRY, a town of Hindooſtan, in Bahar: thirty-two miles ſouth-eaſt of Bettiah.

NARAN', a town of Hindooſtan, in Bahar: forty-two miles eaſt of Hajypour. Lat. 25. 41. N. lon. 86. 10. E.

NARANGABAD', a town of Hindooſtan, in Oude: twenty-five miles north-weſt of Kairabad. Lat. 27. 50. N. lon. 80. 55. E.

NARANGPOU'R, a town of Hindooſtan, in Bengal: twenty-four miles weſt of Comillah.

NARANGUN'GE, a town of Bengal, on the Dulkaſery: ſeven miles ſouth-eaſt of Dacca. Lat. 23. 37. N. lon. 90. 38. E.

NARANGUR', a town of Bengal: eighteen miles ſouth of Midnapour. Lat. 22. 10. N. lon. 87. 30. E.

NARAN'JA, a town of Africa, in the kingdom of Fez: ſeventy-five miles north of Fez.

NARANJAL', a town of South-America, in the audience of Quito: twelve miles ſouth-eaſt of Guayaquil.

NARANJAL', a river of Peru, which runs into the Pacific Ocean in lat. 2. 28'. S.

NARAN'JOS, a town of Peru, in the dioceſe of Truxillo: fifteen miles ſouth of Chacapoyas.

NARAN'JOS, two ſmall iſlands in the Spaniſh Main, near the coaſt of Darien. Lat. 9. 30. N. lon. 79. 58. W.

NARAN'JOS, a cluſter of ſmall iſlands among the Philippines: twelve miles north-eaſt of Maſbate. Lat. 12. 29. N. lon. 123. 54. E.

NARANPOU'R, a town of Hindooſtan, in Bahar: twenty-five miles ſouth-ſouth-weſt of Arrah.

NARANPOU'R, a town of Bengal: ten miles ſouth of Kiſhenagur.

NARANPOU'R, a town of Hindooſtan, in Oude: forty miles north-north-eaſt of Manickpour.

NARANPOU'R, a town of Bengal: thirty miles ſouth-eaſt of Dacca.

NARAPIL'LY, a town of Hindooſtan, in Golconda: forty-five miles eaſt-ſouth-eaſt of Hydrabad.

NARAPIL'LY, a town of Hindooſtan, in Golconda: ten miles eaſt of Hydrabad.

NAR'BETH, a market and poſt town of South Wales, ſtanding on the ſummit of a hill, on the eaſtern ſide of the county of Pembroke, 229½ miles north-weſt from London, and twelve north-eaſt of Pembroke. This place has greatly increaſed of late years both in ſize and opulence. In 1801, the number of houſes and inhabitants in the town appeared, from the parliamentary returns, to amount to 340 of the former, and 1531 of the latter; but, in 1811, the ſame authority ſtates the houſes at 402, and the population at 1779 perſons. The market-day is Wedneſday; and there are ſix well-attended fairs during the year, (viz. Mar. 21, June 4, July 5, Sept. 26, and Dec. 11.) which privileges have been enjoyed ſince the reign of James II. A mail-coach paſſes through the town every day to and from London to Milford. Here are held the petty ſeſſions for the hundred. The church is an ancient building, founded by ſir Andrew Perrot, in the reign of Henry II. The living is a rectory in the gift of the crown, and one of the moſt valuable preferments in the dioceſe of St. David's. On a conſiderable eminence, cloſe to the town, are the ruins of the caſtle of Narbeth, which are now of a very ſmall extent; but, from the outline of walls that may ſtill be traced, it muſt at one time have been a very large and magnificent pile, and of great importance as defending one of the moſt frequented paſſes in the country. Hence it was frequently aſſaulted, and ſometimes taken, by the Welſh princes, during their deſultory wars to repel the aggreſſions of the Anglo-Normans, and afterwards the Engliſh.

About two miles north-eaſt from Narbeth ſtand the ruins of Lawhaden Caſtle, anciently the palace of the biſhops of St. David's. This ſuperb edifice crowns the ſummit of a ſteep wooded hill; and, though apparently placed on the very edge of a precipice, was moated and approached by a drawbridge, at the grand entrance, which was under a gateway between two octagon baſtions of very maſſive architecture. The whole building has been formerly very ſpacious and ſumptuous; as is evident from the preſent remains, though theſe have been much deteriorated of late years by the barbarous practice of uſing its materials for the repair of the roads. It is conſtructed entirely of cut ſtone, and highly finiſhed; and within it is an elegant chapel, which was built by biſhop Vaughan. At what era this caſtle was erected is uncertain; but Mr. Fenton inclines to think that it is chiefly indebted for its grandeur to Thomas Beke, who was biſhop of St. David's from 1280 to 1293, and made this the principal place of his reſidence. Attached to it is a large park and a foreſt, which Leland tells us were well ſtocked with red deer in his time. The keepers of this foreſt were frequently gentlemen of the firſt families in the county; a circumſtance alone ſufficient to indicate the high ſtyle in which the ancient biſhops were accuſtomed to live.

Two miles to the ſouth-eaſt of this palace is Slebech Hall, a very elegant manſion, which occupies the ſite of an ancient commandery of Knights Hoſpitallers, though not a trace of the eſtabliſhment of this church-militant now remains, except the church itſelf, a very ſmall but reſpectable edifice, ſtanding cloſe upon the river Cleddy, which ſkirts the pleaſure-grounds, and contributes greatly to their beauty.—Picton Caſtle, lying eaſtward from Slebech, though built in the reign of William Rufus, is, by the hereditary attention of its poſſeſſors, ſtill almoſt in as good condition as when firſt erected. This manſion of the noble family of Philips is ſurrounded by very extenſive plantations and gardens, laid out with great taſte. Within theſe is an old encampment, called Caſtle-lake, a poſt of conſiderable ſtrength by nature, and rendered more ſo by a very high agger on its weſtern ſide.—At Templeton, a village ſouth-eaſt from Narbeth, is a chapel, now in ruins, which belonged to the knights of Slebech, who are ſaid to have much frequented this place during their hunting-parties. In the centre of the main ſtreet are the ruins of an ancient croſs. The houſes here, though thinly ſcattered, are well built, and preſerve the veſtiges of former opulence. Indeed, there can be no doubt of this having been formerly a conſiderable village; and by ſome it is conjectured to have been early a manufacturing town, ſubordinate to the great colony of Flemings, who eſtabliſhed themſelves at Tenby. *Fenton's Hiſtorical Tour*, 1811. *Carliſle's Topographical Dict. of Wales*, 1812.

NARBIM'SKOI, a lake of Ruſſia, thirty-ſix miles in circumference: 220 miles north-north-eaſt of Turuchanſk.

NAR'BO MAR'TIUS, in ancient geography, now *Narbonne;* a town of Gaul, founded by the conſul Q. Marcius Rex, in the year of Rome 634. It became the capital of Gallia Narbonenſis. See GEOGRAPHY, vol. viii. p. 372. and the next article.

NARBON'NE, a town of France, and principal place of a diſtrict, in the department of the Aude, ſituated on a canal, which communicates with the Aude. Before the revolution it was the ſee of an archbiſhop, the ſeat of an admiralty, and the reſidence of a governor: it contained two collegiate churches, beſides the cathedral, a college, two ſeminaries, thirteen convents, and ſeveral hoſpitals. It was formerly the capital of a vicomté, whoſe lords were powerful; and ſtrongly fortified; but at preſent a wall flanked with baſtions is its only defence. It is not populous in proportion to its extent; neither is it a rich or commercial town. The number of inhabitants is about 10,000. It is three poſts ſouth-weſt of Beziers, and 104½ ſouth of Paris. Lat. 43. 11. N. lon. 3. 5. E.

NAR'BOROUGH, a village in Northamptonſhire, near Eaſt Deeping.

NAR'BOROUGH, a village in Norfolk, on the weſt ſide of Caſtle-Acre. Near here, on a hill, is an old military entrenchment.

NAR'BOROUGH I'SLAND, a ſmall iſland in the South Pacific Ocean, near the coaſt of Chili; diſcovered by ſir John Narborough. It affords wood and water, but is without inhabitants. Lat. 45. 12. S. lon. 76. 12. W.

NARCE'A, a river of Spain, in the province of Aſturias, which runs into the Pravia about a mile above the town of Pravia.

NARCIS'SO LEUCOI'UM. See LEUCOIUM.

NARCIS'SUS, in fabulous hiſtory, a youth of exquiſite beauty, born at Theſpia, a city in Bœotia, was deemed to be the ſon of Cephiſus and the nymph Liriope. According to the fable, he was enamoured with his own figure, which he ſaw in a fountain; and, contemplating it for a long time, without perceiving that he ſaw merely his own ſhadow, he pined away with love and deſire. The nymphs raiſed a funeral pile to burn his body; but they found nothing but a beautiful flower, which hence bears his name. Thus Ovid relates the fable. But Pauſanias, rejecting this account as incredible, refers to another tradition, according to which Narciſſus had a twin-ſiſter, who perfectly reſembled him, and with whom he fell in love; but, having had the misfortune to loſe her while they were hunting together, he abandoned himſelf to melancholy, and frequented the bank of a fountain, whoſe water ſerved as a mirror to reflect his own figure, which, reſembling that of his ſiſter, gave him ſome conſolation.

The flowers called *narciſſuſes*, however, are ſaid to be more ancient than this adventure; and the origin of their name is reported to have been as follows: The daughter of Ceres was gathering flowers in a meadow, when ſhe was raviſhed by Pluto; and the flowers ſhe was gathering, and which Pluto uſed for ſeducing her, were *narciſſuſes*, and not violets. It is ſaid that the manner of Narciſſus's death has no other foundation beſides his name, which is derived from a Greek word that ſignifies "to be benumbed, or without ſenſation;" whence ſoporific drugs have been called *narcotics*. Narciſſus, it is added, having manifeſted only diſdain of all perſons who conceived an affection for him, *Love* himſelf is ſaid to have taken vengeance upon him for his indifference, by cauſing him to be in love with himſelf; and Ovid, who always inclines to the marvellous, has conſidered this ſtory in a light that beſt anſwered that end. Ovid adds, that, as this youth was deſtined to have merely phantoms for the objects of his paſſions, and of thoſe which he inſpired, the nymph Echo fell in love with him, and that his diſdain obliged her to retire into caves and rocks, where ſhe retained nothing but the voice.

NARCIS'SUS, *ſ.* [a name adopted from the poets, who have fabled that the flower which bears it originated in the transformation of a beautiful youth, who pined away with admiration of his own image in a fountain. The origin of the word, nevertheleſs, appears to lie deeper, being derived from ναρκη, ſtupor, and alluding to the effects of the ſmell of a narciſſus. Theſe are frequently an intenſe head-ach, and partial loſs of recollection. The name of the youth might apply to the ſtupidity of his paſſion, and of the flower to its own properties, before Ovid elegantly combined them. The deſcription of Dioſcorides, unuſually full, leaves no doubt of his ναρκισσος being the ſame as ours; the "white ſpecies, purple within," anſwering exactly to the beautiful, though very common, N. poeticus.] In botany, a genus of the claſs hexandria, order monogynia, natural order of ſpathaceæ, (narciſſi, *Juſſ.*) Generic characters—Calyx: ſpathe oblong, obtuſe, compreſſed, opening on the flat ſide, ſhrivelling. Corolla: petals ſix, ovate, acuminate, flat, equal, inſerted into the tube of the nectary externally above the baſe; nectary one-leafed, cylindric-funnel-form, coloured on the border. Stamina: filaments ſix, awl-ſhaped, fixed to the tube of the nectary, ſhorter than the nectary; antheræ oblongiſh. Piſtillum: germen roundiſh, obtuſely three-ſided, inferior; ſtyle filiform, longer than the ſtamens; ſtigma bifid, concave, obtuſe. Pericarpium: capſule roundiſh, obtuſely three-cornered, three-celled, three-valved. Seeds many, globular, appendicled.—*Eſſential Character.* Petals ſix, equal; nectary funnel-form, one-leafed; ſtamina within the nectary.

This favourite genus has engaged the particular attention of ſeveral Britiſh botaniſts, eſpecially Mr. Saliſbury, Mr. Haworth, and the late Mr. Curtis; as well as of Mr. Ker-Bellenden, who, in his contributions to the continuation of the Botanical Magazine, has attended to this among other liliaceous genera, or their allies. The number of ſpecies is fourteen in the 14th edition of the Syſt. Veg. of Linnæus. We have now ſixteen, beſides ſeveral varieties, ſome of which have perhaps a right to be conſidered as diſtinct ſpecies. Three ſpecies are found wild in England.

1. Narciſſus poeticus, poetic or white narciſſus: ſpathe one-flowered; nectary wheel-ſhaped, very ſhort, ſcarioſe, crenulate. The ſtalk, or ſcape, does not riſe higher than the leaves, which are of a grey colour. At the top of the ſtalk comes out one flower from the ſpathe, nodding on one ſide: corolla ſnow-white, ſpreading open flat, the petals rounded at the points: the nectary or cup in the centre is very ſhort, and fringed on the border with a bright purple circle. See BOTANY, Plate VIII. fig. 20. vol. iii. The flowers have an agreeable odour, appear in May, and ſeldom produce ſeeds. The leaves are rounded on the keel, and reflected at the edge. Villars remarks, that in moiſt mountain-paſtures the roots come in bundles, producing a conſiderable packet of narrow erect leaves of an aſh-green colour. The ſcape bears one flower, ſeldom two, hanging down, ſpreading, compoſed of ſix lanceolate petals ſeparate from each other, and having a little red (crimſon) circle in the middle, waved or fringed.

Curtis makes two varieties of this: the common one deſcribed above, which he calls *anguſtifolius*, flowering in April; and the *majalis*, flowering ſix weeks later. The double white narciſſus is alſo a variety.

It is a native of Italy, the ſouth of France, Swiſſerland, and Carniola. Said alſo to be found wild in England on ſandy heaths, as at Shorne between Graveſend and Rocheſter: at Wood Baſtwick and other places in Norfolk. It was cultivated here in 1570, as appears from Lobel. From the deſcriptions of Theophraſtus, Dioſcorides, and Pliny, there is little doubt of this ſpecies being the narciſſus of thoſe authors and of the poets. The next ſpecies, if it be really diſtinct, was probably not conſidered as a ſeparate ſpecies by the ancients, ſince Ovid deſcribes his narciſſus to have a yellow cup; whereas Dioſcorides makes it purple, and Pliny ſometimes one, ſometimes the other.

2. Narciſſus biflorus, two-flowered narciſſus, or pale daffodil: ſpathe two-flowered; nectary wheel-ſhaped, very ſhort, ſcarioſe, crenulate; leaves acute on the keel, the edges turned inwards. "The pale daffodil, or primroſe peerleſs," as it is called by our old authors, uſually produces two flowers; it frequently occurs however with one; more rarely with three; in a high ſtate of culture it probably may be found with more. When it has only one flower it may eaſily be miſtaken for one of the varieties of the preceding, which Mr. Curtis calls *majalis*; but it may be thus diſtinguiſhed from it: The petals are of a yellowiſh hue, or rather a pale cream-colour; the nectary is wholly yellow, not having the orange or crimſon rim; and it flowers at leaſt three weeks earlier; the top alſo of the flowering-ſtem in this, very ſoon after it emerges from the ground, bends down and becomes elbowed; whereas in the *majalis* it continues upright till within a ſhort time of the flowers expanding. Native of ſeveral parts of Europe. Gerarde ſays that it grows wild in fields and by the ſides of woods in the weſt of England. Cluſius alſo reports that he had been credibly informed of its being a native of England. Ray had ſometimes obſerved it wild, but ſuſpected that it might have originally come out of gardens. James Sherard, M.D. found it near Hornſey-church; Mr. Blackſtone in ſeveral places near Harefield; Mr. Vernon at Bellow-hill near Whitchurch, Cheſhire; Mr. Wood near Halifax. It flowers towards the end of April.

β. Mr. Curtis has figured a narciſſus under the name of *M. tenuior*, which ſeems to be ſcarcely a diſtinct ſpecies, though it has only one flower on the ſcape. The root is the ſize of a ſmall nutmeg, of a pale-brown colour. Leaves about a ſpan long, very narrow, at their baſe ſcarcely a quarter of an inch wide, tapering gradually to a point, which is ſomewhat obtuſe; the outer ſide is convex, and ſomewhat fluted; the inner concave, not glaucous. Stalk ſomewhat longer than the leaves, round, ſlightly flattened, eſpecially on its upper part, ſupporting on its ſummit one flower, of a fragrance leſs powerful than that of the jonquil, and more ſo than that of *odorus*. Spathe membranous, length of the peduncle, which is about an inch long. Flower, when fully blown, ſtanding horizontally: tube greeniſh, nearly cylindrical, ſomewhat longer than the peduncle; border flat, divided into ſix ſegments, of a pale-yellow or ſulphur colour, ovate, three alternate ſegments larger, each terminating in a ſhort dagger-point. Nectary yellow, in form like that of N. biflorus, plaited, the margin, as the flower advances, becoming brown. Anthers of the three longer ſtamens viſible in the mouth of it. Mr. Curtis firſt obſerved this narciſſus in the month of May 1794, in a ſingle, but moſtly in a double, ſtate, in the garden of Mr. James Maddock, a floriſt at Walworth, who obtained it from Holland. It appears to have been long cultivated by the Dutch, and from its hardineſs is probably of European origin. It is inferior in ſize and beauty to many others; but as a ſpecies Mr. Curtis thinks it very diſtinct.

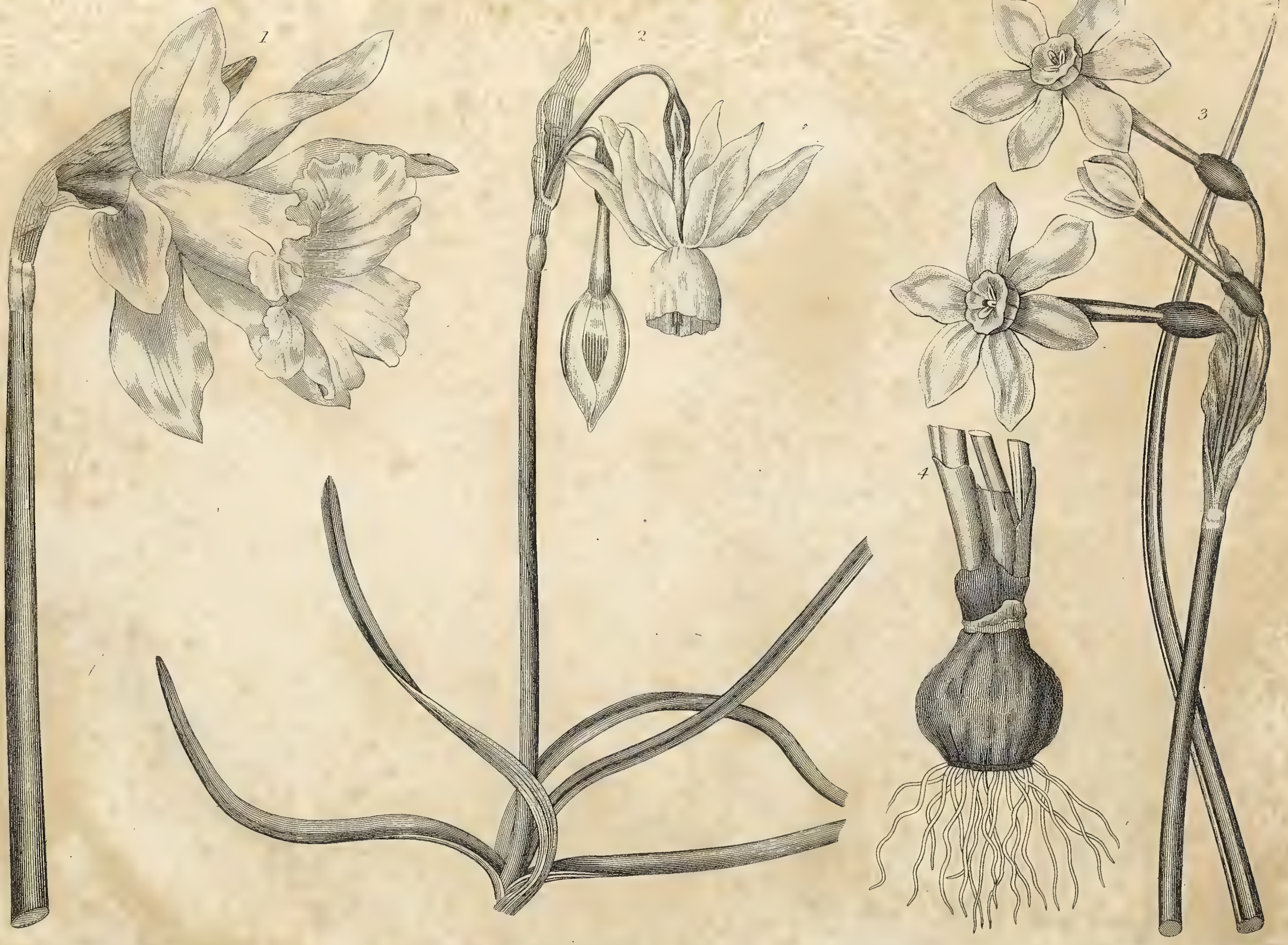
Mr. Miller alſo has a variety, which he names *N. albus*; the petals, he ſays, are whiter and reflexed; the border of the cup is gold-coloured.

3. Narciſſus pſeudo-narciſſus, or common daffodil: ſpathe one-flowered; nectary bell-ſhaped, erect, curled, equalling the ovate petals; ſee BOTANY, Plate VIII. fig. 22. Common Engliſh daffodil has a large bulbous root, from which come out five or ſix flat leaves, about a foot long, and an inch broad, of a greyiſh colour, and a little hollow in the middle like the keel of a boat. The ſtalk riſes a foot and half high, having two ſharp longitudinal angles; at the top comes out one nodding flower, incloſed in a thin ſpathe. The corolla is of one petal, being connected at the baſe, but cut almoſt to the bottom into ſix ſpreading parts; in the middle is a bell-ſhaped nectary, called by gardeners the cup, which is equal in length to the petal, and ſtands erect. The petal is of a pale brimſtone or ſtraw colour, and the nectary is of a full yellow. Seeds roundiſh, black. Native of many parts of Europe; Spain, Italy, Germany, Swiſſerland, France, England, in paſtures, woods, and hedges; flowering in March. Near Charlton, Woolwich, and Erith, in Kent; in Norfolk; Whitwell near Coton, and Whittleſford, in Cambridgeſhire; Noke woods, in Oxfordſhire; about Halifax very abundantly; in Lancaſhire; Hanley Caſtle in Worceſterſhire; Madely in Shropſhire; about Sutton Cofield, and beyond Erdington, on the road from Birmingham to Sutton, it covers almoſt a whole field.

β. Double daffodil. *a*. Pſeudonarciſſus anglicus flore pleno, or Gerarde's double daffodil; he having firſt diſcovered it in a poor woman's garden in the weſt of England: it is ſaid to be natural in the Iſle of Wight. This circumſtance is not mentioned in Gerarde's Herbal. He there ſays that he received the double yellow daffodil from Robinus of Paris.

b. Pſeudonarciſſus aureus maximus flore pleno, or Tradeſcant's great roſe-daffodil. This prince of daffodils, ſays Parkinſon, belongeth primarily to John Tradeſcant, as the firſt founder thereof, and may well be entituled "the glory of daffodils." The flower is very much ſpread open, conſiſting of ſmaller and ſhorter leaves than the next, but more in number, thicker and rounder ſet together, making it ſeem as great and double as any Provence-roſe, and intermixt with divers yellow and pale leaves, as if it were in rows one under another. It abideth long in flower, and ſpreadeth to be the broadeſt in compaſs of any of the daffodils.

NARCISSUS.



The Great Daffodil. Reflexed Daffodil. Common Jonquil.

J. Pass sc.

Engraved for the Encyclopædia Londinensis, 1818.

β. Pſeudonarciſſus aureus Anglicus maximus, or Wilmer's great double daffodil. This differs from the common ſort, N° 1, only in the largeneſs of the leaves and flowers, and the ſtatelineſs of growth. The ſtalk is two feet high, the flower great and fair, each leaf of it twice as large and broad as the former, diverſely intermixt with a row of paler and of deeper-yellow leaves, both growing deeper by ſtanding. "This we had (ſays Parkinſon) from Vincent Sion, born in Flanders, dwelling on the Bank-ſide, an induſtrious and worthy lover of fair flowers, who cheriſhed it in his garden for many years until the year 1620, when it flowered, and he ſhewed it to Mr. John de Franqueville, of whom he ſuppoſed he received it; who, finding it to be a kind never known to us before, cauſed him to reſpect it the more, as it is well worthy. And George Wilmer, of Stratford Bow, eſq. having likewiſe received it of him, as myſelf did alſo, would needs appropriate it to himſelf, and call it by his own name, which ſince hath ſo continued."

γ. Narciſſus latifolius omnium maximus amplo calice flavo, ſive nompareille, the great noneſuch, or incomparable daffodil. Stalk two feet high at the leaſt. Flower large, ſingle, conſiſting of ſix very pale yellow large leaves, almoſt round at the point, with a large cup in the middle ſomewhat yellower, the bottom whereof is narrow and round, riſing wider to the mouth, which is very large and open, unevenly cut in or indented about the edges: this cup doth well reſemble the chalice, that in former days with us, and beyond the ſeas is ſtill, uſed to hold the ſacramental wine. The flower hath ſometimes ten or twelve leaves, and a cup much larger. Mr. Miller conſiders this as a ſpecies diſtinct from our common daffodil; from which it differs in having longer leaves, of a darker green, and higher flower-ſtalks; the ſegments of the petal alſo are rounder, and ſpread open flatter; the cup is about half the length of the petal, and is edged with a gold-coloured fringe. It flowers in April; and varies more than any other. The roots, the firſt year, produced very-double flowers; the ſix outer ſegments longer than the others and white, the middle very full of ſhorter petals, ſome white, others yellow, collected into a globular figure. Some of theſe roots, the following year, produced flowers leſs double, with no white petals, but the larger petals ſulphur-coloured, and the others yellow. From this they afterwards degenerated to half-double flowers; and at laſt to ſingle flowers, with a cup half the length of the petal, in which manner they continued to flower many years: we may conclude, therefore, that the laſt was the natural ſtate of the flower. In this ſtate Mr. Curtis has figured it (121) as a diſtinct ſpecies. He ſays, that the petals are uſually pale yellow, and the nectary inclining to orange, which towards the brim is more brilliant in ſome than in others. In its double ſtate it is well known to gardeners by the name of butter-and-egg narciſſus; and of this there are two varieties; one with colours like the ſingle one above-mentioned; the other, with petals of a pale ſulphur colour, almoſt white, and the nectary bright orange, which is named in the Dutch catalogues orange phœnix, is the moſt ornamental among the ſeveral varieties, and has flowers ſo large as frequently to require ſupport. If the bulbs be not taken up yearly, they will degenerate, as Mr. Miller repreſents. He received roots of it from Spain and Portugal.

Parkinſon enumerates other varieties, as

δ. Narciſſus maximus griſeus calice flavo, the peerleſs grey daffodil: which has the ſix outer leaves of the flower of a gliſtering whitiſh-grey colour, and the cup yellow, longer than that of the preceding.

ε. Narciſſus latifolius, flavo flore, amplo calice, the ſmaller yellow nonpareille, or the lady Matteneſſes daffodil, by which name it was known in the Low Countries, Cluſius having received it from her. The leaves of this are ſhorter and narrower, the ſtalk not ſo high, the flower ſmaller, the cup and petals both pale yellow, yet more yellow than in the former, the cup ſmaller, and neither ſo ſmall in the bottom, nor ſo large at the edges, nor ſo crumpled at the brims.

4. Narciſſus bicolor, or two-coloured narciſſus: ſpathe one-flowered; nectary bell-ſhaped, with the margin ſpreading, curled, equalling the petals. This reſembles the common daffodil; but the petals are white, the nectary is dark yellow and larger, with a ſpreading, waved, notched, border. Gouan ſays it is eaſily diſtinguiſhed by its leaves, ſcarce a palm in length, and half an inch in breadth; by its large flower, with cordate-ovate petals, imbricate at the baſe, and ſulphur-coloured; and by the nectary having a reflex mouth, twelve-cleft or thereabouts, the lobes alſo being toothed and curled: the ſcape is the length of the leaves, or a little ſhorter, and thick. Native of the ſouth of Europe, flowering in April and May. Cultivated in 1629 by Parkinſon.

5. Narciſſus major, or great daffodil: ſheath ſingle-flowered; cup of the nectary bell-ſhaped, erect, the length of the oblong oblique petals; its margin ſpreading, lobed, and criſped; leaves twiſted. This is the largeſt of the genus, and bears the moſt magnificent flowers: though it has long been known in this country, it is confined to the gardens of the curious. It approaches in its general appearance very near to the common daffodil, but it is a much taller plant, and has its leaves more twiſted, as well as more glaucous: the flower, but eſpecially the nectary, is much larger, and the petals are more ſpreading. It anſwers to the preceding in every reſpect but colour, which is always a fine deep yellow. It is repreſented in the annexed Plate, at fig. 1. It varies with double flowers. It is a native of Spain, and flowers with us in April.

6. Narciſſus minor, or ſmall daffodil: ſpathe one-flowered; nectary obconical, erect, curled, ſix-cleft, equalling the lanceolate petals. The little daffodil is nearly related to the common ſort, but is three times ſmaller in all its parts: the ſcape is ſcarcely ſtriated: the ſpathe is greeniſh: the flowers more nodding: the petals diſtinct at the baſe, lanceolate, ſtraight, not oblique or ovate: margin of the nectary ſix-cleft, waved, curled. Though the flowers are not ſo large as thoſe of the other ſpecies, yet, when the roots are planted in a cluſter, they make a very pretty ſhow, and have this advantage, that they flower ſomewhat earlier than any of the others. Native of Spain. Cultivated in 1629, according to Parkinſon.

7. Narciſſus moſchatus, or muſk-narciſſus: ſpathe one-flowered; nectary cylindric, truncate, ſubrepand, equalling the oblong petals. Nectary cylindric, with the mouth obſcurely repand, neither toothed nor curled. Native of Spain.

8. Narciſſus triandrus, ruſh-leaved narciſſus, or reflexed daffodil: ſpathe one or two flowered; flowers drooping; petals reflexed; three of the ſtamens longer. This is of the ſame ſize with N. poeticus; but the leaves are narrower by half, and channelled. Spathe one-flowered; corolla ſnow-white; nectary bell-ſhaped, ſhorter by half than the corolla, with the margin ſtraight, and unequally crenulate; anthers dark yellow, ſhorter than the nectary. The N. triandrus of our nurſeries near London is pale yellow. Mr. Curtis's figure has two flowers from a ſpathe, and there are conſtantly ſix ſtamens, three reaching no farther than the mouth of the tube. See fig. 2.

Parkinſon's figure has three flowers from a ſpathe. He deſcribes it as having three, four, or more, ſnow-white flowers, ſtanding upon long green footſtalks, every flower hanging down his head, and turning up his ſix narrow and long leaves, even to the very footſtalk again: from the middle of the flower hangeth down a long round cup, as white as the leaves, within which are contained three ſmall white chives tipt with yellow, and a ſmall long pointell, thruſting out beyond the brims of the cup. Parkinſon has deſcribed ſeveral others with reflexed petals, probably varieties of this. One wholly of a gold-colour, both cup and petals; a ſecond yellow with a white cup; a third white with a yellow cup.

Linnæus makes it native of the Pyrenees, in which he is followed by Mr. Curtis: according to the Kew Catalogue, it is from Portugal. Cluſius ſays that a French herbariſt, named Nicolas le Quelt, or Quilt, who ſearched the Pyrenees and Spain every year, introduced it in 1599. It was cultivated in England in 1629, as appears from Parkinſon. It ſeems afterwards to have been loſt, and to have been re-introduced lately.

9. Narciſſus orientalis, or oriental narciſſus: ſpathe one or two-flowered; nectary bell-ſhaped, trifid, emarginate, three times ſhorter than the petals. This is a broad-leaved ſpecies, having the appearance of N. tazetta. Corolla white; nectary erect, half or one-third of the length of the petals, trifid, yellow, with the lobes emarginate. Of this there are ſeveral varieties. Native of the Levant. Cultivated in 1758 by Mr. Miller. It flowers in May.

10. Narciſſus trilobus, or nodding jonquil: ſpathe ſubmultiflorous; nectary bell-ſhaped, ſubtrifid, quite entire, ſhorter by half than the petals. This reſembles N. jonquilla, but the nectary is cylindric, more than half the length of the petals, not curled, but obſcurely three-lobed. Native of the ſouth of Europe.

11. Narciſſus odorus, ſweet-ſcented narciſſus, or great jonquil: ſpathe one or two flowered; nectary bell-ſhaped, ſix-cleft, even, ſhorter by half than the petals; leaves ſemicylindric. Flower deep yellow, three times as large as that of N. tazetta, ſometimes one only from a ſpathe, ſometimes more: nectary not fringed, but divided at the mouth into ſix blunt lobes. Parkinſon ſays, it bears two or three very large fair flowers, with a large and more open cup than any other of the ruſh-daffodils, both of a fair yellow colour, yet the cup a little deeper, and a little crumpled about the edges. This ſpecies, which, as its name implies, poſſeſſes more fragrance than many of the others, is a native of the ſouth of Europe, flowers in April, and varies with double flowers. Mr. Miller takes no notice of it, except merely as a variety of N. jonquilla. He cultivated it in 1758. It flowers in April and May.

12. Narciſſus calathinus, or Cluſius's narciſſus: ſpathe many-flowered; nectary bell-ſhaped, almoſt equalling the petals; leaves flat. This reſembles N. tazetta very much, but the petals are a little larger and ſharper: the nectary is the ſame length with the petals. Leaves two or three, a foot or more in length. Stem ſlender, ſtrong, a foot in length. Flowers two or three from a ſpathe, very elegant, large, and looſe: petals yellow: cup half an inch long, ſinuated at the edge, of a deeper yellow colour. It has the odour of the jonquil. Cluſius firſt obſerved this in flower in April 1595, in the garden of Theodoric Clutius or Cluyts, prefect of the Academic Garden at Leyden: both Cluyts and Cornelius van Hille, a miniſter at Rotterdam, gave him bulbs of it. Native of the ſouth of Europe and the Levant.

13. Narciſſus tazetta, or polyanthus-narciſſus: ſpathe many-flowered; nectary bell-ſhaped, plaited, truncate, three times ſhorter than the petals; leaves flat. Bulb large, roundiſh. Leaves three or four, long, narrow, plane. Scape or flower-ſtalk upright, broadiſh; angular, concave, from ten or twelve to eighteen inches in height. Flowers ſix or ſeven to ten from one ſpathe, very fragrant, cluſtered, white or yellow. Native of Spain and Portugal, the ſouth of France, Italy, and Japan; Mr. Miller adds the iſlands of the Archipelago, and Parkinſon the neighbourhood of Conſtantinople. Cluſius obſerved it at the end of January 1565 in Spain and Portugal, and at the beginning of February at Gibraltar. Ray found it in Italy between Lerici and Maſſa, and between Maſſa and Lucca, in April; alſo about Montpelier in February and March.

There are more varieties of the polyanthus-narciſſus than of all the other ſpecies; for, the flowers being very ornamental, and coming early in the ſpring, the floriſts in Holland, Flanders, and France, have taken great pains in cultivating and improving them. The principal varieties are theſe:

α. Petals yellow; with orange, yellow, or ſulphur-coloured, cups or nectaries.

β. Petals white; with orange, yellow, or ſulphur-coloured, cups or nectaries.

γ. Petals white; with white cups or nectaries.

δ. Double flowers of the different varieties.

The Dutch and London Catalogues contain about an hundred ſub-varieties under theſe heads, with pompous names, which are too ſubject to the light breath of faſhion and caprice to be enumerated here.

14. Narciſſus bulbocodium, or hoop-petticoat narciſſus: ſpathe one-flowered; nectary turbinate, larger than the petals; genitals declining. Bulb ſmall. Leaves very narrow, having ſome reſemblance to thoſe of the ruſh, but a little compreſſed, with a longitudinal furrow on one ſide; they are ſeldom more than eight or nine inches long. Flower-ſtalk ſlender, taper, about ſix inches long: petal ſcarce half an inch long, cut into ſix acute ſegments; the nectary, or cup, is more than two inches long, very broad at the brim, leſſening gradually to the baſe, formed ſomewhat like the old farthingale or bell-hoop petticoat worn by the ladies. It is a native of Portugal, whence Mr. Miller received the roots; but it was alſo cultivated in the time of Parkinſon, though now, amid the multitude of novelties that flow in upon us from every quarter, it is not common in our flower-borders. Mr. Curtis informs us that he has ſeen it grow abundantly in ſome gardens in Hampſhire. It flowers in April or May.

15. Narciſſus ſerotinus, or late-flowering narciſſus: ſpathe one-flowered; nectary ſix-parted, very ſhort; leaves awl-ſhaped. Stalk jointed, nine inches high. Corolla white, cut into ſix narrow ſegments; cup yellow. It flowers late in the autumn. Native of Spain, Italy, and Barbary.

16. Narciſſus jonquilla, or common jonquil: ſpathe many-flowered; nectary bell-ſhaped, ſhort; leaves awl-ſhaped. The jonquil, from the narrowneſs of its leaves, like thoſe of ruſhes, has its name, and is called by old authors *N. juncifolius.* There are two or three of them uſually on a plant, and they are angular, fleſhy, and almoſt round. Scape round, hollow, producing a top from three to five flowers from a ſpathe, ſometimes no more than two, very fragrant petals orbiculate or mucronate, both they and the cup yellow. Native of Spain. Cultivated by Gerarde in 1597. It flowers in April and May, and varies with double flowers. The common jonquil is ſhown at fig. 3 on the Plate; and its bulb, or root, at fig. 4.

Propagation and Culture. All the hardy ſorts of daffodil and narciſſus may be planted in large borders of the flower-garden, where, being intermixed with other bulbs, they afford an agreeable variety. They will thrive in almoſt any ſoil or ſituation, and even under the ſhade of trees, where they will produce annually in the ſpring great quantities of flowers for ſeveral years together without tranſplanting, and make a good appearance before the trees come out in leaf. They increaſe abundantly by offſets. The double ſorts ſhould be taken up yearly, to prevent their becoming ſingle.

For raiſing the fine ſorts of polyanthus-narciſſus from ſeeds, which is the way to obtain new varieties, you muſt be very careful, in ſaving your ſeeds, to gather none but from ſuch flowers as have good properties, and particularly from ſuch only as have many flowers upon a ſtalk, that flower tall, and have beautiful cups to their flowers. From ſuch you may expect to have good flowers produced; but, if you ſow ordinary ſeed, it is only putting yourſelf to trouble and expenſe to no purpoſe, ſince from ſuch ſeeds there can be no hopes of procuring any valuable flowers. Having provided yourſelf with good ſeeds, you muſt procure either ſome ſhallow caſes or flat pans, made on purpoſe for the raiſing of ſeedlings, which ſhould have holes in their bottoms, to let the moiſture paſs off; theſe muſt be filled with freſh light ſandy earth, about the beginning of Auguſt, (that being the ſeaſon for ſowing the ſeeds of moſt bulbous-rooted flowers.) The earth in theſe muſt be levelled very even; then ſow the ſeeds thereon pretty thick, covering them over with fine-ſifted light earth about half an inch thick, and place the caſes or pans in a ſituation where they may have only the morning ſun till about ten o'clock, where they ſhould remain until the beginning of October, when they muſt be removed into a warmer ſituation, placing them upon bricks, that the air may freely paſs under the caſes, which will preſerve them from being too moiſt. They ſhould alſo be expoſed to the full ſun, but ſcreened from the north and eaſt winds; and, if the froſt ſhould be ſevere, they muſt be covered, otherwiſe there will be danger of their being deſtroyed; in this ſituation they may remain until the beginning of April, by which time the plants will be up, when you muſt carefully clear them from weeds; and, if the ſeaſon ſhould prove dry, they muſt be frequently watered: the caſes ſhould alſo now be removed into their former ſhady poſition, or ſhaded in the middle of the day, for the heat of the noon-day ſun will be too great for the young plants. The latter end of June, when the leaves of the plants are decayed, you ſhould take off the upper ſurface of the earth in the caſes, (which by that time will have contracted a moſſineſs, and, if ſuffered to remain, will greatly injure the young roots,) obſerving not to take it ſo deep as to touch the roots; then ſift ſome freſh light earth over the ſurface, about half an inch thick, which will greatly ſtrengthen the roots; the ſame ſhould alſo be repeated in October, when the caſes are moved again into the ſun. During the ſummer ſeaſon, if the weather ſhould prove very wet, and the earth in the caſe appear very moiſt, you muſt remove them into the ſun till the earth be dry again; for, if the roots receive much wet during the time they are inactive, it very often rots them; therefore you muſt never give them any water after their leaves are decayed, but only place them in the ſhade, as was before directed.

Thus you ſhould manage them the two firſt ſeaſons, till their leaves are decayed; but, the ſecond ſummer after ſowing, you ſhould carefully take up the roots; which may be done by ſifting the earth in the caſes through a fine ſieve, whereby the roots will be eaſily ſeparated from the earth; then, having prepared a bed or two of good freſh light earth, in proportion to the quantity of your roots, you ſhould plant them therein, at about three inches diſtance every way, and about three inches deep in the ground. Theſe beds ſhould be raiſed above the level of the ground, in proportion to the moiſture of the ſoil, which, if dry, three inches will be enough; but, if it be wet, they muſt be raiſed ſix or eight inches high, and laid a little rounding, to ſhoot off the wet. If theſe beds are made in July, which is the beſt time to tranſplant the roots, the weeds will ſoon appear very thick; therefore you ſhould gently hoe the ſurface of the ground to deſtroy them, being very careful not to cut ſo deep as to touch any of the roots; and this ſhould be repeated as often as may be found neceſſary, by the growth of the weeds, obſerving always to do it in dry weather, that they may be effectually deſtroyed; and, towards the latter end of October, after having entirely cleared the beds from weeds, you ſhould ſift a little rich light earth over them, about an inch thick, the goodneſs of which will be waſhed down to the roots by the winter's rain, which will greatly encourage their ſhooting in the ſpring. If the cold ſhould be very ſevere in winter, you ſhould cover the beds either with old tan or ſea-coal aſhes, or in want of theſe with peaſe-haulm, or ſome ſuch light covering, to prevent the froſt from penetrating the ground to the roots, which might greatly injure them while they are ſo young. In the ſpring, when the plants begin to appear above ground, you muſt gently ſtir the ſurface of the ground, clearing it from weeds, &c. in doing of which, you ſhould be very careful not to injure the plants; and, if the ſeaſon ſhould prove dry, you ſhould now and then gently refreſh them with water, which will ſtrengthen the roots. When their leaves are decayed, you ſhould clear the bed from weeds, and ſift a little earth over them (as was before directed), which muſt alſo be repeated in October, in like manner; but the roots ſhould not remain longer in theſe beds than two years, by which time they will have grown ſo large as to require more room; therefore they ſhould be taken up as ſoon as their leaves are decayed, and planted into freſh beds, which ſhould be dug deep, and a little very rotten dung buried in the bottom, for the fibres of the roots to ſtrike into. Then the roots ſhould be planted at ſix inches diſtance, and the ſame depth in the ground. In the autumn, before the froſt comes on, if ſome rotten tan is laid over the beds, it will keep out the froſt, and greatly encourage the roots; and, if the winter ſhould prove ſevere, it will be proper to lay a greater thickneſs of tan over the beds, and alſo in the alleys, to keep out froſt, or to cover them over with ſtraw, or peaſe-haulm, otherwiſe they may be all deſtroyed by the cold. In the ſpring theſe coverings ſhould be removed, as ſoon as the danger of hard froſt is over, and the beds muſt be kept clean from weeds the following ſummer: at Michaelmas they ſhould have ſome freſh earth laid over the beds, and covered again with tan, and ſo every year continued till the roots flower, which is generally in five years from ſeed, when you ſhould mark all ſuch as promiſe well, which ſhould be taken up as ſoon as their leaves decay, and planted at a greater diſtance in newly-prepared beds; but thoſe which do not flower, or thoſe you do not greatly eſteem, ſhould be permitted to remain in the ſame bed; therefore, in taking up thoſe roots which you marked, you muſt be careful not to diſturb the roots of thoſe left, and alſo to level the earth again, and ſift ſome freſh earth over the beds (as before) to encourage the roots; for it often happens in the ſeedlings of theſe flowers, that, at their firſt time of blowing, their flowers ſeldom appear half ſo beautiful as they do the ſecond year; for which reaſon none of them ſhould be rejected until they have flowered two or three times, that ſo you may be aſſured of their worth.

Thus, having laid down directions for the ſowing and managing thoſe roots, until they are ſtrong enough to flower, we are next to give ſome inſtructions for planting and managing the roots afterwards, ſo as to cauſe them to produce large fair flowers. All the ſorts of narciſſus which produce many flowers upon a ſtalk, ſhould have a ſituation defended from cold and ſtrong winds, otherwiſe they will be ſubject to be injured by the cold in winter, and their ſtems broken down when in flower; for, notwithſtanding their ſtalks are generally pretty ſtrong, yet the number of flowers upon each renders their heads weighty, eſpecially after rain, which lodges in the flowers, and, if ſucceeded by ſtrong winds, very often deſtroys their beauty, if they are expoſed thereto; ſo that a border under a hedge, which is open to the ſouth-eaſt, is preferable to any other poſition for theſe flowers. The morning ſun riſing upon them will dry off the moiſture which had lodged upon them the preceding night, and cauſe them to expand fairer than when they are planted in a ſhady ſituation; and, if they are too much expoſed to the afternoon ſun, they will be hurried out of their beauty very ſoon; and, the ſtrong winds uſually coming from the weſt and ſouth-weſt points, they will be expoſed to the fury of them, which frequently is very injurious.

Having made choice of a proper ſituation, you muſt then proceed to prepare the earth neceſſary to plant them in; for, if the natural ſoil of the place be very ſtrong or poor, it will be proper to make the border of new earth, removing the former ſoil away about three feet deep. The beſt earth for theſe flowers is a freſh light hazel loam, mixed with a little very rotten neats dung: this ſhould be well mixed together, and often turned over, in order to ſweeten it; then, having removed away the old earth to the before-mentioned depth, you ſhould put a layer of rotten dung or tan in the bottom, about four or five inches thick, upon which you muſt lay ſome of the prepared earth, about eighteen or twenty inches thick, making it exactly level; then, having marked out by line the exact diſtances at which the roots are to be planted, (which ſhould not be leſs than ſix or eight inches ſquare,) you muſt place the roots accordingly, obſerving to ſet them upright; then you muſt cover them over with the before-mentioned earth about eight inches deep, being very careful in doing it not to diſplace the roots; when this is done, you muſt make the ſurface of the border even, and make up the ſide ſtraight, which will appear handſome. The beſt time for planting theſe roots is in the end of Auguſt, or beginning of September; for, if they are kept too long out of the ground, it will cauſe their flowers to be weak. You ſhould alſo obſerve the nature of the ſoil where they are planted, and whether the ſituation be wet or dry, according to which you ſhould adapt the freſh earth, and order the beds; for, if the ſoil be very ſtrong and the ſituation moiſt, you ſhould then make choice of a light earth, and raiſe the beds ſix or eight inches, or a foot, above the level of the ground, otherwiſe the roots will be in danger of periſhing by too much wet; but, if the ſituation be dry and the ſoil naturally light, you ſhould then allow the earth to be a little ſtronger, and the beds ſhould not be raiſed above three or four inches high; for, if they are made too high, the roots will ſuffer very much, if the ſpring ſhould prove dry, nor would the flowers be near ſo fair. As alſo in very ſevere winters, thoſe beds, which are raiſed much above the level of the ground, will be more expoſed to the cold than thoſe which are lower, unleſs the alleys are filled up with rotten tan or litter.

During the ſummer, the only culture theſe flowers require is, to keep them free from weeds; and, when their leaves are entirely decayed, they ſhould be raked off, and the beds made clean: but by no means cut off their leaves till they are quite decayed, as it is by ſome practiſed, for that greatly weakens the roots. Towards the middle of October, if the weeds have grown upon the beds, you ſhould in a dry day gently hoe the ſurface of the ground to deſtroy them, obſerving to rake it over ſmooth again; and, before the froſts come on, the beds ſhould be covered over two inches thick with rotten tan, to keep out the froſt; after which they will require no farther care till the ſpring, when their leaves will appear above ground, at which time you ſhould gently ſtir the ſurface of the earth with a ſmall trowel, being very careful not to injure the leaves of the plants, and rake it ſmooth with your hands, clearing off all weeds, &c. which, if ſuffered to remain at that ſeaſon, will ſoon grow ſo faſt as to appear unſightly, and will exhauſt the nouriſhment from the earth. With this management theſe roots will flower very ſtrong, ſome of which will appear in March, and the others in April; which, if ſuffered to remain, will continue in beauty a full month, and are, at that ſeaſon, very great ornaments to a flower-garden.

Theſe roots ſhould not be tranſplanted oftener than every third year, if they are expected to flower ſtrong and make a great increaſe; becauſe the firſt year after removing they never flower ſo ſtrong as they do the ſecond and third; nor will the roots increaſe ſo faſt when they are often tranſplanted; but, if you let them remain longer than three years unremoved, the number of offſets, which by that time will be produced, will weaken the large bulbs, and cauſe them to produce very weak flowers; therefore, at the time of tranſplanting them, all the ſmall offſets ſhould be taken off, and planted in a nurſery-bed by themſelves; but the large bulbs may be planted again for flowering. If you plant them in the ſame bed where they grew before, you muſt take out all the earth two feet deep, and fill it up again with freſh, in the manner before directed, which will be equal to removing them into another place: this is the conſtant practice of the gardeners in Holland, who have but little room to change their roots; therefore they every year remove the earth of their beds, and put in freſh, ſo that the ſame place is conſtantly occupied by the like flowers. But thoſe people take up their roots every year; for, as they cultivate them for ſale, the rounder their roots are, the more valuable they will be: the way to have them ſo is to take their offſets from them annually; for, when their roots are left two or three years unremoved, the offſets will have grown large, and theſe, preſſing againſt each other, will cauſe their ſides to be flatted; ſo that, where the roots are propagated for ſale, they ſhould be annually taken up as ſoon as their leaves decay; and the large bulbs may be kept out of the ground till the middle or end of October, but the offſets ſhould be planted the beginning of September or ſooner, that they may get ſtrength, ſo as to become blowing roots the following year: but, where they are deſigned for ornament, they ſhould not be removed oftener than every third year, for then the roots will be in large bunches, and a number of ſtalks with flowers coming from each bunch; they will make a much better appearance than where a ſingle ſtalk riſes from each root, which will be the caſe when the roots are annually removed.

Perſons who are nice in theſe flowers ſhelter them by an awning, during the time of flowering, to keep off ſun, rain, and wind, as is practiſed with auriculas, carnations, and other very handſome delicate flowers, to preſerve the beauty of the bloom, and to continue it longer. The polyanthus-narciſſus may be blown in glaſſes in rooms during the winter and early in the ſpring, from October to March.

The jonquils ſhould be planted in beds or borders, ſeparate from other roots, becauſe theſe require to be tranſplanted at leaſt every year, otherwiſe their roots are apt to grow long and ſlender, and ſeldom flower well after; which is alſo the caſe if they are continued many years in the ſame ſoil: wherefore the roots ſhould be often removed from one part of the garden to another, or, at leaſt, the earth ſhould be often renewed, which is the moſt probable method to preſerve their flowers in perfection. The ſoil in which theſe flowers ſucceed beſt is an hazel-loam, neither too light nor over ſtiff; it muſt be freſh, and free from roots of trees or noxious weeds, but ſhould not be dunged; for it is very remarkable, that, where the ground is made rich, they ſeldom continue good very long, but are ſubject to ſhoot downwards, and form long ſlender roots. Theſe flowers are greatly eſteemed by many people for their ſtrong ſweet ſcent; though there be very few ladies that can bear the ſmell of them, eſpecially if confined in a room. Where the ſmell of the jonquils can be endured, they are blown with ſucceſs in glaſſes, as well as the polyanthus-narciſſus. The glaſſes ſhould be filled up to the bottom of the bulb with freſh ſoft water: place them in a light warm room, near windows which have the benefit of the ſun: and keep up the water to the ſame height, by putting in a freſh ſupply every fortnight or three weeks. Theſe and other flowers may alſo be brought forward in a warm room in pots ſet in pans of water; or ſtill more effectually in ſtoves or hotbeds, by which means a ſucceſſion of theſe flowers may be obtained during the winter and ſpring till they appear in the natural ground. See AMARYLLIS, ANTHERICUM, FERRARIA, HÆMANTHUS, LEUCOIUM, and PANCRATIUM.

NARCON'DAM, an iſland in the Eaſtern Indian Sea, about 20 miles in circumference. It is a barren rock, riſing abruptly out of the Ocean, uninhabited, and deſtitute of vegetation: 75 miles ſouth from the Great Andaman. Lat. 13. 23. N. lon. 94, 40. E.

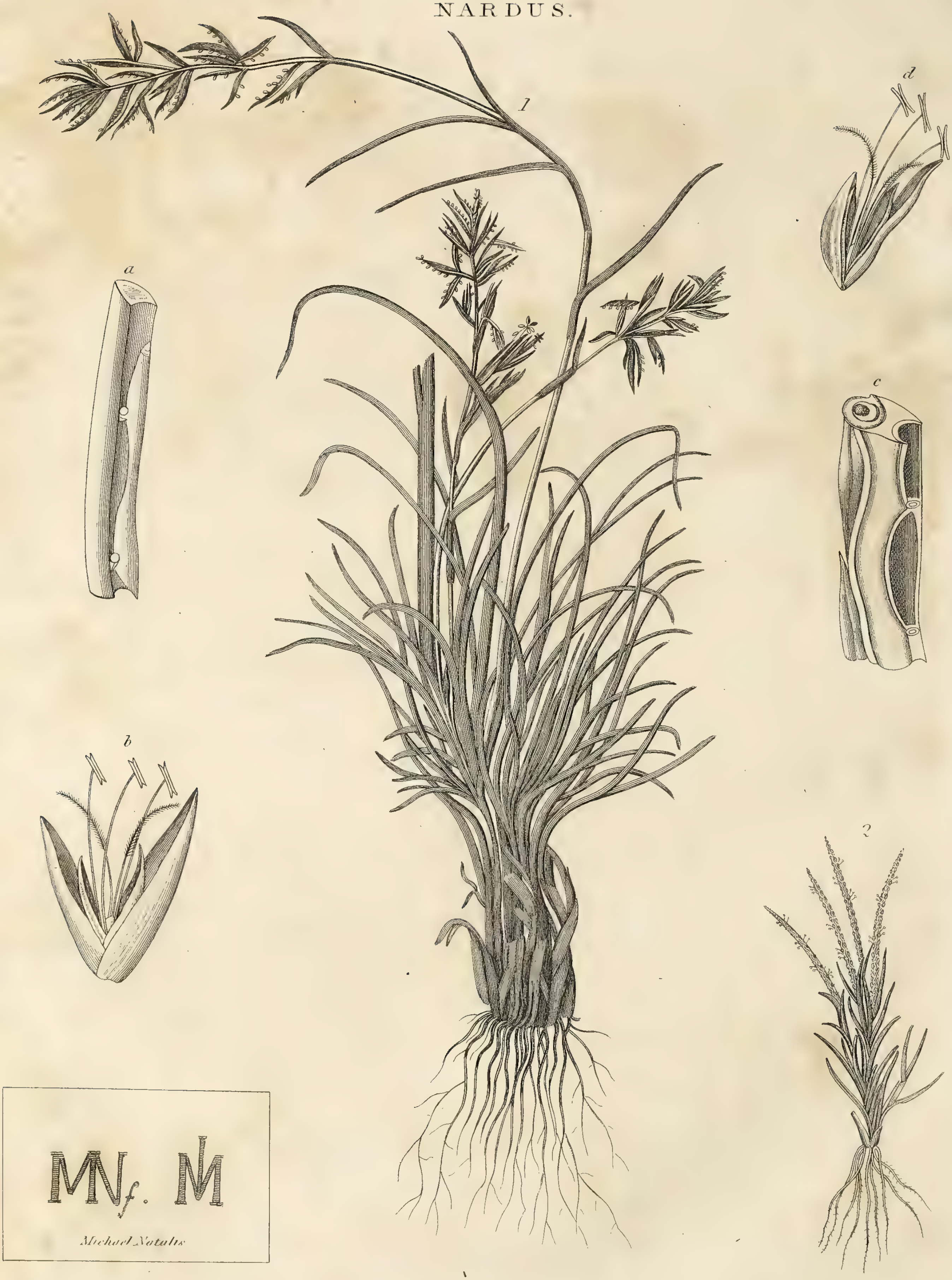
NARCO'SIS, *ſ.* [Greek.] Privation of ſenſe; ſtupefaction.

NARCOT'IC, or NARCOT'ICAL, *adj.* [ναρκοω, Gr. *narcotique*, Fr.] Producing torpor, or ſtupefaction.—*Narcotick* includes all part of the materia medica which any way produces ſleep, whether called by this name, or hypnoticks, or opiates. *Quincy.*—Medicines which they call *narcotical*, that is to ſay, ſuch as benowme and dead the diſeaſed. *Harmar's Tr. of Beza*, (1587.)

NARCOT'IC, *ſ.* A drug producing ſleep.—*Narcotikes* and opie of Thebes fine. *Chaucer's Knight's Tale.*

NARCOT'ICALLY, *adv.* By producing torpor.—Arreſting

NARDUS.



Indian Mat graſs, or Spikenard.

reſting that impetuous motion of the ſpirits, as thoſe things do that paſs for *narcotically* cold. *Whitlock's Mann. of the Engl.*

NARCOT'ICNESS, *ſ.* The quality which takes away the ſenſe of pain. *Scott.*

NARD, *ſ.* [*nardus*, Latin; *ναρδος*, Gr.] Spikenard; a kind of ointment:

He now is come
Into the bliſsful field, through groves of myrrh,
And flow'ring odours, caſſia, *nard*, and balm. *Milton's P. L.*

An odorous ſhrub. See Nardus.

Smelt o' the bud o' the briar,
Or the *nard* in the fire. *Beu Jonſon's Underwoods.*

NARD (Indian). See Andropogon.

NAR'DECK, a circar of Hindooſtan, in the ſubah of Delhi, bounded on the north by Hiſſar, on the eaſt by Ballogiſtan, on the ſouth by Nagore, and on the weſt by Moultan: it ſeems to be woody, with few towns.

NAR'DEN, See Naarden, p. 498.

NAR'DI (Jacopo), an eminent Italian hiſtorian, was born of an ancient and noble family at Florence in 1476. After ſuſtaining ſeveral honourable offices in his native city, he was ſent ambaſſador to the republic of Venice in 1527. Upon his return to Florence he eſpouſed the party adverſe to the Medici family, and diſtinguiſhed himſelf as well in counſel as in arms. The prevalence of the Medici was attended with his impriſonment and his exile, after being ſtripped of all his property. He was one of the emigrants who in 1535 laid their complaints before the emperor Charles V. at Naples; but, the application proving fruitleſs, he retired to Venice, where he employed the latter years of his life in cultivating literature, and compoſing various works. It is not known when he died. In a letter written by him to Varchi, dated in July 1755, he ſays, "I am ſtill in health, though weak, having to begin, in the twenty-firſt of the preſent month, to aſcend with my ſtaff the laborious ſteep of the eightieth year of this my miſpent life." Probably he did not long ſurvive. Nardi wrote the hiſtory of Florence from 1494 to 1531, a period all within his own obſervation. A party-exile could ſcarcely avoid writing a party-hiſtory; and his work, though much eſteemed, bears the ſtamp of that character. He wanted either the power or the courage to publiſh it in his life-time, and it was firſt printed at Lyons in 1582. Several other editions followed. Some diſcourſes belonging to it, with ſome expunged paſſages, exiſt in manuſcript in libraries at Venice and Florence. He likewiſe compoſed the life of Antonio Giacomini Tebalducci Maleſpini, printed at Florence in 1597. Theſe original works, however, contributed perhaps leſs to his reputation than his tranſlation of Livy, firſt publiſhed at Venice in 1540, and ſeveral times reprinted. It has always been accounted one of the beſt verſions in the Italian language. He alſo tranſlated Cicero's Oration for Marcellus. Nardi moreover cultivated Italian poetry, and compoſed ſome *Canti Carnaſchialeſchi*, printed in the collections of poems of that kind; and a comedy in verſe entitled *L'Amicizia*. *Tiraboſchi.*

NAR'DO, a town of Naples, in the province of Otranto; the ſee of a biſhop, ſuffragan of Brandiſi, but exempt from his juriſdiction: twenty-two miles weſt of Otranto, 184 eaſt-ſouth-eaſt of Naples. Lat. 40. 27. N. lon. 18. 0. E.

In this little city are 8000 inhabitants. The ſteeple of its cathedral is built in a very uncommon but ſhowy ſtyle of Gothic architecture. Luco Giordano and Solimeni have adorned the church with ſome agreeable paintings. This place was part of the Balzo eſtate. The Aquavivas were the next poſſeſſors: they are thought to have come from the Marca di Ancona. In 1401, in conſideration of their relationſhip to pope Boniface IX. Ladiſlaus erected their manor of Atri into a dukedom, an honour till then ſeldom granted to any but princes of the blood-royal. Claudius Aquaviva, a famous general of the Jeſuits, who died in 1615, was of this family.

NAR'DO CEL'TICÆ SIM'ILIS. See Valeriana.

NAR'DOLE, a town of Hindooſtan, in the circar of Rajamundry: twelve miles ſouth-weſt of Rajamundry.

NAR'DUS, *ſ.* [a name retained from the Greek and Latin writers, but ſaid to be of Hebrew origin.] Mat-grass, or Spikenard; in botany, a genus of the claſs triandria, order monogynia, natural order of gramina or graſſes. Generic characters—Calyx: none. Corolla: two-valved; outer valve lanceolate-linear, long, mucronate, embracing the ſmaller with its belly: inner ſmaller, linear, mucronate; nectary none. Stamina: filaments three, capillary, ſhorter than the corolla; antheræ oblong. Piſtillum: germ oblong; ſtyle one, filiform, long, pubeſcent; ſtigma ſimple. Pericarpium: none; the corolla grows to the ſeed, and does not open. Seed one, ſtraight, linear-oblong, acuminate at both ends, narrower at top.—*Eſſential Character.* Calyx none; corolla two-valved. There are five ſpecies.

1. Nardus ſtricta, or common mat-graſs: ſpike briſtle-ſhaped, ſtraight, pointing one way. Root perennial. Culms from a ſpan to a foot in height, ſlender, ſtiff, roughiſh, having one, two, or three, joints near the baſe, with a ſhort leaf to each, and thence naked to the ſpike. Root-leaves numerous, longer, narrow, a little rough. Spike two or three inches long, conſiſting of about twenty ſpikelets diſperſed thinly along the rachis. Florets yellowiſh white or purple, pubeſcent, alternate, ſeſſile. Rachis, or ſpike-ſtalk, convex on one ſide, hollowed on the other, with rough alternate teeth on the edges for the inſertion of the florets, and continued above them to a ſhort briſtly point. This graſs is eaſily diſtinguiſhed by the ſlenderneſs and ruſhy ſtiffneſs of the ſtalks and leaves; and by the florets being thinly diſperſed along the ſpike, moſtly in pairs, pointing all the ſame way, and having each only one ſtyle. It flowers from May or June to Auguſt: Ray ſays from the end of April; and that it holds its ſpike till winter. Native of moſt parts of Europe, in woody moiſt barren meadows; with us chiefly on or about bogs or heaths. Being ſtiff, hard, and ſhort, Linnæus obſerves that it eludes the ſtroke of the ſcythe, or takes off its edge, for which reaſon it is diſliked by the mowers. In England it rarely comes under the ſcythe. Linnæus alſo informs us that crows frequently ſtock it up, for the ſake of the larva of ſome Tipula, which they find at the root. He ſays that goats and horſes eat it, but that cows and ſheep are not fond of it. With us it does not ſeem to be applied to any uſe.

2. Nardus ariſtata, or awned mat-graſs: calyxes horned. Root biennial. This is a very ſmall ſpecies. The leaves curve back, and roll up like hair, dry away, and diſappear in part. The ſpike makes about one-third of the culm: it is curved back at the end, which diſcovers the little awns of the florets; for they are ſo ſmall, that they are not ſeen without attention and practice. The florets come in pairs in a very ſmall ſcale, which ſerves them for a calyx, and which might rank this graſs with the Loliums. The florets are very ſlightly peduncled, two-valved, and terminated by a little awn. Native of the South of Europe, in ſandy barren ſoils.

3. Nardus Indica, Indian mat-graſs, or ſpikenard: ſpike briſtle-ſhaped, pointing one way, a little curved inwards. It ſeems very doubtful to what genus the real Indian ſpikenard belongs. The laſt edition of Miller's Dictionary, by Mr. Profeſſor Martyn, has deſcribed it in three different places: firſtly, under Andropogon nardus; ſecondly, here; and thirdly, as Rottboellia ſetacea. It was firſt noticed by Kœnig at Tranquebar; and a very particular deſcription of it was afterwards given by Dr. Blane, for which ſee Andropogon, vol. i. p. 684, 5. As that account was not accompanied with a repreſentation, we have ſupplied that deficiency by the annexed Plate, fig. 1. where alſo at *a* is a portion of the rachis; and at *b* the flower. This graſs, in its wild ſtate, riſes to the height of three or four feet, and, when carefully cultivated, to ſix feet.

4. Nardus Thomæ, or St. Thomas's mat-graſs: ſpike ſolitary, erect, awl-ſhaped, imbricate two-ways; rachis waved, excavated, but not jointed. This ſmall ſpecies is contraſted with the preceding at fig. 2. Culms minute, erect, compreſſed, about an inch high without the ſpike, and two with it. Leaves numerous, forming a tuft, two inches long, briſtle-ſhaped. Spike ſolitary, erect, awl-ſhaped, two-ranked, compreſſed, yellowiſh: rachis waved, excavated on the ſides, not jointed. Flowers all hermaphrodite, diſpoſed alternately in the excavations of the rachis; calyx one-flowered, two-valved; outer valvelet rigid, linear; inner boat-ſhaped, and leſs rigid; corolla two-valved, membranous, hairy. At *c* is a portion of the rachis, magnified, with the flowers of one ſide in their places; *d*, the flower. This alſo was found by Kœnig in Tranquebar, at St. Thomas's Mount; on old walls.

Willdenow has diſtinguiſhed another ſpecies, found alſo by Kœnig in Malabar, which ſeems to the ſame with this. He thus deſcribes it under the name of *piloſa*: It is the ſmalleſt ſpecies of the genus, the whole graſs being hardly more than an inch in height; culms ſimple, cloſely covered with the ſheaths of the leaves, ſeveral from one root; leaves linear, channelled, hairy with ſcattered hairs long in proportion to the plant: ſpike ſolitary, terminating, awl-ſhaped.

5. Nardus ciliaris, or ciliated mat-graſs: ſpike curved in, ciliate. Leaves flat. Culm a ſpan high. Spike halved, or having only on one ſide alternate erect florets, from twelve to fifteen in number; the outer valve ovate-oblong, awnleſs, ciliate along the edge with numerous rugged ſcales. Proper calyx none, but on one ſide of the florets a briſtle, ſhorter than the glume. Native of the Eaſt Indies.

6. Nardus Gangitis. See ROTTBOELLIA CYLINDRICA. See alſo ÆGILOPS, AGROSTIS, CACALIA, and VALERIANA.

NARE, *ſ.* [*naris*, Lat.] A noſtril; not uſed, except as in the following paſſage, in affectation:

There is a Machiavelian plot,
Though every *nare* olfact it not. *Hudibras.*

NARE'A, a country of Africa, in the ſouthern part of Abyſſinia, formerly governed by its own princes; but, having been conquered, and converted to Chriſtianity, part of it is become ſubject to the Abyſſinian emperor. The conquered part, however, does not extend more than about thirty or forty leagues either way. The whole kingdom is reckoned rich and fertile, producing great plenty, and vaſt quantities of cattle, and carrying on a very conſiderable commerce with the Caffres, who convey thither abundance of gold, which they exchange for clothes, ſalt, and other commodities. The Nareans are allowed, by the Abyſſinians themſelves, to be the beſt and handſomeſt people in all Ethiopia, tall, ſtout, and well-ſhaped; and in their dealings, honeſt, wiſe, faithful, and undiſguiſed. They are alſo brave and warlike, and have gallantly defended their country againſt the incurſions of the wild and barbarous Galles. The tribute they pay to the Abyſſinian emperor ſeems to proceed rather from their loyalty than from any obligation or compulſion.

NAREDCOT'TY, a town of Thibet: twenty-eight miles ſouth of Gangotri.

NAREK'HA, the Hindoo name for the infernal regions, which are ſuppoſed to be divided into a variety of places adapted to different degrees of puniſhment.

NAREL'LA, a town of Hindooſtan: fifteen miles north-north-weſt of Delhi.

NAREN'DA, a town of Hindooſtan, in Agimere: nine miles north-eaſt of Roopnagur.

NAREN'ZA, a river of Dalmatia, which riſes near Moſtar, and runs into the Adriatic. The land bordering on the river is exceedingly fertile; notwithſtanding the fertility of the ſoil, and the convenience of the ſituation in regard to the trade with Turkey, the territory of Narenza is very thinly inhabited, and very little frequented by ſea-faring people, who dread the effects of the air, from which, perhaps, is derived the expreſſion of *Niretva od Boga procleta*, "Narenta, curſed by God," which is become a proverb in Dalmatia. The celebrated Dr. Guiſeppe Pugati, who died a profeſſor of phyſic in the univerſity of Padua, tells us that the water which ſtagnates in ſome places becomes peſtilential to ſuch a degree as to kill the fiſh that ſwim in it; and he aſſures us, that the birds that frequent marſhes, of which there are many thereabouts, often fall down poiſoned by the exhalations. He reckons the Narentine autumnal fevers a ſpecies of plague, very difficult to cure.

NAREN'ZA, anciently NARENTA, a town of Dalmatia, on the above river, formerly the capital of Dalmatia, and one of its principal fortreſſes. It was governed by a Roman proconſul and council; and under its juriſdiction were comprehended many diſtant places. In ſucceeding times, the Sclavonians ſeated themſelves here; and, under the title of Narentani, moleſted the navigation of theſe parts till the year 987, when the Venetians made themſelves maſters of the town. They had their own chiefs for a long time; but, in the year 1479, became ſubject to the Turkiſh yoke. Of the ancient town, not the leaſt trace is ſaid to remain; but in this neighbourhood is another, called *Narenza*, from the river of the ſame name, which the Venetians fortified, but diſmantled again in the year 1716. It is ſixty-eight miles ſouth-eaſt of Spalatro, and thirty-ſix north-north-weſt of Raguſa. Lat. 43. 34. N. lon. 18. 4. E.

NARES (James, Muſ. D.) an eminent muſical compoſer, was born in 1715, at Stanwell, in Middleſex. His father was for many years ſteward to the earls of Abingdon. James received his muſical education under Mr. Yates and Dr. Pepuſch; and in 1734 was choſen organiſt of York, though only nineteen years of age. While he reſided in that city he married, and was much employed as a teacher of muſic. On the death of Dr. Green in 1755, he was ſo powerfully recommended at court, that he obtained the united places of organiſt and compoſer to his majeſty. On this promotion he came to London, and was ſoon after created doctor in muſic at Cambridge. In 1757 Dr. Nares had the additional place of maſter of the choriſters, with an increaſe of the former ſalary; and, in this ſituation, he ſuperintended the education of ſeveral pupils who became eminent in their profeſſion. He compoſed a great many anthems and ſervices for the royal chapel, of which a number have been printed. He died in 1783, leaving a character as a man not leſs reſpectable than his reputation as a muſician. His principal works are, ſeveral ſets of Leſſons for the Harpſichord; the Royal Paſtoral, a Dramatic Ode on the Nuptials of his preſent Majeſty; Catches, Canons, and Glees; Anthems; and an uſeful elementary Treatiſe on Singing. Their merit has been highly extolled by a perſon of eminence in the profeſſion, who affirms that they "will be admired as long as a taſte for muſic ſhall ſubſiſt." Dr. Burney ſays of him, that "he was a ſtudious and ſound muſician;" and that "his diligence in compoſing for the chapel, and inſtructing the children, acquired him great reſpect." He was ſucceeded in the chapel-royal by Dr. Arnold, and as maſter of the children by Dr. Ayrton.

NA'RESTBAD, a town of Perſia, in the province of Kerman: 120 miles eaſt of Kabis.

NAREW', a river which riſes on the borders of Lithuania, and runs into the Bug near Serolzeck, in the duchy of Warſaw.

NAREW', a town of Poland, in the palatinate of Bielſk: twelve miles north-eaſt of Bielſk.

NAR'FORD, a village of Norfolk, on the Nar, and on the eaſt ſide of Narborough.

NAR'GARA, or NADAGA'RA, in ancient geography, a ſmall town of Africa, where Hannibal and Scipio held that famous conference, of which the particulars and the conſequences are detailed under the article CARTHAGE, vol. iii. p. 848.

NAR'GHIN, a ſmall iſland in the Caſpian Sea, near the weſt coaſt: ten miles ſouth-eaſt of Baku.

NAR'GHIS, a town of Perſia, in the province of Farſiſtan: one hundred miles ſouth-weſt of Schiras, and thirty north-eaſt of Bender Rigk.

NAR'GON, a ſmall iſland in the gulf of Finland. Lat. 59. 30. N. lon. 24. 36. E.

NAR'HAI, a town of Hindooſtan, in Mewat: thirty-five miles north of Cotputly.

NARIFUSO'RIA, *ſ.* A name given by authors to ſuch medicines as were meant to be inſtilled into the noſtrils, for diſorders of the head and eyes.

NARI'GA, a town of Ruſſia, in the government of Archangel, on the coaſt of the Frozen Ocean, near the mouth of the Petchora: 168 miles north-eaſt of Mezen.

NA'RIM, a town of Ruſſia, at the conflux of the Ob and Ket, in the government of Tobolſk; defended with palliſadoes and wooden towers. The environs abound with foxes, black, white, and grey; ermines and ſables. It is four hundred miles eaſt of Tobolſk, and 1520 eaſt of Peterſburg. Lat. 59. 5. N. lon. 81. 14. E.

NARIMA'NI, a town of Turkiſh Armenia, on the Batoun: forty-five miles weſt-north-weſt of Kars, and fifty-ſeven north-eaſt of Erzerum.

NARINAM-POU'LLI, *ſ.* in botany. See HIBISCUS.

NARIN'GA, a town of Bengal: ſixty miles weſt-north-weſt of Midnapour.

NARIPARIDUR'GA, a town of Hindooſtan, in the circar of Cuddapa: twenty-two miles weſt-ſouth-weſt of Cuddapa.

NA'RIZ, a town of Perſia, in the province of Adirbeitzan: ninety miles ſouth-ſouth-weſt of Tabris.

NARK'SALIK, a town of Weſt Greenland. Lat. 62. 5. N. lon. 48. W.

NARKSAR'SAAK, a town of Eaſt Greenland. Lat. 60. 35. N. lon. 44. 30. W.

NARNAL'LA, a town of Hindooſtan, in the country of Berar: thirty-five miles weſt-north-weſt of Ellichpour, and ſeventy-two eaſt of Burhanpour. Lat. 21. 25. N. lon. 77. 34. E.

NARNAVERAM', a town of Hindooſtan, in the Carnatic: eight miles eaſt-north-eaſt of Bomrauzepollam.

NAR'NI, a town of Italy, in the duchy of Spoleto, the ſee of a biſhop, under the pope, on the Nera. It contains ſeven pariſh-churches, and twelve convents. Narni was under the Roman republic called *Nequinum*, from *nequam*, a rogue, on account of the tricks of the inhabitants. It was made a Roman colony in the year of Rome 452, in the conſulate of T. Manlius Torquatus. In 1785 it was greatly damaged by an earthquake. It is ſixteen miles ſouth-ſouth-weſt of Spoleto, and thirty-eight north of Rome. Lat. 42. 31. N. lon. 12. 34. E.

NAR'NIA, or NAR'NA, in ancient geography, a town of Umbria, waſhed by the river Nar, from which it received its name.

NAR'NOL, a town of Hindooſtan, in the Mewat country: eighty miles ſouth-weſt of Delhi, and twenty-five north-weſt of Cotputly. Lat. 28. 50. N. lon. 76. 28. E.

NA'RO, now *Narenta*, a river of Dalmatia, falling into the Adriatic, and having the town of Narona, now called *Narenza*, on its banks, a little above the mouth.

NA'RO, a town of Sicily, in the valley of Mazara: eleven miles eaſt Girgenti, and forty-ſix ſouth of Termini. Lat. 37. 24 N. lon. 13. 45. E.

NA'ROCZ, a town of Lithuania, in the palatinate of Wilna: forty-eight miles eaſt of Wilna.

NAR'ODICZ, a town of Poland, in Volhynia: ſixty miles north-north-eaſt of Zytomiers.

NAROL'LY, a town of Hindooſtan, in Guzerat: twenty miles north-eaſt of Surat.

NARO'VA, a river of Ruſſia, which divides the two provinces of Ingria and Eſthonia. In this river are two falls, which, though pompouſly deſcribed by travellers, appear trivial and unintereſting to thoſe who have ſeen the fall of the Rhine at Schaffhauſen, of the Dahl near Gefle in Sweden, and the ſtupenduous cataracts of Trolhætta. The breadth of the river is 200 feet, and the perpendicular height of the falls ſcarcely exceeds twenty. The ſteep and chalky banks of the river, its rapid and turbid ſtream, and a rocky iſland which ſeparates the two falls, form a rugged and picturesque ſcene, which is heightened by the foam and roaring of the cataract.

NAROV'TCHAT, a town of Ruſſia, in the government of Penza: eighty-four miles weſt of Penza. Lat. 53. 44. N. lon. 43. 14. E.

NARP, a river of Pruſſian Lithuania, which runs into the Piſſa near Gumbinnen.

NAR'RABLE, *adj.* [from *narration.*] Capable to be told or related. *Cockeram.*

NARRAGAN'SET. See NARAGANSET, p. 571.

NARRAGUA'GUS. See STEUBEN.

NARRAGUA'GUS BA'Y, a bay on the coaſt of Maſſachuſetts, joining to Machias Bay.

NARRAN'GIA, *ſ.* With the Arabs, a kind of divination drawn from the various appearances of the ſun and moon. *Aſh.*

To NAR'RATE, *v. a.* To relate; to tell.

NARRA'TION, *ſ.* [Fr. from *narratio*, Lat.] Account; relation; hiſtory.—Homer introduces the beſt inſtructions in the midſt of the plaineſt *narrations. Broome on the Odyſſey.*

NAR'RATIVE, *adj.* [*narratif*, Fr. from *narro*, Lat.] Relating; giving an account.—To judicial acts credit ought to be given, though the words be *narrative. Ayliffe's Parergon.*—Story-telling; apt to relate things paſt.—Age, as Davenant ſays, is always *narrative. Dryden.*

The poor, the rich, the valiant, and the ſage,
And boaſting youth, and *narrative* old age. *Pope.*

NAR'RATIVE, *ſ.* A relation; an account; a ſtory.—In the inſtructions I give to others concerning what they ſhould do, take a *narrative* of what you have done. *South.*—Cynthio was much taken with my *narrative. Tatler.*

NAR'RATIVELY, *adv.* By way of relation.—The words of all judicial acts are written *narratively*, unleſs it be in ſentences wherein diſpoſitive and enacting terms are made uſe of. *Ayliffe.*

NARRA'TOR, *ſ.* A teller; a relater.—He is but a *narrator* of other men's opinions, ſuſpending his own judgment. *Mountagu's App. to Cæſar*, (1625.)—Conſider whether the *narrator* be honeſt and faithful, as well as ſkilful; whether he hath no peculiar gain or profit by believing or reporting it. *Watts's Logick.*

NAR'RATORY, *adj.* Giving a relation of things.—Letters, though they be capable of any ſubject, yet commonly they are either *narratory*, objurgatory, conſolatory, &c. *Howell.*

NARRICKEE', a town of Hindooſtan: twenty miles eaſt-north-eaſt of Agra.

To NAR'RIFY, *v. a.* To narrate; to give an account of.

NAR'ROW, *adj.* [naꞃeu, naꞃƿe, Sax. from nyꞃ, near.] Not broad or wide, having but a ſmall diſtance from ſide to ſide.—The angel ſtood in a *narrow* place, where was no way to turn either to the right hand or to the left. *Num.* ii. 26.—By being too few, or of an improper figure and dimenſion to do their duty in perfection, they become *narrow*, and incapable of performing their native function. *Blackmore.*

Edward from Belgia
Hath paſs'd in ſafety through the *narrow* ſeas. *Shakeſpeare.*

Small; of no great extent; uſed of time as well as place.—From this *narrow* time of geſtation may enſue a ſmallneſs in the excluſion; but this inferreth no informity. *Brown.*—Though the Jews were but a ſmall nation, and confined to a *narrow* compaſs in the world, yet the firſt riſe of letters and languages is truly to be aſcribed to them. *Wilkins.*—Covetous; avaricious:

To *narrow* breaſts he comes all wrapt in gain,
To ſwelling hearts he ſhines in honour's fire. *Sidney.*

Contracted; of confined ſentiments; ungenerous.—The greateſt underſtanding is *narrow.* How much of God and nature is there, whereof we never had any idea. *Grew.*—The hopes of good from thoſe whom we gratify, would produce a very *narrow* and ſtinted charity. *Smalridge.*—Near; within a ſmall diſtance:

Then Mneſtheus to the head his arrow drove,
But made a glancing ſhot, and miſs'd the dove;
Yet miſs'd ſo *narrow,* that he cut the cord
Which faſten'd by the foot the flitting bird. *Dryden.*

Cloſe; vigilant; attentive.—Many malicious ſpies are ſearching into the actions of a great man, who is not always the beſt prepared for ſo *narrow* an inſpection. *Addiſon's Spectator.*

The orb he roam'd
With *narrow* ſearch; and with inſpection deep
Conſider'd ev'ry creature, which of all
Moſt opportune might ſerve his wiles. *Milton's P. L.*

NAR'ROW, *ſ.* A narrow paſſage; a ſtrait. *Aſh.*

To NAR'ROW, *v. a.* To dimininiſh with reſpect to breadth or wideneſs.—By reaſon of the great continent of Braſilia, the needle deflecteth toward the land twelve degrees; but at the Straits of Magellan, where the land is *narrowed,* and the ſea on the other ſide, it varieth about five or ſix. *Brown.*—A government, which by alienating the affections, loſing the opinions, and croſſing the intereſts, of the people, leaves out of its compaſs the greateſt part of their conſent, may juſtly be ſaid, in the ſame degree it loſes ground, to *narrow* its bottom. *Temple.*—To contract; to impair in dignity of extent or influence.—One ſcience is incomparably above all the reſt, where it is not by corruption *narrowed* into a trade, for mean or ill ends, and ſecular intereſts; I mean theology, which contains the knowledge of God and his creatures. *Locke.*—To contract in ſentiment or capacity of knowledge.—Deſuetude does contract and *narrow* our faculties, ſo that we can apprehend only thoſe things in which we are converſant. *Gov. of the Tongue.*—How hard it is to get the mind, *narrowed* by a ſcanty collection of common ideas, to enlarge itſelf to a more copious ſtock. *Locke.*

Lo! every finiſh'd ſon returns to thee;
Bounded by nature, *narrow'd* ſtill by art,
A trifling head, and a contracted heart. *Pope.*

To confine; to limit.—By admitting too many things at once into one queſtion, the mind is dazzled and bewildered; whereas, by limiting and *narrowing* the queſtion, you take a fuller ſurvey of the whole. *Watts's Logick.*—Our knowledge is much more *narrow'd,* if we confine ourſelves to our own ſolitary reaſonings, without much reading. *Watts.*—In farriery, a horſe is ſaid to *narrow,* when he does not take ground enough, and does not bear far enough out to the one hand or to the other.

NAR'ROW-HEARTED, *adj.* Contracted in ſentiment; ungenerous.—Nothing more ſhakes any ſociety than mean diviſions between the ſeveral orders of its members, and their *narrow-hearted* repining at each other's gain. *Sprat.*

NARROW-I'SLAND, or Stenosa, a ſmall and uninhabited iſland of the Grecian Archipelago, eaſt of Maxia, but near it.

NAR'ROW-MINDED, *adj.* Of confined ſentiments.—He is a *narrow-minded* man that affects a triumph in any ſtudy. *Ben Jonſon.*

NAR'ROW-NECKED, *adj.* Strait or contracted in the throat.—Tall *narrow-necked* people are often conſumptive. *Wiſeman.*—It is with narrow-ſouled people as with *narrow-necked* bottles; the leſs they have in them, the more noiſe they make in pouring it out. *Swift's Miſcellanies.*

NAR'ROW-SOULED, *adj.* Contracted in ſentiment; ungenerous.—It is with *narrow-ſouled* people as with narrowed-necked bottles; the leſs they have in them, the more noiſe they make in pouring it out. *Swift.*

Love firſt invented verſe, and form'd the rhime,
The motion meaſur'd, harmoniz'd the chime;
To lib'ral acts enlarg'd the *narrow-ſoul'd,*
Soften'd the fierce, and made the coward bold. *Dryden.*

NAR'ROW-SPIRITED, *adj.* Contracted in ſpirit; faſtidious.—A ſalamander grows familiar with a ſtranger at firſt ſight, and is not ſo *narrow-ſpirited* as to obſerve whether the perſon ſhe talks to be in breeches or in petticoats. *Addiſon.*

NAR'ROWING, *ſ.* A narrow place; a narrow part. *Aſh.*—The act of ſtraitening, or making narrow.

NAR'ROWLY, *adv.* With little breadth or wideneſs; with ſmall diſtance between the ſides.—Contractedly; without extent.—The church of England is not ſo *narrowly* calculated, that it cannot fall in with any regular ſpecies of government. *Swift.*—Cloſely; vigilantly; attentively.—For a conſiderable treaſure hid in my vineyard, ſearch *narrowly* when I am gone. *L'Eſtrange.*—A man's reputation draws eyes upon him that will *narrowly* inſpect every part of him. *Addiſon.*—Nearly; within a little.—Some private veſſels took one of the Aquapulca ſhips, and very *narrowly* miſſed of the other. *Swift.*

My fellow-ſchoolmaſter
Doth watch Bianca's ſteps ſo *narrowly.* *Shakeſpeare.*

Avariciouſly; ſparingly.

NAR'ROWNESS, *ſ.* Want of breadth or wideneſs.—The height of buildings, and *narrowneſs* of ſtreets, keep away the ſun-beams. *Burton's Anat. of Mel.*—In our Gothick cathedrals, the *narrowneſs* of the arch makes it riſe in height, or run out in length. *Addiſon on Italy.*—Want of extent; want of comprehenſion.—That prince, who ſhould be ſo wiſe and godlike, as by eſtabliſhed laws of liberty to ſecure protection and encouragement to the honeſt induſtry of mankind, againſt the oppreſſion of power and *narrowneſs* of party, will quickly be too hard for his neighbours. *Locke.*—Confined ſtate; contractedneſs.—The moſt learned and ingenious ſociety in Europe, confeſs the *narrowneſs* of human attainments. *Glanville.*—The Latin, a ſevere and compendious language, often expreſſes that in one word, which either the barbarity or the *narrowneſs* of modern tongues cannot ſupply in more. *Dryden.*

Cheap vulgar arts, whoſe *narrowneſs* affords
No flight for thoughts, but poorly ſticks at words. *Denham.*

Meanneſs; poverty; [neaꞃaneſſe, Sax.]—If God will fit thee for this paſſage, by taking off thy load and emptying thy bags, and ſo ſuit the *narrowneſs* of thy fortune to the narrowneſs of the way thou art to paſs, is there any thing but mercy in all this? *South.*—Want of capacity.—Such is the poorneſs of ſome ſpirits, and the *narrowneſs* of their ſouls; and they are ſo nailed to the earth. *Howell's Inſtruct. for Trav.*

NAR'ROWS (The), a narrow paſſage from the ſea, between Long and Staten iſlands, into the bay which ſpreads before New York city: nine miles ſouth of it.—A ſtrait about three miles broad, between the iſlands of Nevis and St. Chriſtopher in the Weſt Indies.—A ſtrait, called "Petit Droit," in the river St. Lawrence, in Upper Canada, between Granadier-iſland and the townſhip of Eſcot, now included in Yonge.

NARRYTAMO'E, a province of Thibet, north of Napaul.

NARSAPOU'R, a town of Hindooſtan, in the circar of Ellore, on the Godavery: forty miles eaſt-ſouth-eaſt of Ellore.

NARSAPOU'R, a town of Hindooſtan, in the circar of Ellore: twenty-five miles north-weſt of Ellore.—A town of Hindooſtan, in Golconda: ten miles ſouth-ſouth-eaſt of Damapetta.—A town of Hindooſtan, in Myſore: twenty-two miles north of Bangalore.

NARSERA'Y, a town of Hindooſtan in Mewat: ten miles ſouth of Cotputly.

NAR'SES the Eunuch. See the article Rome.

NARSINEN', a town of Pruſſia, in Oberland: four miles eaſt of Soldau.

NARSINGAPATAM', a town of Hindooſtan, in the country of Cattack, near the coaſt of the Bay of Bengal: forty-five miles ſouth of Cattack.

NARSINGUR', a town of Hindooſtan, in Bengal: forty-four miles weſt of Midnapour.

NARSYZ'SK, a town of Poland, in Volhynia: ſixty-four miles north-north-eaſt of Zytomiers.

NARTHE'CIUM, *ſ.* in botany. See ANTHERICUM oſſifragum, vol. i.

NA'RU-KI'LO. See PONTEDERIA.

NA'RU-NIN'DI. See CEROPEGIA.

NAR'VA, a ſeaport-town of Ruſſia, which, together with its ſuburbs, is ſituated, according to a geographical diviſion, partly in Ingria, and partly in Eſthonia; as the river Narova divides theſe two provinces; (ſee NAROVA;) but, in the diviſion of governments eſtabliſhed by the late empreſs, it is compriſed in Ingria, or the government of St. Peterſburgh. Narva, ſuppoſed to have been built in 1224, ſtands on the Narova, nearly one hundred miles from Peterſburgh, twenty-four from the point where that river iſſues from the Lake Peipus, and eight from its mouth, where it falls into the Gulf of Finland. The houſes are built of brick ſtuccoed white, and it has more the appearance of a German than of a Ruſſian town. In the ſuburbs, called Ivangorod, the coloſſal remains of an ancient fortreſs, built by Ivan Vaſſilievitch the Great, impend in a pictureſque manner over the ſteep banks of the Narova. The principal exports are hemp, flax, timber, and corn; the imports are ſalt, tobacco, wine, ſalted herrings, ſpices, tea, ſugar, and other grocery wares. The commodities which go to Narva along the Narova are obliged, on account of the falls of that river, to be carried a great way by land. Near Narva is the ſpot celebrated for the victory which Charles XII. in the nineteenth year of his age, gained over the Ruſſian army in 1700. It then belonged to Sweden; but, about five years after, it was taken by the Ruſſians by ſtorm, under the command of Peter the Great, who gave a great proof of humanity: the Ruſſian ſoldiers were beginning to pillage, and to commit all the diſorders uſual when a town is taken by ſtorm; Peter traverſed the ſtreets on horſeback, with his drawn ſword in his hand, reſtrained his troops from pillage, killed two who refuſed to deſiſt, placed guards at the doors of different houſes, and before the churches, and repaired to the Hôtel de Ville, where the magiſtrates and principal citizens had taken refuge, and, throwing his ſword upon the table, exclaimed, "It is not ſtained with the blood of the natives, but with that of my own ſoldiers, whom I have killed in order to ſave your lives." Narva is one hundred miles ſouth-eaſt of Revel, and ſixty-eight ſouth-weſt of Peterſburgh. Lat. 59. 16. N. lon. 28. 2. E.

NAR'VA, or NARO'VA, a river of Ruſſia, which runs from the Tchudſkoi Lake to the Gulf of Finland below Narva.

NA'RIUM-PA'NEL, *ſ.* in botany. See UVARIA.

NARUNGPOU'R, a town of Hindooſtan, in Allahabad, on the Ganges: ſeventeen miles eaſt of Gazypour.

NAR'WA, a town and fortreſs of Hindooſtan, in the country of Agra, on the Sinde. Thevenot calls it *Nader*, and d'Anville *Narva:* ninety-eight miles ſouth of Agra, and ninety-two ſouth-eaſt of Rantanpour. Lat. 25. 40. N. lon. 78. 18. E.

NAR'WHALE, *ſ.* A ſpecies of whale. See MONODON, vol. xv. p. 689.—Thoſe long horns, preſerved as precious beauties, are but the teeth of *narwhales*. *Brown's Vulg. Errours.*

NARWUR', a town of Hindooſtan, in Guzerat: twenty-one miles ſouth of Darempour.

NARY'CIA, or NA'RYX, in ancient geography, a town of Magna Græcia, built by a colony of Locrians after the fall of Troy. The place in Greece from which they came bore the ſame name, and was the country of Ajax Oileus. The word *Narycian* is more univerſally underſtood as applying to the Italian colony, near which pines and other trees grew in abundance.

NAS, a town of Sweden, in the province of Upland: twenty-one miles ſouth of Upſal.

NAS, a town of Norway, in the province of Aggerhuus: ſixty miles north of Chriſtiania.

NAS, [from *ne has*.] Has not. *Obſolete:*

For pity'd is miſhap that *nas* remedy,
But ſcorn'd been deeds of fond foolery. *Spenſer.*

NASACA'RA, a town of Japan, in the iſland of Ximo: fifteen miles eaſt of Kokura.

NASAD'KA, a town of Ruſſia, in the government of Perm: ſixteen miles ſouth-eaſt of Perm.

NASAGAR', a town of Hindooſtan, in Lahore: fifty-ſix miles ſouth-eaſt of Nagercote.

NA'SAL, *adj.* [*naſus*, Lat.] Belonging to the noſe.—Some nations may be found to have a peculiar guttural or *naſal* ſmatch in their language. *Holder's Elem. of Speech.*—When the diſcharge leſſens, paſs a ſmall probe through the *naſal* duct into the noſe every time it is dreſt, in order to dilate it a little. *Sharp's Surgery.*

NA'SAL, *ſ.* A medicine operating through the noſe.—*Naſals* are generally received: an empirick in Venice had a ſtrong water to purge by the mouth and noſtrils. *Burton's Anat. of Mel.*—One of the letters ſpoken as through the noſe.—In attempting to pronounce theſe two conſonants, as likewiſe the *naſals*, and ſome of the vowels, ſpiritally, the throat is brought to labour, and it makes that which we call a guttural pronunciation. *Holder.*

NASA'LIA, *ſ.* Remedies to be taken by the noſe; called alſo *errhines*.

NASAMO'NES, in ancient geography, a numerous people of Africa, who inhabited a part of Cyrenaica. According to Pliny, Silius, and Lucan, the Pſylli and Naſamones muſt have been ſeated near the greater Syrtis, or behind the Regio Syrtica and Cyrenaica, if we adopt Strabo's opinion. The Pſylli, as Herodotus informs us, having once had all their reſervoirs of water dried up by the ſouth wind, advanced into the Sahara, in order to make war upon that wind; but, as it blew with extreme violence, they were overwhelmed with torrents of ſand, and all periſhed. After this tragical event, their neighbours, the Naſamones, annexed the territories which they poſſeſſed to their own dominions. Herodotus repreſents the Naſamones as a powerful nation in his time, and remarkable for ſome ſingular cuſtoms, then prevalent amongſt them. During the ſummer-ſeaſon, they left their cattle on the coaſt, and diſperſed themſelves over the plains of Ægila, or Augila, in order to gather the fruit of the palm-trees, or dates, with which this place abounded. Here likewiſe they found an immenſe quantity of graſshoppers, which, being dried in the ſun, they pulverized, and infuſed into milk. The liquor compoſed of theſe two ingredients was highly eſteemed by them as a moſt pleaſant beverage. They had many wives, whom they uſed in public, like the Maſſagetæ, after having erected a ſtaff for a mark. The bride lay the firſt night with all the gueſts invited to the wedding; and received from each of them the next morning a preſent, which he had brought with him for that purpoſe. When they took an oath, they laid their hands on the ſepulchres of thoſe who had been generally eſteemed the moſt juſt and excellent perſons amongſt them. At their divinations, they went to the tombs of their anceſtors, where, after certain prayers, they fell aſleep, and grounded their predictions on the dreams that then occurred to them. They pledged their faith to each other by mutually preſenting a cup of liquor. When they had no liquid, the parties took up duſt from the ground, which they put into their mouths. According to ſome authors, the Naſamones were regarded by the ancients as no better than a numerous gang of banditti; as they made frequent incurſions upon the territories of their neighbours, which they plundered and ravaged in a barbarous manner. A people of the ſame name, as we learn from Philoſtratus, inhabited part of Ethiopia.

NA'SAS, a river of North-America, in the country of New Biſcay, which joins the Sauceda in lat. 25. 10. N. lon. 102. 31. W. and with it forms the Rio Palmas, which runs into the Gulf of Mexico in lat. 25. N. lon. 98. 46. W.

NAS'BINALS, a town of France, in the department of the Lozere: twelve miles north-weſt of Marvejols.

NAS'BY, a town of Sweden, in Nericia: twelve miles north of Orebro.

NAS'CA, a ſeaport of Peru, in the archbiſhopric of Lima, and juriſdiction of Iça, Piſco, and Naſca; the territory is fertile in wine and ſugar; the harbour is good, but the town is in a ſtate of decay. It is 190 miles ſouth-ſouth-eaſt of Lima. Lat. 14. 48. S. lon. 75. 6. W.

NAS'CA, a river of Peru, which runs into the Pacific Ocean in lat. 14. 42. S.

NAS'CAL, ſ. [*naſcale*, low Lat.] A kind of medicated peſſary.—They may make uſe of a *naſcal* or peſſary, compoſed of caſtoreum mixed with rue. *Ferrand on Melan.*

NASCA'RO, a river of Naples, which runs into the Gulf of Squillace in lat. 38. 58. N. lon. 17. 5. E.

NAS'CENT, *adj.* [*naſcens*, Lat.] Growing; encreaſing.—Without any reſpect of climates, Imagination reigns in all *naſcent* ſocieties of men, where the neceſſities of life force every one to think and act much for himſelf. *Gray's Lett.*

NASCIMEN'TO, a ſmall iſland in the Indian Sea, near the ſouth-weſt coaſt of Madagaſcar. Lat. 25. 15. S. lon. 42. 6. E.

NAS'CIO, or NA'TIO, a goddeſs at Rome, who preſided over the birth of children. She had a temple at Ardea. *Cic. de Nat. Deor.*

NASE, a town of Norway, in the province of Aggerhuus: ninety-ſix miles north of Chriſtiania.

NASE, a river of North-America, which runs into the Miſſiſſippi in lat. 37 20. N. lon. 90. 12. W.

NA'SEBERRY-TREE. See SLOANEA and CHRYSOPHYLLUM.

NA'SEBY, [or *Navelſby*, from its being ſuppoſed to be the very centre of the kingdom, as well as the higheſt ground.] A village in the county of Northampton. Though ſmall, it is, on many accounts, intereſting to the traveller, and will ever be conſpicuous on the page of hiſtory. Its geological features naturally attract the attention of the philoſopher; and the political importance connected with the military ſcenes diſplayed in its vicinity, peculiarly entitle it to topographical notice. Six ſprings riſe within the pariſh, the waters iſſuing from which are collected in reſervoirs, and form valuable ponds. The Upper Avon derives its ſource from one of theſe ſprings; the Nen from another; and the riſe of the Welland has been referred to Naſeby-field. The pariſh conſiſts moſtly of open fields, and is nearly twenty miles in circumference. Naſeby was formerly a market-town; the inhabitants having obtained a charter in the fifth year of king John. The market-croſs is ſtill ſtanding. A conſiderable manufacture of worſted ſtuffs, harrateens, and tammies, was carried on here; but has greatly declined through the immenſe increaſe of the cotton-trade, and the prevalence of muſlins and calicoes. By the return to parliament under the population-act of 1811, the number of houſes is ſtated to be 120, which are inhabited by 598 perſons.

Adjacent to this village, on Naſeby-field, occurred the memorable battle between the royal and parliamentarian forces, June 14, 1645, which proved ſo fatal to the royal cauſe, and in which, according to lord Clarendon, both king and kingdom were loſt. See the article ENGLAND, vol. vi. p. 675.

NA'SEWITZ, a town of Pruſſia, in the palatinate of Culm, eight miles north-eaſt of Biſchofswerder.

NASH, a town of Virginia, forty-two miles weſt of Richmond.

NASH, a county of North-Carolina; with 6975 inhabitants, including 2596 ſlaves. A large and valuable body of iron-ore has been diſcovered.

NASH, a village in Buckinghamſhire, in the pariſh of Whaddon.—A village in Dorſetſhire; a hamlet in the pariſh of Broad Windſor.—A village in Hampſhire, near the Channel; eaſt of Chriſt-Church.—A village in Herefordſhire, on the Wadels, near Preſteign in Radnorſhire.

NASH (Thomas), a dramatic writer, was born at the ſeaport-town of Loweſtoff in Suffolk, and was deſcended from a family whoſe reſidence was in Herefordſhire. He received his education at St. John's College, Cambridge, where he took the degree of B. A. 1585. If we may judge from his pamphlet, entitled *Pierce Pennileſs*, which, though written with conſiderable ſpirit, ſeems to breathe the ſentiments of a man in the height of deſpair and rage againſt the world, he had met with many diſappointments and much diſtreſs. And, indeed, it ſeems not improbable, from the mention which he makes of Robert Green in his Pierce Pennileſs, and from his having been with that writer at the feaſt in which he took the ſurfeit that carried him off the ſtage of life, that he had been, and even continued to the laſt to be, a companion and intimate to that looſe and riotous genius. He is ſuppoſed to have died about the year 1600, or 1601, and before that time ſeems to have altered the courſe of his life, and to have become very pious. In a pamphlet, entitled *Chriſt's Tears over Jeruſalem*, printed before the end of the ſixteenth century, he ſays, in a dedication to lady Elizabeth Carey, "A hundred unfortunate farewels to fantaſticall ſatiriſme. In thoſe vaines heretofore I miſ-ſpent my ſpirit, and prodigally conſpired againſt good houres. Nothing is there now ſo much in my vowes as to be at peace with all men, and make ſubmiſſive amends where I have moſt diſpleaſed." Again: "To a little more wit have my increaſing yeeres reclaimed mee then I had before: thoſe that have beene perverted by any of my workes, let them reade this, and it ſhall thrice more benefit them. The autumne I imitate, in ſheading my leaves with the trees, and ſo doth the peacock ſhead his taile, &c."

Naſh's talent was ſatire, in which he muſt have had great excellence, if we may give credit to the authority of an old copy of verſes, which Langbaine has quoted, concerning him, in which it is ſaid of him:

> Sharply ſatyric was he; and that way
> He went, that ſince his being, to this day,
> Few have attempted; and I ſurely think,
> Thoſe words ſhall hardly be ſet down in ink
> Shall ſcorch and blaſt ſo as his could, when he
> Would inflict vengeance.

His dramatic works are only three in number, viz. 1. Dido, Queen of Carthage, a tragedy, 1594, in conjunction with Marloe. 2. Summer's laſt Will and Teſtament, a comedy, 1600. 3. The Iſle of Dogs, a comedy. It appears, from a very ſcarce pamphlet, entitled, "The Trimming of Thomas Naſhe, Gentleman, by the high-tituled Patron Don Richardo de Medico Campo, Barber Chirurgeon to Trinity College in Cambridge," 4to. 1597, that Naſh was then (in 1597) in confinement on account of his having written this play, though as to its merits or demerits we are not able to ſpeak, as it never has been printed; that while he was at Cambridge he wrote part of a ſhow, called *Terminus et non Terminus*, for which the perſon who was concerned with him in that compoſition was expelled; that Naſh left his college when he was of ſeven years ſtanding, and before he had taken his maſter's degree, about the year 1587; and that, after his arrival in London, he was often confined in different gaols. Suppoſing him to have gone to college when he was ſixteen years old, it appears by this account that he was born in the ſame year that gave Shakſpeare to the world (1564). *Biog. Dramat.*

NASH (Richard), commonly called *Beau Naſh*, or *King of Bath*, born at Swanſea in South Wales, 1674, died 1761. He was the *Arbiter Elegantiarum* of his time. His heart ſeemed an aſſemblage of the virtues which diſplay an honeſt benevolent mind, with the vices which ſpring from too much good-nature. He had pity for every creature's diſtreſs, but wanted prudence in the application of his benefits. He had generoſity for the wretched in the higheſt degree, at a time when his creditors complained of his want of juſtice. About 1703, the city of Bath became in ſome meaſure frequented by people of diſtinction. Several phyſicians had praiſed the ſalubrity of the wells; and the amuſements were put under the direction of a maſter of the ceremonies; the ſecond perſon appointed to which office was Mr. Naſh, who ſet up a band of muſic, and the company very ſenſibly increaſed. The city of Bath, from his aſſiduity, ſoon became the theatre of ſummer-amuſements for all people of faſhion; and every amuſement ſoon improved under his adminiſtration. His equipage was ſumptuous, and he uſed to travel in a poſt-chariot and ſix greys, with out-riders, footmen, French horns, and every other appendage of expenſive parade. Of all the inſtances of Naſh's bounty, none does him more real honour than the pains he took in eſtabliſhing an hoſpital at Bath. It is with regret we add after this, that, in the evening of his life, he wanted that charity which he had never refuſed to any. Paſt the power of giving or receiving pleaſure, he became poor, old, and peeviſh; and, indeed, a variety of cauſes concurred to embitter his departing life. He died in St. John's Court, Bath, Feb. 3, 1761, ſincerely regretted by the city to which he had been ſo long and ſo great a benefactor. *Jones's Biographical Dict.*

NASH POI'NT, a cape in the Britiſh Channel, on the ſouth coaſt of Wales, and county of Glamorgan. Lat. 51. 23. N. lon. 4. 30. W.

NASHAU'N, or NAW'SHAWN, a ſmall iſland in Buzzard's Bay.

NASHUA'Y, a river of New Hampſhire, which runs into the Merrimack three miles north of Dunſtable.

NASH'VILLE, a town of the ſtate of Tennaſſee, on the ſouth ſide of Cumberland River; boats of twenty tons are navigated between this place and New Orleans. Lat. 37. 2. N. lon. 84. 12. W.

NASHWAC'TISH, a river of New Brunſwick, which runs into the St. John in lat. 46. 4. N. lon. 66. 46. W.

NASICOR'NOUS, *adj.* [from the Lat. *naſus*, noſe, and *cornu*, horn.] Having a horn on the noſe.—Some unicorns are among inſects; as thoſe four kinds of *naſicornous* beatles deſcribed by Moffetus. *Brown.*

NAS'ILOW, a town of Lithuania, in the palatinate of Wilna: fifty miles ſouth-eaſt of Wilna.

NAS'IMA, a town of Japan, on the ſouth coaſt of Niphon. Lat. 34. 26. N. lon. 134. 8. E.

NAS'IMA, a ſmall iſland of Japan, in the ſtrait between Niphon and Xicoco.

NAS'NO, a town of Japan, in the iſland of Niphon: ſeventy miles north of Jedo.

NASKATAPOO'R, or the Town of Men without Noſes. See KHIRTIPOOR, vol. xi.

NAS'KEAG POI'NT, a cape of Hancock-county, in the ſtate of Maine, being the eaſtern point of Penobſcot-bay, in the town of Sedgwick.

NAS'KOW, a town of Denmark, ſituated on the weſt coaſt of the iſland of Laland, of which it is the capital; it was anciently well fortified, but is now only encompaſſed with a wall. It is a town of the middling ſize, and handſomely built. The inhabitants are wealthy, and trade in the produce of the country, which is very fertile. The Jews are allowed the public exerciſe of their religion, and have a ſynagogue. In this town are an hoſpital and a grammar-ſchool, both well endowed. Here is alſo a pretty good harbour. In 1420, Naſkow ſuffered extremely by fire; in 1570, it was plundered by the Lubeckers; and, in 1659, it ſurrendered to the Swedes, after a vigorous reſiſtance of thirteen weeks; but was reſtored at the peace. Lat. 54. 51. N. lon. 11. 5. E.

NA'SO, a town of Sicily, in the valley of Demona: nine miles weſt of Patti.

NASONO'VA, an oſtrog of Ruſſia, in the government of Tobolſk, on the Eniſei: 320 miles north-north-weſt of Turuchanſk.

NASO'W, a town of Pomerania: eight miles north-eaſt of Curling.

NASPATUC'KET. See WANASPATUCKET.

NASS'AFI, the ſurname of Nagmeddin Abou Hafs Omar Ben Mohammed, a celebrated Muſſulman doctor, who was born in the year of the Hegira 461, or A. D. 1069, at the city of Nekſcheb, called by the Arabians Naſſaf or Neſſef, in that part of the Perſian territories which lies beyond the river Gihon, anciently called the Oxus. He was one of the moſt eminent of the ſect of the Haniſites, or followers of Abou-Hanifah, who is venerated as the principal imam or chief of one of the four orthodox ſects among the Mahometans. He is ſpoken of by ſucceeding writers in high terms of praiſe; and has the titles given to him of "*Nagm Eddin u Almillat*, or Star of the Faith and of Religion;" and "*Mofti Alginn u Aluns*, or Sovereign Doctor of Genii and of Men." He died at Samarcand, in the year 537 of the Hegira, or A. D. 1123, when he was about the age of fifty-four, deeply regretted by an immenſe number of diſciples, who reſpected him equally on account of his learning and piety. To him are attributed nearly a hundred treatiſes on the Muſſulman law and traditions, in which he is ſaid to have condenſed the excellences of 550 preceding writers.

NASS'AFI, the ſurname of Hafedheddin Aboulbarakat Abdallah Ben Ahmed Ben Mahmoud, another famous Muſſulman doctor, of the ſame country with the preceding, but who flouriſhed at a much later period. The ſoundneſs of his doctrine, and the exemplarineſs of his piety, are likewiſe highly commended; and his writings on law and religion are held in much eſteem. He died at Bagdat, in the year 710 of the Hegira, or A. D. 1291. He was the author of a Commentary on the elder Naſſafi's Works; a Commentary on the five books of the Muſſulman law; and two pieces on the metaphyſics and ſcholaſtic divinity of the Mahometans. *D'Herbelot's Bibl. Orient.*

NASSAR'RE (Pablo de Zaragoça), an eccleſiaſtic and organiſt of the royal convent in that city, author of a treatiſe on muſic in Spaniſh, entitled *Fragmentos Muſicos*, in four parts, or diſtinct treatiſes; in which are contained the general rules neceſſary for canto fermo; characters for time, in meaſured muſic; counterpoint, and compoſition. Madrid, 4to. 1700.

The work is written in dialogue; the queſtions are pertinent, and the anſwers ſuccinct and clear. In the firſt dialogue on canto fermo, examples are given, in Gregorian notes, of all the eight modes of the church. In the ſecond dialogue, the clefs, characters for time, and their proportions in canto figurato, or meaſured muſic, are explained; in which the old time-table is united with the new, from the maxima to the ſemi-quaver. A conſiderable part of this ſection is now uſeleſs in practice, unleſs in deciphering very old muſic. In the third dialogue, the technical terms uſed in counterpoint are defined, and its rules explained. In this part of the work the author's knowledge of the hiſtory of counterpoint appears to be very ſuperficial. He quotes Bacchius Senior in his definition. All his examples are written on canto fermo on four lines. But this ſection advances no further in compoſition than plain counterpoint, and the uſe of concords. In the fourth dialogue, however, the uſe of diſcords, paſſing notes, and ligatures, or binding-notes, is amply treated; and numerous ſhort examples of fugue on ſimple ſubjects are given, but none of canon or double counterpoint. The paſſages are all eccleſiaſtical, and much more ancient than the date of the book.

NASS'AS, a river of Mexico, which falls into the Gulf of Mexico.

NASSAU'. See MAURICE, vol. xiv. p. 558, 9.

NASSAU', a principality of Germany, ſituated in the Wetterau, about forty-eight miles in length, and twenty-eight in breadth. Though it is for the moſt part woody and mountainous, yet it is not without fine arable and meadow land. The houſe of Naſſau is deſcended from Otho, lord of Lamenberg, who lived in the 10th century. The founder of the preſent princes of Naſſau was count Henry I. ſurnamed the Wealthy, who equally left to his two ſons, Walram and Otho I. the whole county of Naſſau; with its feudal, patrimonial, and hereditary, lands. In a compact of partition, made in the year 1255, they held the patrimonial houſe and prefecturate of Naſſau, with other family-privileges, in an indiviſible community; but the other part of the county they divided. Weilburg, Wiſbaden, and Idſtein, became Walram's part; and Otho I. had Siegen, Dillenberg, Herborn, Beilſtein, Hadamar, and Ems, all which gave diſtinctive titles to each family. The preſent reigning princes are Naſſau Weilburg, Naſſau Dillenburg, and Naſſau Saarbruck Uſingen. All the branches are named from the principal towns in the ſeveral diſtricts.

NASSAU', a town of Germany, in the county of Naſſau Dietz, on the Lahn; the church of which is uſed in common both by the Lutherans and Calviniſts. On the other ſide of the river facing the town, and on a high mountain, formerly ſtood Naſſauberg, a place of great antiquity, and the original houſe of the Naſſau family; but ſince a fief of Treves: twenty-two miles north-weſt of Mentz; twelve ſouth-eaſt of Coblentz. Lat. 50. 17. N. lon. 7. 55. E.

NASSAU' DI'ETZ. This county is ſituated, according to Buſching, in the circle of the Upper Rhine; Berenger places it in the circle of Weſtphalia; it lies on the river Lahn, and was formerly called *the Golden County*, on account of its fertility. It was a fief of Treves, having been granted to the archbiſhop of that city by the emperor Frederic III. in ſo abſolute a manner, that the poſſeſſor of this county was to hold it as a fief of the elector of Treves, as it had before been held of the emperor and empire. Dietz is the capital.

NASSAU', a ſmall town of America, in Dauphin county, Pennſylvania; containing a German church, and about thirty-five houſes; called alſo Kempſtown.—A river on the coaſt of Eaſt Florida, which runs into the ſea in lat. 30. 44. N. lon. 81. 42. W.—An iſland in the Eaſt-Indian ocean, ſituated weſt of Sumatra; about fifty miles in circumference. This iſland and Poggy are ſometimes called Naſſau Iſlands, and ſometimes Poggy Iſlands. The inhabitants are all tattooed. Lat. 3. S. lon. 100. W.—A ſea-port town of Providence, one of the Bahama iſlands.—A town of Germany, in the county of Hohenloe; four miles north of Wieckerſheim.—A mountain of the iſland of Jamaica; fifty miles weſt-north-weſt of Kingſton.—A ſmall iſland at the mouth of Byram river, in Long-iſland Sound.—A large bay, called *Spirito Santo*, on the coaſt of Weſt Florida, about ſeventy miles from north to ſouth, in which are ſeveral iſlands, the moſt northerly of which is Myrtle iſland. Lat. 27. 45. to 28. 10. N. lon. 82. 35. to 83. W.—A large and open bay on the ſouth coaſt of Terra del Fuego iſland; eaſt of Falſe Cape Horn, which forms the weſtern limit of the bay; it is well ſheltered from the tempeſts of the ocean, and capable of holding a fleet of ſhips. Lat. 55. 38. S.—A cape on the coaſt of Surinam, or north-eaſt of South America, north-north-weſt of Eſſequibo gulf, and the eaſt point of the entrance into the river Pumaron. Lat. 7. 40. N. lon. 59. 30. W.—A cape on the north ſhore of Terra Firma, in South America.—A road on the coaſt of Weſt Florida, weſt of Mobile bay, north of Ship iſland, and within the north end of the Chandeleurs, or Myrtle iſlands. This is one of the beſt roads, moſt eaſy of acceſs, and the beſt ſheltered for large veſſels, on the whole coaſt of Florida. This road was firſt diſcovered by Dr. Daniel Cox of New Jerſey, who called it Naſſau in honour of the reigning prince, William III.

NASSAU'VIA, [ſo named by Commerſon in compliment to the prince of Naſſau, who is ſaid to have been the companion of his herborizing excurſions about the ſtraits of Magellan.] In botany, a genus of the claſs ſyngeneſia, order polygamia-ſegregata, natural order compoſitæ, *Linn.* (cinarocephalæ, *Juſſ.*) Generic characters—Common calyx: of ſeveral oblong pungent horizontal leaves, ſurrounding a cylindrical common receptacle, and ſeparating the tufts of flowers; perianthium double; the outermoſt of three linear-lanceolate leaves; inner of five larger ones; all rather ſpinous-pointed. Corolla: compound, tubular; florets four or five, equal, perfect, uniform; their limb two-lipped; the upper with three teeth, erect; lower with two, reflexed. Stamina: filaments five, capillary; anthers cohering, acute, about equal to the limb. Piſtillum: germen oblong, ſomewhat quadrangular, compreſſed; ſtyle thread-ſhaped; ſtigmas linear, divaricated. Pericarpium: none, except the permanent calyx. Seed the figure of the germen; down of four or five ſoft white deciduous briſtles, ſcarcely extending beyond the calyx. Receptaculum: ſmall, naked.—*Eſſential Character.* Flowers in an oblong head, with ſharp ſcales interſperſed; calyx four or five flowered, double; the outer of three leaves, inner of five; florets tubular, two-lipped; down briſtly, deciduus; receptacle naked.

Naſſauvia ſuaveolens, the only ſpecies. Native of the ſtraits of Magellan; communicated by Juſſieu and Thouin from Commerſon's Herbarium. The root appears to be perennial. Stems decumbent at the baſe, then erect, a ſpan high, leafy, with a few ſhort lateral branches. Leaves ſeſſile, ovate, acute, ribbed, ſmooth, crowded, deeply toothed, or almoſt pinnatifid, in their upper part. Flowers terminating the main ſtem, in a denſe oblong downy head, whoſe outer ſcales are broadeſt, all of them being entire and ſingle-ribbed; in which characters, and their downineſs, they differ from the foliage. The whole plant has much of the aſpect of a tuſſilago, or butter-bur, in its flowers; but the foliage is totally diſſimilar, both in form, ſize, and ſituation, to every ſpecies of that genus, as is likewiſe the fructification. This herb is ſaid to be delightfully fragrant; but nothing of that kind is perceptible in our dried ſpecimens.

NASS'ENFUSS, or MOKRONOG, a town of the duchy of Carniola: five miles north of Rudolfswerth.

NASS'ENFELS, a town of Bavaria, in the principality of Aichſtatt: four miles north of Neuberg, and five ſouth of Aichſtatt.

NASS'IA, a town of Sweden, in the province of Smaland: eighteen miles eaſt-ſouth-eaſt of Jonkioping.

NASS'IG, a town of the duchy of Wurzburg: five miles ſouth of Konigſhofen in der Grabfeld.

NASS'IR-ED'DIN, the ſurname of Mohammed Ben Haſſan, or Ben Mohammed al-Thouſſi, a very celebrated philoſopher, aſtronomer, and various writer, among the Mahometans. He was born in the year of the Hegira 597, or A.D. 1182; but in what place or country we are not informed. He cultivated literature and the ſciences with great ſucceſs, and is characterized by Ebn Khalekan as "the doctor who had acquired the higheſt reputation in all branches of knowledge." He is frequently called, by way of eminence, "*Khouageh*, or the Maſter." Holagou, emperor, of the Moguls, placed him at the head of all the philoſophers and aſtronomers whom he had given directions for ſparing amidſt the wars of depredation which he carried on againſt the Mahometans; and he created him director, or ſuperintendant, of the revenues of all the colleges in the cities of which he became maſter. Afterwards he aſſigned him the city of Maragah, in the Perſian province of Aiderbeitzan; and commanded him to prepare thoſe aſtronomical tables which have reached our time, and were called *Imperial*, or *Ilekhanik*, after the emperor's title of *Ilkhan*. Naſſir Eddin alſo publiſhed the moſt eſteemed Mahometan editions, with commentaries, of Euclid's Elements of Geometry, and the Spherics of Theodoſius and Menelaus, in the years 663 and 670 of the Hegira, or A. D. 1246 and 1253; a treatiſe on moral ſubjects, entitled *Akhlak al-Naſſeri*; and another on economics and politics, entitled

Al-Menzeli and *Alo-Medeni.* Naſſir Eddin died in the year 672 of the Hegira, or A. D. 1254, according to ſome writers; but others aſſign his death to the year 687 of the Hegira, or A. D. 1269. *D'Herbelot's Bibl. Orient.*

NASSIRABAD', a town of Hindooſtan, in Oude: twenty-five miles north of Manickpour.

NASSIT'ZA, a town of Sclavonia: ſeventeen miles north of Brod, and twenty-five weſt of Eſzek.

NASSO'GNE, late a town of France, in the department of the (now diſſevered) Sambre and Meuſe, containing 801 inhabitants.

NASS'UCK, a town of Hindooſtan, in Guzerat: 128 miles weſt of Aurungabad, and ninety-five ſouth-ſouth-weſt of Surat. Lat. 19. 50. N. lon. 73. 49. E.

NASSURABAD', a town of Hindooſtan, in Allahabad: ſix miles ſouth of Jionpour.

NAST, a famous artiſt in porcelain, was born in 1754 at Ragaſburg in Stiria, but ſpent the greateſt part of his life in France. When he came to Paris for the purpoſe of ſeeking a livelihood, he had neither money nor friends; and could not even ſpeak the language of the people on whom his exiſtence now depended. In this deplorable ſituation he fell ſick immediately after his arrival, and was carried to the Hôtel Dieu, where for the firſt time he found real comfort in a foreign land. The pious ſiſters, who performed the duty of nurſes in that inſtitution, received the ſtranger like a brother: their kind attentions operated ſo beneficially on both mind and body, that he ſpeedily recovered, and quitted the hoſpital with feelings of the warmeſt gratitude. He had now to think of the means of earning his bread. He had previouſly learned no trade, but poſſeſſed a capacity for any thing. Chance brought him acquainted with a countryman of his, who was a journeyman ſadler; and Naſt became a ſadler too. He ſoon found this employment too mechanical; his ingenious mind required a higher and a wider ſphere. A ſecond accident gained him acceſs to a porcelain-manufactory at Vincennes, where he obtained work. From this time he devoted all his thoughts to the manufacture of porcelain; and ſtudied with the greateſt aſſiduity the chemical and mechanical proceſſes belonging to it; and, as it could not eſcape him that the forms of porcelain are intimately connected with and dependent on taſte for the arts, he felt the neceſſity of learning to draw; and therefore ſpent the daily hours of reſt which his employment allowed him, in attending a drawing-ſchool where gratuitous inſtruction was given. In like manner he exerciſed himſelf in turning and modelling, that he might make himſelf complete maſter of his trade. At the ſame time he made chemical experiments, and by inceſſant diligence ſoon became a ſkilful workman. His laboratory was a wretched garret, which ſerved him likewiſe for a lodging; and he lived upon little elſe than bread and water. His productions fell into the hands of perſons capable of appreciating their merits. M. Prouſt, the eminent chemiſt, one of his early patrons, formed a correct notion of his great inventive talents. Being commiſſioned by the Spaniſh ambaſſador to look out for a perſon to eſtabliſh a porcelain-manufactory in Spain, he immediately thought of Naſt, and made him the offer. Naſt accepted it, on condition that he ſhould be paid for his little ſtock, which he eſtimated at from fifteen to eighteen hundred francs, and allowed his travelling expenſes. The Spaniſh government diſplayed in this negociation the dilatorineſs inherent in the national character. Several months elapſed before the conſent of the court of Madrid arrived. Meanwhile the induſtrious Naſt had conſiderably increaſed the value of his ſtock, and now demanded twice as much for it as before. It was neceſſary to write again to Madrid on the ſubject. Several months again paſſed; and, when the Spaniſh government at length ſignified its acquieſcence, Naſt's ſituation at Paris had ſo far improved, and opened to him ſo flattering a proſpect, that he determined not to turn his back upon it, but to remain where he was. This prudent reſolution he never had cauſe to repent. Naſt's porcelain ſoon became celebrated in France, and in foreign countries; it was exported to every part of Europe, and at the public exhibitions never failed to excite univerſal admiration. Several medals were adjudged to him by the government; and he was admitted a member of the Society for the Encouragement of the Arts at Paris. To M. Naſt, indeed, France owed the advantage of being able to obtain porcelain at a very low price, as well for common uſe as for every purpoſe of luxury. He thus obtained a rapid and certain ſale for his wares, and raiſed his eſtabliſhment to the rank of one of the greateſt in Europe. Naſt retained through life the induſtry and frugality characteriſtic of his nation, and behaved like a father to all his dependents. With the fruits of his induſtry he purchaſed a fine eſtate a few miles from Paris. When bread was dear, he had the conſideration to allow the men ſo much as they were obliged to pay for it above the uſual price. He conſequently poſſeſſed the attachment of all his work-people; and it is not unlikely that his kind treatment of them contributed much to the flouriſhing ſtate of his concern. He died in 1817.

NAS'TADT, a town of Weſtphalia, in the county of Catzenelnbogen: eighteen miles ſouth of Coblentz, and twenty-two north-weſt of Mentz. Lat. 50. 10. N. lon. 7. 48. E.

NAS'TILY, *adv.* [from *naſty.*] Dirtily; filthily; nauſeouſly.—The moſt pernicious infection next the plague, is the ſmell of the jail, when priſoners have been long and cloſe and *naſtily* kept. *Bacon's N. Hiſt.*—Obſcenely; groſsly.

NAS'TINESS, *ſ.* Dirt; filth.—This cauſed the ſeditious to remain within their ſtation, which by reaſon of the *naſtineſs* of the beaſtly multitude, might more fitly be termed a kennel than a camp. *Hayward.*

Haughty and huge as high Dutch bride,
Such *naſtineſs* and ſo much pride
Are oddly join'd by fate. *Swift.*

Obſcenity; groſſneſs of ideas.—Their *naſtineſs*, their dull obſcene talk and ribaldry, cannot but be very nauſeous and offenſive to any who does not baulk his own reaſon, out of love to their vice. *South.*—A divine might have employed his pains to better purpoſe, than in the *naſtineſs* of Plautus and Ariſtophanes. *Dryden.*

NASTISTAK', an iſland of Ruſſia, in the mouth of the Lena, about eighty miles in length and twenty in breadth. Lat. 71. 44. to 72. 50. N. lon. 115. 40. to 119. 34. E.

NASTO'LA, a town of Sweden, in the province of Tavaſtland: forty-ſeven miles eaſt of Tavaſtthus.

NASTUR'TIUM. See ARABIS, CARDAMINE, COCHLEARIA, HELIOPHILA, IBERIS, LEPIDIUM, MYAGRUM, PANAX, SISYMBRIUM, THLASPI, and VELLA.

NAS'TUS, *ſ.* in botany, a name borrowed by Juſſieu from the antient Greeks, whoſe καλαμος ναϛος, however, is deſcribed as having a ſolid ſtem, uſeful for making arrows; whereas the plant of Juſſieu is no other than the bamboo, or Arundo bambos of Linnæus, well known to have hollow ſtems and branches, on which its peculiar uſe, for many domeſtic purpoſes, greatly depends. Hence Retzius, finding this valuable plant a diſtinct genus from Arundo, called it BAMBOS, altered by Schreber into BAMBUSA. Gmelin, in his edition of Linnæus, vol. ii. p. 579, has BAMBUS, and in the next page NASTUS, with a ſtrange miſconception of characters, for the very ſame thing. Upon referring back to ARUNDO, vol. ii. we find that all the ſpecies of bamboo then known are included in that article; but, for thoſe who chooſe to diſtinguiſh the bamboos more particularly from the reeds, the generic characters of the former are given under the word BAMBUSA, in the ſame volume.

NAS'TY, *adj.* [*naſs*, Germ. *nat*, Belg. *nazzo*, Franc. humid, wet; *natjan*, Goth. to wet.] Dirty; filthy; ſordid; nauſeous; polluted.—Sir Thomas More, in his anſwer to Luther, has thrown out the greateſt heap of *naſty* language that perhaps ever was put together. *Atterbury.*—A nice man is a man of *naſty* ideas. *Swift.*—Obſcene; lewd.

NASUD'DEN, a ſmall iſland on the weſt ſide of the Gulf of Bothnia. Lat. 64. 4. N. lon. 20. 44. E.

NA'TA, a town of the iſland of Zante: ſeven miles north-weſt of Zante.

NA'TA, or St. JA'GO DE NA'TA DE LOS CAVALLE'ROS, a town of South America, in the province of Panama, founded in the year 1517, by Gaſpard d'Eſpinoſa. The inhabitants are a mixture of Spaniards and Indians. The town is ſituated on the bay of Panama, fifty miles ſouth-weſt of Panama. Lat. 8. 35. N. lon. 81. 6. W.

NATACHQUO'IN, a river of Labrabor, which runs into the ſea in lat. 50. 25. N. lon. 60. 45. W.

NA'TAL, *adj.* [Fr. from *natalis*, Lat.] Native; relating to nativity.—Since the time of Henry III. princes' children took names from their *natal* places, as Edward of Carnarvon, Thomas of Brotherton. *Camden.*

Propitious ſtar! whoſe ſacred power
Preſided o'er the monarch's *natal* hour,
Thy radiant voyages for ever run. *Prior.*

NA'TAL, *ſ.* [*natalis*, Lat.] Time and place of nativity. *Not in uſe.*

Why ſhould not we with joy reſound and ſing
The bleſſed *natals* of our heavenly king.
Fitz-geffry's Bleſſed Birthday, 1634.

NATAL', a country of Africa, on the ſouth-eaſt coaſt of Caffraria, ſo called by the Portugueſe, who diſcovered it on Chriſtmas-day, 1498. Several capes or promontories of this country are called *Point Natal*, the principal of which is ſituated in lat. 32. S. lon. 27. 19. E.

NATAL', a river of Africa, which forms the northern boundary of the country of Natal, and runs into the Indian Sea in lat. 29. 30. S. lon. 29. E.

NATAL', a ſmall iſland in the Indian Sea. Lat. 8. 30. S. lon. 47. 5. E.

NATAL', a cape and town on the ſouth ſhore of the Rio Grande, on the north-eaſt coaſt of Brazil. On the point which forms the cape is the *Fortalaza des tres Magos*, or Caſtle of the Three Kings. The town of Natal is three leagues from the caſtle, before which is good anchorage for ſhips in four to five fathoms' water, well ſecured from winds.

NATAL', the name of an Engliſh ſettlement in the country of Batta, in the iſland of Sumatra, called alſo Natar. The Engliſh ſettled here about the year 1752, and formed connections in that part of the country. It is inhabited by perſons ſettled there for the convenience of trade, from the neigbouring countries of Acheen, Rou, and Menangeabow; and by their concourſe and traffic it is become populous and rich. A large quantity of gold is procured from the country, ſome of the mines lying within ten miles of the factory, and a conſiderable vent is found for imported goods. Like other Malay towns it is governed by Dattoos, one of whom is ſtyled Dattoo Buſſar, or "chief magiſtrate," and his ſway is very great. *Marſden's Sumatra.*

NATA'LIS, NATALIS DIES, or NATALITIUM, *ſ.* properly ſignifies a man's birth-day. The word was firſt uſed among the heathens, to ſignify the feaſt held on the anniverſary of the birth-day of an emperor; whence it came, in time, to ſignify any ſort of feaſt. And accordingly, in the Faſti, we meet with *natalis ſolis*, *natalis invicti*, &c. The primitive Chriſtians, finding the word thus eſtabliſhed, uſed it in the ſame manner; and hence we meet in the ancient martyrologiſts with *natalis calycis*, for the feaſt of the ſupper, or Maundy Thurſday; *natalis cathedræ*, for the pontificate of St. Peter; *natalis* or *natalitium* of ſuch a church, for the feaſt of the dedication. The word *genethlion* is uſed by the Greeks in the ſame ſenſe.

NATA'LIS (Michael,) a Dutch engraver of ſome reputation, was born at Liege in the year 1589. He was inſtructed in drawing by Joachim Sandrart; but learned the rudiments of engraving at Antwerp of Charles Mallery. From Antwerp he travelled to Rome, where he joined Cornelius Bloemart, Theodore Matham, and Regnier Perſyn, (all artiſts from the Low Countries,) and aſſiſted them in completing the ſtatues and buſts of the Juſtinian gallery, conſiſting of a hundred and fifty prints. Stimulated by emulation, and aſſiſted in his ſtudies by Bloemart, Natalis now made conſiderable progreſs in his art. He engraved many other plates from the pictures of the great maſters of Italy; and, after his return to Flanders, was invited to Paris, where he reſided a conſiderable time. Natalis engraved ſomewhat in the ſtyle of Bloemart: his prints have merit; yet the ſquare-grained mode of execution, to which he was partial, does not happily expreſs fleſh or drapery, but is rather adapted to the repreſentation of ſtone. When he quitted this open ſquare manner, which was very ſeldom, his prints were mellow and ſoft; but the heads of his figures want character, and the other extremities are but indifferently drawn. He combined his initials occaſionally in the two modes repreſented in the preceding engraving of NARDUS, p. 581.

NATALI'TIAL, *adj.* [*natalitius*, Lat.] Given at the day of one's nativity; conſecrated at the nativity of a perſon.—We read in the life of Virgil, how far his *natilitial* poplar had outſtripped the reſt of its contemporaries. *Evelyn.*

NATAN'GEN, or OLD NATANGEN, a province of Pruſſia, bounded on the north-eaſt and eaſt by the Pregel, on the ſouth by Ermeland, and on the weſt by the Friſche Haff. This country is populous and well cultivated; and conſiſts partly of arable and partly of meadow land; ſo that agriculture and grazing turn to good account. Though the ſoil is in ſome parts very ſtony, yet it produces better corn than Samland or Little Lithuania. It is alſo well wooded, and yields all ſorts of game and plenty of fiſh. Brandenburg is the capital.

NATAS'KA, a town of Poland, in the palatinate of Kiev: fourteen miles ſouth of Bialacerkiew.

NATA'TION, *ſ.* [*natatio*, Lat.] The act of ſwimming.—In progreſſive motion, the arms and legs move ſucceſſively, but in *natation* both together. *Brown's Vulg. Err.*

NA'TATORY, *adj.* enabling to ſwim.—When they feel the neceſſity of ſleep, their *natatory* bladder is much inflated: they can ſupport themſelves at different heights by their levity only. *Brit. Crit.*

NATCH, *ſ.* [corrupted perhaps from *notch*. Malone.] That part of the ox which lies near the tail or rump, between the two loins. *Fitzherbert's Huſbandry.*—Width (of a cow) at the *nache* fourteen inches. *Marſhall.*

NATCH'EZ, a powerful nation of Indians, who formerly inhabited the country on the eaſt ſide of the Miſſiſſippi; about lat. 31. 40. N. Nothing now remains of this nation but the name, by which the country is ſtill denominated. The Creeks, or Muſkokulges, (ſee p. 401.) roſe upon its ruins. The French completed their deſtruction in 1730.

The tribe of the Natchez, according to Dr. Robertſon, (Hiſt. of Amer. vol ii.) had advanced (as well as the people of Bogota) beyond the other uncultivated nations of America in their ideas of religion, as well as in their political inſtitutions. The ſun was the chief object of religious worſhip among the Natchez. In their temples, which were conſtructed with ſome magnificence, and decorated with various ornaments, according to their mode of architecture, they preſerved a perpetual fire, as the pureſt emblem of their divinity. Miniſters were appointed to watch and feed this ſacred flame. The firſt function of the great chief of the nation, every morning, was an act of obedience to the ſun; and feſtivals returned at ſtated ſeaſons, which were celebrated by the whole community with ſolemn but unbloody rites. On the deceaſe of their cazique or chief, a certain number of his wives, of his favourites, and of his ſlaves, were put to death, and interred together with him, that he might appear with the ſame dignity in his future ſtation, and be waited upon by the ſame attendants. Many of the deceaſed perſon's retainers offered themſelves as voluntary victims, and courted the privilege of accompanying their departed

maſter,

matter, as a high diſtinction. Others, however, laboured to avoid their doom, and ſeveral ſaved their lives by flying to the woods. As the Indian Bramins give an intoxicating draught to the women who are to be burnt together with the bodies of their huſbands, which renders them inſenſible of their approaching fate, the Natchez obliged their victims to ſwallow ſeveral large pills of tobacco, which produce a ſimilar effect.

NATCH'EZ, the principal town of the Miſſiſſippi territory, on the eaſt ſide of the Miſſiſſippi; 300 miles north of New Orleans by water, 150 by the lake road. It has a Roman-catholic church, and is defended by a fort. Lat. 31. 32. N.

As Natchez is likely to become a metropolis of the back ſettlements, a centre of adminiſtration, of literature, and of traffic, we ſhall here ſubjoin a brief account of its productions. The ſtaple-commodity is cotton, which the country produces in great abundance, and of good quality. The manufacture of calico, and the cultivation of tobacco, were carried on with ſpirit ſome years ago; but they have both given way to the culture of cotton. The country produces maize, or Indian corn, equal, if not ſuperior, to that in any part of the United States. The time of planting is from the beginning of March until the beginning of July. The cotton is generally planted in the latter end of February and the beginning of March. Rye, which has been attempted has ſucceeded in ſome places; but wheat has failed. Apples and cherries are ſcarce; but peaches, plums, and figs, are very abundant. The vegetables of the Middle States generally ſucceed here. The ſugar-cane has been tried, but its effects have not been fully aſcertained. From the great number of artificial mounds of earth viſible through the whole ſettlement of Natchez, it muſt, at ſome former period, have been well peopled; beſides, in all parts where new plantations are opened, broken Indian earthen-ware is found; ſome of the pieces being in tolerable preſervation, and retaining diſtinctly the original ornaments; but none of it appears to have ever been glazed.

NATCH'IKIN, a town of Kamtſchatka. In the neighbourhood is a medicinal ſpring: thirty miles eaſt of Bolcheretſk.

NATCH'ING-TONG', a town of Corea: eighteen miles weſt-north-weſt of Han.

NATCHITOCH'ES. See NACHITOCHES, p. 501.

NATCHITOCH'ES, or NACHITOCHES, a name given to Red River in Louiſiana, which runs into the Miſſiſſippi in lat. 31. 15. N. lon. 91. 47. W.

NAT'CHUS, a town of the ſtate of Georgia. Lat. 33. 27. N. lon. 86. 40. W.

NATE'CO, a town of Africa, in the kingdom of Bambouk: one hundred miles ſouth-eaſt of Galam.

NA'TELY, a village in Hampſhire, north-eaſt of Baſingſtoke.

NA'TENS, a town of Perſia, in the province of Irak: ſixty miles north of Iſpahan, and fifty eaſt of Couſar.

NAT'ERNBACH, a town of Auſtria: eight miles weſt-north-weſt of Efferding.

NAT'ERNBERG, a town and caſtle of Bavaria, near the Danube: two miles weſt of Deckendorf, and nine north-north-weſt of Oſterhofen.

NA'TERS, a town of Swiſſerland, in the Valais. Near it are the ruins of a caſtle which formerly belonged to the family of Flue, or Super Saxo. This family, one of the moſt powerful of the republic, viewing with jealouſy and diſcontent the biſhop's aſcendency, raiſed againſt the ſee for a ſeries of years much trouble and inquietude; till at laſt, having gained ſufficient influence, it cauſed the famous cardinal Matthew Schinner, the then biſhop of Sion, to be expelled from the Valais, at the cloſe of the ſixteenth century. Nevertheleſs, this prelate, who was no leſs active than ambitious, poſſeſſing eloquence and a moſt intriguing mind, who had likewiſe unfortunately promoted the ſhedding of much of the Valaiſan blood in uſeleſs military expeditions in the Milaneſe, found means to reinſtate himſelf in the dioceſe; and, by way of retaliation, expelled in his turn this very family of the Flues, and took poſſeſſion of their eſtates. This place is twenty-nine miles eaſt of Sion.

NATEW', a town of the county of Tyrol: ſix miles weſt-ſouth-weſt of Inſpruck.

NA'THAN, a town of Perſia, in the province of Irak: ſixty miles north-north-eaſt of Iſpahan.

NA'THAN, [Heb. a gift.] A famed prophet, and a confident of king David. Not long after David's advancement to the throne of Iſrael, he intended to build a temple for the Lord. Nathan, without waiting the divine direction, encouraged him to do it; but, ſoon after, was directed of God to forbid him, and tell him that that work was divinely allotted to his ſon and ſucceſſor. Some years after, when David had defiled Bathſheba, and murdered her huſband, Nathan, directed of God, reproved him. He told him a parable of a man who had a great many flocks and herds of his own, and yet, when his friend came to viſit him, he by force took from a poor neighbour his only lamb, which was very dear to him, to entertain his friend. With great indignation, David replied, that ſuch a perſon ſhould be obliged to reſtore fourfold to the poor man, and then be put to death. Nathan told him that he himſelf was the guilty criminal; for he had defiled Bathſheba, the only wife of Uriah, and had murdered him. When Adonijah attempted to ſettle himſelf on the throne, Nathan and Bathſheba, by his direction, prevented it; and he and Benaiah, and others, were immediately appointed to crown Solomon. 2 *Sam.* vii. xii. 1 *Kings* i. Nathan and Gad wrote the hiſtory of David; probably the Second Book of Samuel, and laſt part of the Firſt. He and others wrote the hiſtory of Solomon. 1 *Chron.* xxix. 29. 2 *Chron.* ix. xxvii. But whether this Nathan was the father of Azariah and Zabud, who were officers of dignity under Solomon, (1 *Kings*, iv. 5.) we know not.

NA'THAN (Ben-Jechiel-Ben-Abraham), a learned rabbi who flouriſhed in the eleventh century, was preſident of the Jewiſh academy at Rome, and died in the year 1106. He was the author of a work entitled "*Haruch*, or Set in Order;" being a Talmudical dictionary; in which all the terms of the Talmud are alphabetically arranged; the pages from which they are taken quoted in the margin; and the whole explained in a very copious manner. Of this work the elder Buxtorf frequently availed himſelf, without duly acknowledging his obligations. It was firſt printed at Peſaro, in 1515, folio; and afterwards underwent impreſſions at Venice, in 1531, 1553, and 1653; at Baſil, in 1599; at Amſterdam, in 1655, with additions by rabbi Benjamin Muſaphia; and at Paris, in 1629, folio, greatly enlarged by Philip Aquino, under the title of, "Dictionarium Hebræo-Chaldæo-Thalmudico-Rabbinicum."

NA'THAN (Iſaac), a learned rabbi who flouriſhed in the fifteenth century. He was the firſt Jew who made a Hebrew Concordance to the Bible; on which he was occupied from the year 1438 to 1445. This work, he acknowledges in the preface, was not his own compilation, but for the moſt part copied from Latin concordances; ſo that the Jews are indebted to Chriſtians for the works of this nature which they poſſeſs. Our author entitled his performance *Mair Netib*, or Light to the Path. It was firſt printed at Venice by Bombergue, in 1524, folio; afterwards in a more correct ſtate, with a Talmudical index, at Baſil, by Froben, in 1581, folio; and at Rome in 1622, under the care of Marius a Calaſio, of the order of friars minors, and profeſſor of the Hebrew language, in four volumes, folio, ſtill further corrected; and with the addition of the Chaldee of Daniel and Ezra, a Latin verſion of the words, and ſuch Syriac and Arabic words as are ſuppoſed to be derived from Hebrew roots, &c. The moſt complete and valuable edition of it is that of Buxtorf the elder, which was publiſhed by his ſon at Baſil, in 1632, folio. An edition of this work was publiſhed at

London, in 1747, by William Romaine, A.M. in four volumes, folio; but its reputation for correctneſs does not ſtand ſo high in the learned world as to ſuperſede thoſe of Rome and Baſil. Rabbi Nathan alſo left behind him ſome ſmaller pieces in manuſcript.

NA'THAN, ſurnamed NATA-SPIRA, from the city of Spires, where he was probably born, a celebrated rabbi in the ſeventeenth century. He became chief of the ſynagogue at Cracow, where he died in 1633, at the age of forty-eight. He wrote a treatiſe, entitled; "*Tob Aaretz*, or The Goodneſs of the Earth;" conſiſting of a cabaliſtical diſſertation on the advantages and privileges of the Holy Land, printed at Venice in 1655, 8vo. and another, entitled "*Megillah Hamucoth*, or The volume of Profundities;" Cracow 1636, and Erfurt 1691, 4to. which is a cabaliſtical commentary on ſome verſes in the third chapter of Deuteronomy; abounding, as he imagined, in deep myſteries, which he endeavoured to explain.

NA'THAN (Ben-Moſes), another celebrated rabbi in the ſeventeenth century, who reſided at Saſlaw in the Ruſſian dominions, in 1648; removed at firſt to Leghorn, and then to Venice, where he was diſtinguiſhed as a cabaliſt in 1653; and was afterwards chief of the Jewiſh ſynagogue at Jaſſy in Moldavia. He was the author of 1. *Teami Socah*, or the Manner of obſerving the Feaſt of the Tabernacles; containing an allegorical expoſition of that feſtival, printed at Amſterdam in 1652, 4to. 2. *Iven Metzolah*, or the Mire of deep Waters; taken from Pſalm lxix. 3. printed at Venice in 1653, 4to. in which he deſcribes the oppreſſions and perſecutions that were ſuffered by the Jews during the years 1648 and 1649, in Rhætia, Lithuania, and Poland. 3. *Share Tzion*, or the Gates of Zion; conſiſting of various prayers uſed by the Jews, with an account of the ceremonies accompanying them, inſtructions for reciting the Keriath Schema in bed, for ſtudying the Talmud, &c. which has been frequently printed at Prague, Amſterdam, Deſſau, Frankfort on the Oder, &c. in 8vo. 4. *Shephah Berouh*, or the pure Lip; a kind of Vocabulary, containing Hebrew, German, Latin, and Italian, words, of the ſame meaning, in oppoſite columns, printed at Prague in 1660, 4to. and at Amſterdam in 1701, 8vo. with the addition of a fifth column, of French words, &c. *Wolfii Bibl. Heb.*

NATHA'NA IN'DIANS, Indians of North-America about lat. 66. N. lon. 121. and 125. W.

NATHANA'EL, [Heb. the gift of God.] A man's name.

NATH'EMOE, *adv.* [for *nathmore.*] Never the more:

His rude aſſault and rugged handeling
Straunge ſeemed to the knight, that aye with ſo
In fayre defence and goodly menaging
Of armes was wont to fight, yet *nathëmoe*
Was he abaſhed now. *Spenſer.*

NATH'LESS, *adv.* [Sax. not the leſs.] Nevertheleſs; formed thus, *natheleſs*, *nath'leſs*. Wicliffe, Gower, and Chaucer, uſe *natheleſs*; and, as a poetical word, it was certainly of three ſyllables, as Spenſer alſo uſes it; afterwards contracted into two. *Now obſolete.*—Yet *nathëleſſe* it could not doe him die. *Spenſer.*

Nath'leſs, my brother, ſince we paſſed are
Unto this point, we will appeaſe our jar. *Spenſer.*

The torrid clime
Smote on him ſore beſides, vaulted with fire.
Nathleſs he ſo endur'd, till on the beach
Of that inflamed ſea he ſtood, and call'd
His legions. *Milton.*

NATH'MORE, *adv.* [Saxon.] Never the more. Spenſer, from whom Dr. Johnſon cites his example, does not uſe *nathmore* as a word only of two ſyllables, but as of three, both in the paſſage incorrectly cited by Dr. Johnſon, and elſewhere. *Todd.*—Yet *nathëmore* his meaning ſhe ared. *Spenſer.*

Yet *nathëmore* by his bold hartie ſpeach
Could his blood-froſen heart embolden'd be. *Spenſer.*

NA'TI, a city of China, of the ſecond rank, in Quang-ſi: ſixty-five miles north-weſt of King-yuen, and 420 ſouth-ſouth-weſt of Peking. Lat. 24. 45. N. lon. 106. 50. E.

NA'TI-SCHANIBU', *ſ.* in botany. See EUGENIA.

NA'TICK, an ancient townſhip of North America, on Charles-river, in Middleſex-county, Maſſachuſetts: eighteen miles ſouth-weſt of Boſton. Its name in the Indian language ſignifies the "Place of Hills." The famous Mr. Elliot formed a religious ſociety here; and in 1670 there were about fifty Indian communicants. At his motion, the general court granted the land round this town, containing about 6000 acres, to the Indians; but very few of their deſcendants remain at preſent. In 1761 it was incorporated into an Engliſh diſtrict, and in 1781 into a townſhip; and it now contains 694 inhabitants.

NA'TION, *ſ.* [Fr. from *natio*, Lat.] A people diſtinguiſhed from another people; generally by their language, origin, or government.—A *nation* properly ſignifies a great number of families derived from the ſame blood, born in the ſame country, and living under the ſame government. *Temple.*—If Edward III. had proſpered in his French wars, and peopled with Engliſh the towns which he won, as he began at Calais, driving out the French, his ſucceſſors, holding the ſame courſe, would have filled all France with our *nation*. *Raleigh.*—A great number; emphatically:

When after battle I the field have ſeen
Spread o'er with ghaſtly ſhapes, which once were men;
A *nation* cruſh'd! a nation of the brave!
A realm of death! and on this ſide the grave!
Are there, ſaid I, who from this ſad ſurvey,
This human chaos, carry ſmiles away? *Young.*

NATION is alſo uſed, in ſome univerſities, for a diſtinction of the ſcholars and profeſſors of colleges. The faculty of Paris conſiſts of four nations; viz. that of France, that of Normandy, that of Picardy, and that of Germany; which are again, excepting that of Normandy, diſtinguiſhed into tribes; and each tribe has its deacon. The German nation comprehends all foreign nations, Engliſh, Italian, &c. When the procureur of the *French* nation ſpeaks in public, his ſtyle is "Honoranda Gallorum natio;" he of *Picardy* ſays, "Fideliſſima Pacardorum natio;" he of *Normandy*, "Veneranda Normannorum natio;" he of the nation of *Germany*, "Conſtantiſſima Germanorum natio."

NATIONS, Law of. See the article LAW, vol. xii. p. 322 & ſeq.

NA'TIONAL, *adj.* Public; general; not private; not particular.—The aſtoniſhing victories our armies have been crowned with, were in ſome meaſure the bleſſings returned upon that *national* charity which has been ſo conſpicuous. *Addiſon.*—God, in the execution of his judgements, never viſits a people with publick and general calamities, but where their ſins are publick and *national* too. *Rogers.*

They in their earthly Canaan plac'd,
Long time ſhall dwell and proſper, but when ſins
National interrupt their public peace. *Milton.*

Bigoted to one's own country.

NA'TIONAL DEBT', the money owing by government to the public; which public is taxed to pay the intereſt of it.

The origin of the national debt has been briefly ſtated, together with its amount at various times, up to the year 1804, under the article ENGLAND, vol. vi. p. 805. How the *ſinking-fund* has been made to act in reducing it, while other cauſes have ſo enormouſly increaſed it, will be ſeen under the article FUND, vol. viii. p. 116–120. An additional plan for the reduction of the debt has been the eſtabliſhment of *life-annuities* upon government-ſecurity; as to which, ſee the article LONDON, vol. xiii. p. 173, 4. and LIFE-ANNUITY, vol. xii. p. 647. Yet, with both theſe helps, ſo expenſive have been the wars and other follies in which we have been recently engaged, that, from the year 1786, when the ſinking-fund was put in operation by Mr. Pitt, the ſum total of the debt has increaſed above threefold; it having been then ſomewhat over 266,000,000; now upwards of 800,000,000.

The only advantage that can reſult to a nation from public debts is the increaſe of circulation, by multiplying the caſh of the kingdom, and creating a new ſpecies of currency, aſſignable at any time and in any quantity; always, therefore, ready to be employed in any beneficial undertaking, by means of this its transferable quality; and yet producing ſome profit even when it lies idle and unemployed. A certain proportion of debt ſeems to be highly uſeful to a trading people; but what that proportion is, it is not for us to determine. This much is indiſputably certain, that the preſent magnitude of our national encumbrances very far exceeds all calculation of commercial benefit, and is productive of the greateſt inconveniences. For, firſt, The enormous taxes that are raiſed upon the neceſſaries of life for the payment of the intereſt of this debt, are a hurt both to trade and manufactures, by raiſing the price as well of the artificer's ſubſiſtence as of the raw material, and of courſe, in a much greater proportion, the price of the commodity itſelf. Nay, the very increaſe of paper-circulation itſelf, when extended beyond what is requiſite for commerce or foreign exchange, has a natural tendency to increaſe the price of proviſions, as well as of all other merchandiſe. For, as its effect is to multiply the caſh of the kingdom, and this to ſuch an extent that much muſt remain unemployed, that caſh (which is the univerſal meaſure of the reſpective values of all other commodities) muſt neceſſarily ſink in its own value, and every thing grow comparatively dearer. Secondly, If part of this debt be owing to foreigners, either they draw out of the kingdom annually a conſiderable quantity of ſpecie for the intereſt, or elſe it is made an argument to grant them unreaſonable privileges in order to induce them to reſide here. Thirdly, If the whole be owing to ſubjects only, it is then charging the active and induſtrious ſubject, who pays his ſhare of the taxes, to maintain the indolent and idle creditor who receives them. Laſtly, and principally, It weakens the internal ſtrength of a ſtate, by anticipating thoſe reſources which ſhould be reſerved to defend it in caſe of neceſſity.

On the whole, then, the national debt is undoubtedly a ſubject of vaſt importance, and as ſuch it has been always conſidered; for much has been ſaid and written upon it, and many ſchemes have been propoſed at various times and by various perſons for gradually removing it; it being conſidered by the moſt judicious as a very pernicious encumbrance to a commercial country. Some, we are aware, think it of vaſt utility; but this opinion is too feebly ſupported to be convincing. The public debt is indiſputably a great grievance; and every lover of his country muſt ſurely wiſh to ſee it removed: the period, however, when this bleſſing ſhall take place, if indeed it ever arrive, muſt at leaſt be very diſtant. We refer ſuch as wiſh for farther information on this intereſting topic to thoſe who have treated of it at full length; as Smith in his Wealth of Nations, and Sir John Sinclair in his Hiſtory of the Revenue. The writings of Dr. Price likewiſe deſerve conſiderable attention, eſpecially as one of his plans for the reduction of the debt (the ſinking-fund) has in fact been adopted, and in conſequence eſtabliſhed, by the legiſlature: his three plans may be found in a pamphlet by his nephew William Morgan, F.R.S. entitled, A Review of Dr. Price's Writings on the Subject of the Finances of this Kingdom. And it is but juſtice to that accurate and laborious calculator and amiable man to obſerve, that the whole of the national debt, which had been accumulated up to the end of the American war, has already been cancelled by the ſinking-fund; and, though the country is now involved in a debt of three times that amount, owing to the laviſh expenditure of the late war, yet, if we ſhould be permitted to enjoy another peace of the ſame duration as that which took place in the adminiſtration of ſir Robert Walpole in England and of cardinal Fleury in France, the preſent ſinking-fund would be found to poſſeſs powers fully equal to the reduction of the debt within very moderate limits, and without any violation of the national faith. If any one circumſtance, more than another, has tended to exalt this nation in the eyes of Europe, and to raiſe us to a height of moral pre-eminence which no other people ever attained, it is the uniform conſtancy with which we have preſerved our national credit.

NATIONAL'ITY, *ſ.* National character.—Let our friendſhip, let our love, that *nationality* of Britiſh love, be ſtill ſtrengthened. *Howell's Letters.*—He could not but ſee in them that *nationality*, which I believe no liberal Scotſman will deny. *Boſwell's Tour to the Heb.*

To NA'TIONALIZE, *v. a.* To diſtinguiſh nationally. This is a very modern word, like *denationalize*.

NA'TIONALLY, *adv.* With regard to the nation.—The term adulterous chiefly relates to the Jews, who being *nationally* eſpouſed to God by covenant, every ſin of theirs was in a peculiar manner ſpiritual adultery. *South.*

NA'TIONALNESS, *ſ.* Reference to the people in general.

NATI'SO, in ancient geography, now *Natiſone*, a river riſing in the Alps, and falling into the Adriatic eaſt of Aquileia. *Pliny* iii. 18.

NATISTAG'OET HAR'BOUR, a harbour on the ſouth coaſt of Labrador. Lat. 50. 6. N. lon. 60. 55. W.

NA'TIVE, *adj.* [*natif*, Fr. from *nativus*, Lat.] Produced by nature; natural, not artificial:

This doctrine doth not enter by the ear,
But of itſelf is *native* in the breaſt. *Davies.*

She, more ſweet than any bird on bough,
Would oftentimes amongſt them bear a part,
And ſtrive to paſs, as ſhe could well enough,
Their *native* muſick by her ſkilful art. *Spenſer.*

Natural; ſuch as is according to nature; original.—The members, retired to their homes, reaſſume the *native* ſedateneſs of their temper. *Swift.*—Conferred by birth; belonging by birth:

But ours is a privilege ancient and *native*,
Hangs not on an ordnance, or power legiſlative;
And firſt, 'tis to ſpeak whatever we pleaſe. *Denham.*

Relating to the birth; pertaining to the time or place of birth.—If theſe men have defeated the law, and outrun *native* puniſhment; though they can outſtrip men, they have no wings to fly from God. *Shakeſpeare's Hen.* V.

Many of our bodies ſhall, no doubt,
Find *native* graves. *Shakeſpeare's Hen.* V.

Original; that which gave being:

Have I now ſeen death? is this the way
I muſt return to *native* duſt? O ſight
Of terrour, foul, and ugly to behold. *Milton.*

Born with; co-operating with; congenial:

The head is not more *native* to the heart,
The hand more inſtrumental to the mouth,
Than is the throne of Denmark to thy father. *Shakeſpeare.*

NA'TIVE, *ſ.* One born in any place; original inhabitant.—Make no extirpation of the *natives*, under pretence of planting religion: God ſurely will no way be pleaſed with ſuch ſacrifices. *Bacon's Adv. to Villiers.*—There ſtood a monument to Tacitus the hiſtorian, to the emperors Tacitus and Florianus, *natives* of the place. *Addiſon.*

Tully, the humble muſhroom ſcarcely known,
The lowly *native* of a country town. *Dryden's Juv.*

Offspring:

The accuſation,
All cauſe unborn, could never be the *native*
Of our ſo frank donation. *Shakeſpeare's Coriol.*

NA'TIVELY, *adv.* Naturally; not artificially.—We wear hair which is not *natively* our own. *Bp. Taylor.*—There is ſomething ſo *natively* great and good in a perſon that is truly devout, that an awkward man may as well pretend to be genteel as an hypocrite to be pious. *Tatler,* Nº 211.—Originally.—I take two names given to Chriſt to be *natively* Chaldee words. *Lightfoot's Miſcell.*—This goodneſs of God *natively* proceedeth from his will, as thought and truth proceedeth from his mind. *Shelford's Learned Diſc.*

NA'TIVENESS, *ſ.* State of being produced by nature.

NATIVIDAD', a mine-town of Braſil, in the government of Goyas. Lat. 13. 30. S. lon. 31. 20. W.

NATIVIDAD', a ſmall iſland in the Pacific Ocean, near the coaſt of California: fourteen miles ſouth-ſouth-eaſt from the iſland of Cerros.

NATIVIDAD', a ſeaport of Mexico, in New Galicia: 180 miles ſouth-weſt of Mechoacan. Lat. 19. 20. N. lon. 106. 16. W.

NATIV'ITY, *ſ.* [*nativité,* Fr.] Birth; iſſue into life.—Concluding ever with a thankſgiving for the *nativity* of our Saviour, in whoſe birth the births of all are only bleſſed. *Bacon.*—They looked upon thoſe as the true days of their *nativity,* wherein they were freed from the pains and ſorrows of a troubleſome world. *Nelſon.*—Time, place, or manner, of birth.—They ſay there is divinity in odd numbers, either in *nativity,* chance, or death. *Shakeſpeare's Merry Wives of Windſor.*

My huſband, and my children both,
And you the calenders of their *nativity,*
Go to a goſſip's feaſt. *Shakeſpeare's Com. of Err.*

State or place of being produced:

Theſe, in their dark *nativity,* the deep
Shall yield us, pregnant with infernal flame. *Milton's P. L.*

NATIVITY is a word now chiefly uſed in ſpeaking of ſaints, &c. The Nativity of St. John the Baptiſt, celebrated in the Romiſh church with great ſolemnity on the 24th of June; the Nativity of the Holy Virgin, a feaſt eſtabliſhed by pope Sergius I. who was advanced to the ſee of Rome in 687, and obſerved on the 8th of September, &c. When we ſay abſolutely The Nativity, it is underſtood of that of Jeſus Chriſt, or the feaſt of Chriſtmas, which St. Gregory calls the "feſtival of feſtivals," and St. Chryſoſtom "the chief of all feſtivals." Of the early celebration of this feſtival in the Chriſtian church, we have given melancholy evidence under the word CHRISTMAS-DAY, vol. iv. but the obſervance of the day did not become general among Chriſtians till about the year 500; and hence the true day on which it ſhould be celebrated is loſt; for there is no good reaſon to ſuppoſe that Our Saviour was born on the 25th of December.

NATIVITY, in aſtrology, the theme or figure of the heavens, and particularly of the twelve houſes, at the moment when a perſon was born; called alſo the *horoſcope.* See the article ASTROLOGY, vol. ii. p. 313, 323.—Caſting the *nativity,* or by calculation ſeeking to know how long the queen ſhould live, &c. was made felony, anno 23 Eliz. c. 2. *Jacob's Law Dict.*

NATIZO'NE, a river of Friuli, which runs into the Liſonzo four miles north of Palma Nuova.

NAT'LAND. See vol. xi. p. 661.

NATO'LIA, or ANATOLIA, a province of Aſiatic Turkey, bounded on the north by the Black Sea, on the eaſt by Caramania, on the ſouth by the Mediterranean, and on the weſt by the Archipelago and the Sea of Marmora; about 400 miles in its greateſt extent from eaſt to weſt, and 350 from north to ſouth. Anatolia was anciently denominated *Aſia* ſimply, or by way of peculiar excellence, as being the beſt ſpot in this part of the world, and adorned with many opulent cities, and conſiderable ſtates. Afterwards it was diſtinguiſhed from the whole Aſiatic region by the epithet of *Minor,* or Leſs, and accordingly denominated *Aſia Minor;* it derived the name of *Anatolia* from its eaſtern ſituation with regard to Europe, and it is ſtill called the Levant. Anatolia, in its largeſt ſenſe, comprehends the ancient provinces of Galatia, Paphlagonia, Bithynia, Pontus, Myſia, Phrygia, Lydia and Maonia, Æolis, Ionia, Caria, Doris, Pamphylia, Piſidia, Cappadocia, Lycia, Lycaonia, and Cilicia. Later geographers have divided it into four parts, according to their ſituation: viz. Anatolia, properly ſo called, on the weſtern part; Caramania, on the ſouthern; Aladulia, on the eaſtern; and Amaſia, on the northern. Anatolia, properly ſo called, is divided into the following diſtricts; viz. Bithynia, Myſia, Æolis, Ionia, Caria, Doris, Lydia, Phrygia, Galatia, and Paphlagonia.

Anatolia, or Natolia, is now governed by a beglerbeg, who reſides at Kiutaja, under whom are ſeveral ſangiacs. The ſoil is, in general, fertile, producing corn, tobacco, and fruits of various kinds; cotton and ſilk; and, notwithſtanding the indolence of the Turks, and the oppreſſive nature of their government, its commerce is conſiderable; particularly in carpets, leather, drugs, cotton, ſilk, and other articles of produce and manufacture. Moſt of the inhabitants are Mahometans, with a conſiderable proportion of Chriſtians, particularly of the Greek church, governed by patriarchs, archbiſhops, and biſhops, who are tolerated by the Porte. Here are likewiſe many Armenians, and ſome Roman Catholics.

NATOL'ICA, an iſland in the Mediterranean, near the coaſt of Greece. Lat. 38. 39. N. lon. 21. 26. E.

NA'TRA, a town of Sweden, in Angermanland: thirty-five miles north-north-eaſt of Hernoſand.

NATRAPOL'LAM, a town of Hindooſtan, in Myſore: ſix miles north of Allumbaddy.

NA'TRIX, *ſ.* in botany. See ONONIS.

NA'TROLITE, *ſ.* in mineralogy, the name given by Klaproth (Mem. Acad. Scien. Berlin, 1803) to a foſſil found at Hogau in Suabia, on the borders of Swiſſerland. It is depoſited in the crevices, or clefts and cavities, of the ſonorous porphyry (klinginſtein porphyry), from having a ſound nearly metallic, which form the mountains and rocks of Hohentwial, Hohenkraken, and Mügdeberg. The colour of this foſſil is a dirty ochraceous yellow, approaching ſometimes to an iſabella yellow, or at other times to a yellowiſh-brown, interſected with concentric white lines. It is compact; its internal ſurface has a ſilky luſtre; it breaks into wedge-like pieces, the edges of which poſſeſs little tranſparency; it is not very hard, extremely brittle, and its ſpecific gravity is 2·200: 100 grains of this foſſil, ignited in a ſilver crucible, loſt 9 grains; it fuſes quickly before the blowpipe into a tranſparent glaſs, full of ſmall air-bubbles, and in a porcelain furnace melts into a brown glaſs; and in a charcoal crucible it afforded the ſame product, with minute globules of iron in the ſurface. From the analyſis of Klaproth, 100 parts of the natrolite yielded

Siliceous earth -	48 grains.
Alumine - -	24·25
Oxyd of iron -	1·75
Soda - - -	16·50
Water - -	9
	99·50

NA'TRON, *ſ.* A ſort of black ſalt imported from Egypt. See NATRUM.

NATRUDACOT'TA, a town of Hindooſtan, in Tinevelly: ſixteen miles eaſt of Tinevelly.

NATSIATAM', *ſ.* in botany. See MENISPERMUM.

NATT, a caſt of Hindoos, which originally ſprung from a man of the Malakar caſt having had connexion with a woman of the Soodra. From this caſt are ſelected the dancing girls, ſo famous, or rather infamous, in India.

NAT'TA (Marcantonio), a celebrated Italian juriſt, was deſcended from an ancient and noble family of Caſal in Montferrat, which produced ſeveral eminent men of the ſame profeſſion. Marcantonio was born at Aſti, and ſtudied the law at Pavia in the early part of the ſixteenth century, under Corti, Maino, and Decio. The acquiſition of knowledge was his only paſſion; and the progreſs he made was ſuch, that he was admitted among the juriſconſults before the age of twenty-three, and was made a ſenator at Caſal. The wars drove him thence to Pavia, where he opened a ſchool of law. He received invitations from ſeveral princes to ſettle in their dominions, and exerciſed various honourable offices, one of which was that of a magiſtrate in Genoa. He publiſhed Legal Conſultations, which were in great eſteem; and likewiſe wrote works on Theology and Philoſophy. Paulo Manuzio greatly praiſes a metaphyſical work of his "De Pulchro," and addreſſes to him many letters in his collection. Beſides the work juſt mentioned, he publiſhed a treatiſe "De Deo," in fifteen books, which is a typographical rarity; De Immortalitate Animi; De Paſſione Domini; &c. *Gen. Biog.*

NATTAL', a town of the iſland of Sumatra, where the Engliſh have a factory. Lat. 0. 39. N. lon. 98. 24. E.

NATTAM', a town and fortreſs of Hindooſtan, in the country of Madura: forty-five miles ſouth-ſouth-weſt of Trichinopoly, and eighteen north of Madura. Lat. 10. 10. N. lon. 78. 18. E.

NATTAM', a town of Hindooſtan, in the Carnatic: twenty-eight miles weſt-north-weſt of Trichinopoly.

NAT'TENAT, an Indian town or village in Nootka Sound.

NAT'TER JACK'. See RANA rubeta.

NATTO'RE, a town of Bengal, capital of the circar of Bettooriah: 115 miles north-north-eaſt of Calcutta, and ninety north-weſt of Dacca. Lat. 24. 25. N. lon. 89. 7. E.

NAT'TROW, a town of the kingdom of Burmah: ten miles north-weſt of Ava.

NA'TRUM, *ſ.* NATRON; in mineralogy, genus of ſalts. Generic Characters—Of a cauſtic taſte, effervefcing with acids, with oil forming ſoap, changing blue vegetable juices green, rendering acid ſolutions of earths and metals turbid. There are four ſpecies.

1. Natrum antiquorum, mineral alkali, or carbonat of ſoda: inodorous, dry, nearly pure. Found in China, Bengal, Perſia, Syria, Egypt, South America, Denmark, Swiſſerland, and Hungary, generally during the ſpring and ſummer, in a ſtate of whitiſh effloreſcent powder, and moſt uſually combined with a greater or leſs portion of earth, common ſalt, acid, and various ſubſtances; it is totally ſoluble in water, and, after evaporation, runs into four ſided priſmatic cryſtals terminating each ſide in a needle-point, which, on expoſure to the air, ſoon moulder into a ſnowy impalpable powder: with quicklime and oil it forms ſoap; it eaſily melts in the fire, and with ſilex forms glaſs.

To the weſt of the Delta of Egypt are ſeveral lakes, ſome of which contain common ſalt, or muriat of ſoda, in ſolution; others, natron, or carbonat of ſoda. In ſome of theſe lakes both theſe ſubſtances are contained, and are depoſited alternately on the ſides of the lake in conſequence of the evaporation of the water that held them in ſolution; this alternate depoſition depending on the different degrees of ſolubility of theſe ſalts: the common ſalt, being the leaſt ſoluble, is firſt cryſtallized; and, when that has been ſeparated to ſuch an extent as to leave a conſiderable exceſs of carbonat of ſoda, or natron, in ſolution, then, according to the law obſerved by Berthollet, and alluded to by Mr. Watt in his experiments on ferriite, this latter ſubſtance begins to cryſtallize. Berthollet, who attentively examined the ſituation of theſe lakes, and the nature of the ſurrounding country, found that the ſoil of the neighbourhood was ſtrongly impregnated, partly with carbonat and partly with muriat of ſoda. He ſuppoſes that the natron, or carbonat of ſoda, is the reſult of the decompoſition of the common ſalt by means of carbonat of lime; during which proceſs the lime combines with the muriatic acid of the common ſalt, forming with it muriat of lime; while the carbonic acid, thus diſengaged from the lime, combines with the ſoda, and thus forms the natron.

The terms *natron* and *nitrum*, which are uſed indiſcriminately in the works of the early natural hiſtorians, are moſt commonly applicable to the ſubſtance at preſent under conſideration; but they are ſometimes applicable to ſaltpetre, the *nitre* of the preſent day; and ſometimes to ſal ammoniac, as it is uſually called, which is a chemical ſaline combination of ammonia, or hartſhorn, and muriatic acid. But carbonat of ſoda may be diſtinguiſhed from other mineral ſaline ſubſtances by its effervefcence upon the addition of any ſtrong acid; by its alkaline taſte; and by the property which it poſſeſſes of changing vegetable blue colours to green.

This ſubſtance is procured from the natron-lakes of Egypt principally in the month of Auguſt; but is found likewiſe, in ſmaller quantity, during the reſt of the year. It is diſengaged from the ground by iron inſtruments, and carried on the backs of camels as far as Teranè, where it is ſhipped on the Nile to be conveyed to Cairo, or to the ſtore-houſes at Roſetta. The quantity annually collected amounts to near 25,000 quintals, and a great deal more might be obtained: it is uſually ſold at from 15 to 18 medines the quintal, delivered in either of theſe two towns.

Natron is ſeldom to be met with perfectly pure, independently of the earthy ſubſtances with which it is almoſt conſtantly mixed; it is not an alkali entirely unadulterated; it is generally blended with marine ſalt, with Glauber's ſalt, and in ſome degree with vitriolic tartar. In the ſtore-houſes at Roſetta, there are two ſorts; viz. the common and the *ſultaniè*, or royal. This latter is whiter, better cryſtallized, and purer, than the common ſort: it is conſequently ſtronger, and, when uſed, a ſmaller quantity is ſufficient.

This mineral alkali poſſeſſes the ſame properties as vegetable alkali, or ſoda; but it is ſaid to poſſeſs them in a higher degree of ſtrength. Its principal uſe is the bleaching of cloth and thread. The method purſued at Roſetta is as follows: The ſkeins of thread are arranged in a large copper, ſet in maſon-work; above them is put a layer of natron; and then a ſufficient quantity of cold water is poured in to ſoak both the thread and the natron. The whole is left in this ſituation for three days; at the end of which, the thread is taken out and hung upon ſticks placed over the copper. When it has drained, a fire is lighted under the copper, and the water, in which the thread was ſoaked, with the natron, is made to boil, after having received an addition of ſome lime. The thread is ſteeped and ſtirred about in this hot lye, and waſhed in it ſeveral times, without being left there. It is immediately taken to the Nile, in which it is waſhed and beaten; it is then ſpread out to dry. When the ſkeins are very dry, they are again waſhed in the whey which runs from cheeſes, and which, in Arabic, is called *meſch*. This is a ſort of ſtiffening that improves the cloth; and, when the Egyptians handle a ſoft cloth, they ſay that it wants meſch. To bleach 200lbs. of thread, it generally requires 100lbs. of natron, and from 60 to 80lbs. of lime; obſerving, however, that the *ſultaniè* natron, that is, the purer ſort, being ſtronger than the common, a ſmaller quantity muſt be uſed; without this precaution, the thread, or linen, would be liable to be burnt. The natron-trade, though pretty briſk with Turkey, and even with the ſtate of Venice, where this alkali, mixed with ſandy ſtone, makes the beautiful blown glaſs of Murano, was abſolutely at an end, with regard to France; though in the year 1777 it appeared likely to be revived. It is not ſolely to the bleaching of cloths and thread that the uſe of natron is confined in the country where it is formed. It is alſo uſed in dyeing, in the preparation of leather, in making glaſs, in bleaching linen, in dough inſtead of leaven, for preſerving meat and making it tender, and laſtly, to mix with ſnuff and make it more pungent. Natron is alſo found in another lake, leſs conſiderable than that called the Lake of Teranè, which is in the deſert of Nitria, or of St. Macarius, viz. near Damanhour, and in other countries, beſides Egypt. *Sonnini's Travels in Egypt.*

2. Natrum acidulare: inodorous; diſſolved in water. Found in the warm and acidulous baths of Seltzer and various parts of Germany, and in the lakes between Alexandria and Roſetta.

3. Natrum murorum: inodorous, mixed with carbonate of lime. Found in old walls cemented by lime, effloreſcing like froſt, and is not totally ſoluble in water.

β. N. marmoreum. Found in marble rocks.

4. Natrum volatile, volatile alkali, or carbonat of ammoniac: fetid, mixed with earths and other ſalts. Found in various ſoils, in chalk, ſwineſtone, argil, and often in the natron of old walls; its odour originates in the ammonia of decayed living bodies.

NATU'NA I'SLANDS, a cluſter of ſmall iſlands in the Chineſe Sea: ſixty miles weſt from the coaſt of Borneo. Lat. 4. N. lon. 108. E.

NATU'PA, a town on the weſt coaſt of the iſland of Panay. Lat. 11. 30. N. lon. 122. E.

NAT'URAL, *ſ.* An idiot; one whom nature debars of underſtanding; a fool.—That a monſter ſhould be ſuch a *natural. Shakeſpeare.*—Take the thoughts of one out of that narrow compaſs he has been all his life confined to, you will find him no more capable of reaſoning than a perfect *natural. Locke.*—Native; original inhabitant. *Not in uſe.*—The inhabitants and *naturals* of the place ſhould be in a ſtate of freemen. *Abbot's Diſc. of the World.*—Oppreſſion in many places wears the robes of juſtice, which, domineering over the *naturals,* may not ſpare ſtrangers; and ſtrangers will not endure it. *Raleigh's Eſſays.*—Gift of nature; nature; quality. *Not in uſe.*—The wretcheder are the contemners of all helps; ſuch as, preſuming on their own *naturals,* deride diligence, and mock at terms when they underſtand not things. *B. Jonſon.*—To conſider them in their pure *naturals,* the earl's intellectual faculties were his ſtronger part, and the duke, his practical. *Wotton.*

NAT'URAL, *adj.* [*naturalis,* Lat.] Produced or effected by nature; not artificial.—There is no *natural* motion of any particular heavy body which is perpetual; yet it is poſſible from them to contrive ſuch an artificial revolution as ſhall conſtantly be the cauſe of itſelf. *Wilkins's Dedalus.*—Illegitimate; not legal.—This would turn the vein of that we call *natural* to that of legal propagation; which has ever been encouraged, as the other has been diſfavoured, by all inſtitutions. *Temple.*—Beſtowed by nature; not acquired.—If there be any difference in *natural* parts, it ſhould ſeem that the advantage lies on the ſide of children born from noble and wealthy parents. *Swift.*—Not forced; not far-fetched; dictated by nature.—I will now deliver a few of the propereſt and *naturaleſt* conſiderations that belong to this piece. *Wotton.*—Following the ſtated courſe of things.—If ſolid piety, humility, and a ſober ſenſe of themſelves, is much wanted in that ſex, it is the plain and *natural* conſequence of a vain and corrupt education. *Law.*—Conſonant to natural notions.—Such unnatural connections become, by cuſtom, as *natural* to the mind as ſun and light: fire and warmth go together, and ſo ſeem to carry with them as *natural* an evidence as ſelf-evident truths themſelves. *Locke.*—Diſcoverable by reaſon; not revealed.—I call that *natural* religion, which men might know, and ſhould be obliged unto, by the meer principles of reaſon, improved by conſideration and experience, without the help of revelation. *Wilkins.*—Tender; affectionate by nature:

To leave his wife, to leave his babes,
He wants the *natural* touch. *Shakeſpeare's Macbeth.*

Unaffected; according to truth and reality.—What can be more *natural* than the circumſtances in the behaviour of thoſe women who had loſt their huſbands on this fatal day? *Addiſon.*—Oppoſed to violent; as, a *natural* death.

NATURAL is now generally uſed, of children, to ſignify illegitimate, or not born in wedlock. That this, however, was not the ancient original meaning, is evident from a letter of Edward IV. when earl of March, and his brother the earl of Rutland, to their father Richard duke of York, printed in the xviith volume of the Archæologia. The letter begins thus: "Right high and right mighty prince, our full redoubted and right noble lord and father, as lowly with all our hearts as we your true and *natural* ſons can or may, we recommend us unto your noble grace." It is evident, then, that the word *natural* did not, in the reign of Henry VI. ſignify *illegitimate*; but the fact is, that, when applied to children, it was uſed in oppoſition to *adopted;* and, when applied to *phyſical,* it was in oppoſition to *civil,* qualities. Thus, when a man had an eſtate given him to hold during his *natural life,* it was to ſecure him the benefit of the gift after he might be dead in law by becoming a monk. And to this day, in the eccleſiaſtical courts, which in many of their forms and doctrines ſtill adhere to the Juſtinian Code, and the canon-law eſtabliſhed when the catholic religion prevailed in this country, the epithet *natural* is applied to *lawful* children: for in all probates of wills and letters of adminiſtration granted to the children of a deceaſed perſon, the form of the grant is, "To A. B. the *natural and lawful* ſon or daughter of the ſaid C. D." It may be ſaid that the word *lawful,* in theſe inſtruments, is employed to explain the word *natural,* which would otherwiſe be taken to ſignify illegitimate: ſo it may, and indeed it is moſt probable that it was firſt introduced into theſe forms at the period when, in common parlance, the word *natural* came to ſignify *illegitimate.* For, that there was a time when the word *natural,* though ſtanding alone, did not mean *illegitimate,* is proved by king Edward's letter. This inference might, however, have admitted of ſome doubt, if the word *true* in that letter had followed *natural;* but, as it precedes it, it cannot be ſaid to be uſed in explanation of it. If it be ſaid that it is now many ages ſince the imperial code, which allowed of the adoption of children, was in uſe in this country, and that it is, therefore, no proof that the word *natural* can now be employed in oppoſition to the word *adopted,* we aſk, what other ſenſe can be given to it in the grants of probates and adminiſtrations? and whether it does not often happen that, in the forms of legal inſtruments, we retain modes of expreſſion of which the origin is forgotten, and the utility is unknown? In fact, the word *natural* is retained to this day, not only in the inſtruments above mentioned, but in all conveyances and ſettlements of eſtates; and a modern conveyancer would be thought a very bold innovator, who, in drawing a deed of this kind, ſhould not, in giving an eſtate to a man during his life, expreſs it to be during his *natural* life. The only meaning the word can have, when ſo uſed, is to diſtinguiſh the *natural* from the *civil* exiſtence of the perſon; a diſtinction, however, which has long ſince become uſeleſs and abſurd.

Another proof that there was a time when the word *natural* did not imply *illegitimacy* is this, that even at this day it is the univerſal practice of lawyers to add a word of explanation when they mean to uſe the word *natural* in the ſenſe of illegitimate. Thus, although an unprofeſſional perſon in making his will would ſay, "I give 1000l. to my *natural* ſon, A. B." meaning his *illegitimate* ſon; a lawyer drawing the will for him would ſay, "I give to my *natural* or *reputed* ſon, A. B." This explanatory phraſe is, therefore, a remnant of former times, when the word *natural* had begun to be taken in common parlance for *illegitimate,* but which was not then eſtabliſhed as its legal ſignification. It ſeems clear, therefore, that in the reign of Henry VI. the word *natural,* when ſtanding alone, did not imply *illegitimate;* but that there afterwards came a period when, in its uſual acceptation, it did ſo ſignify; and its legal ſignification, therefore, was governed by the accompanying epithet. When that period was, is by no means ſettled, but is an object very worthy of inquiry. *Gent. Mag.* 1816. Part I. p. 579, 80.

NATURAL HISTORY, or the HISTORY OF NATURE, is a deſcription of all natural bodies whatever; whether terreſtrial, as animals, vegetables, foſſils, fire, water, air, &c. or celeſtial, as the ſtars, planets, comets, &c. In this enlarged ſenſe, natural hiſtory is much the ſame with what we otherwiſe call *phyſiology*.

NATURAL HISTORY, however, in its common and more convenient acceptation, is confined to a deſcription and inquiry into the nature of thoſe natural products which are more immediately within our reach; as man, beaſts, birds, fiſhes, inſects, worms, plants, metals, minerals, &c. Other particulars of the hiſtory of nature are included under the articles ASTRONOMY, GEOGRAPHY, and CHEMISTRY.

When we take a general ſurvey of the objects with which we are ſurrounded, we are bewildered amidſt the number and variety that are every-where preſented to our view. The air, the woods, the fields, the waters, teem with myriads of animals; a large proportion of the earth's ſurface is covered with a green mantle of luxuriant herbage, interſperſed with plants and flowers of a thouſand varied tints; and, when we ſearch below this, when we explore the cloud-capt mountain, the gloomy mine, the ſequeſtered cavern, or the rocky cliff, we diſcover a great variety of mineral ſubſtances, either piled into irregular maſſes, or lying in uniform beds or layers, diſpoſed in veins or ſeams, or ſcattered at random through the other ſtony matters.

To the caſual obſerver, the number and variety of theſe objects would appear almoſt infinite. He would conſider it equally impoſſible to enumerate them as to number the ſtars, or count the ſands on the ſea-ſhore. This idea, however, ariſes from his ſeeing them in confuſion and diſorder. The naturaliſt, by ſeparating them into thoſe groups or claſſes in which they often naturally preſent themſelves, has ſucceeded not only in diſtinguiſhing the ſeveral kinds from each other, but even in gueſſing pretty accurately at the number of ſpecies that have hitherto been diſcovered.

The number of natural productions being confeſſedly very great, it is neceſſary to find out ſome means of diſtinguiſhing them from each other, and of recognizing them on ſeeing them anew. Theſe means are the peculiarities, or the aſſemblages of peculiarities, that excluſively belong to each body. Now, there is ſcarcely any ſubſtance that has a ſimple character, that is, which can be diſtinguiſhed from every other ſubſtance by any one of its properties ſingly. It is only by the combination of ſeveral of theſe properties that we can diſtinguiſh an object from others which reſemble it in poſſeſſing ſome one or more of thoſe very properties; and the more numerous the ſpecies we compare, the more neceſſary it becomes to bring their properties together, in order to aſſign to each a character that may diſtinguiſh it from the reſt. Hence, to diſtinguiſh a ſpecies, conſidered independently from all others that exiſt in nature, it is neceſſary to expreſs in its character almoſt the whole of its properties; and, the more of theſe we take into the character, the more complete will be our deſcription of the object. But no man can acquire a ſufficiently accurate knowledge of all natural objects to enable him to give a complete deſcription of them: human life is too ſhort to admit of the completion of ſuch a taſk. All that can be expected from our limited faculties is to acquire a general knowledge of natural objects, confining our principal attention to ſuch as poſſeſs ſome ſtriking qualities, or appear convertible to the uſeful purpoſes of life.

To gain this end, two modes of procedure have been adopted by naturaliſts. According to the firſt mode, we employ characters that proceed by degrees from particulars to generals. We begin by comparing together a certain number of ſpecies that bear the neareſt relation to each other. In drawing the characters of theſe ſpecies, it is requiſite to expreſs only thoſe differences which, on a ſuppoſition that they are the moſt nearly related, form but a ſmall part of their properties; a number of ſpecies thus brought together conſtitutes what is called a *genus*, or tribe.

The remainder of theſe properties, which are common to all the ſpecies of the genus, combine to form the character, or rather the deſcription, of the genus, diſtinguiſhing it from all thoſe which might be formed by bringing together other ſpecies; but the number of theſe common properties being ſtill very conſiderable, we repeat the ſame means in order to reduce the characters of the genera to ſmaller terms. We compare together only thoſe genera which moſt nearly reſemble each other, and the generic characters now employed muſt only expreſs thoſe differences which form but a ſmall part of their common properties. Thoſe properties, which are common to all the genera, compoſe a character that diſtinguiſhes this aſſemblage or group from all other groups or genera. Such an aſſemblage of genera is called an *order*.

Repeating the ſame operation, and bringing together ſuch orders as are moſt nearly allied, we form a more general aſſemblage, called a *claſs*; and again, uniting a certain number of claſſes, we form a higher diviſion, to which naturaliſts have given the name of *kingdom*. This chain of diviſions, in which the higher links comprehend the lower, forms what is called a METHOD. The other mode of procedure is to riſe gradually from generals to particulars, beginning with the ſlighteſt and moſt obvious differences, thus forming the firſt diviſion or kingdom; dividing each kingdom into claſſes, each claſs into orders, each order into genera, each genus into ſpecies, and each ſpecies into varieties. This deſcending ſeries conſtitutes what is called a SYSTEM, and is that which has been generally adopted by naturaliſts.

To illuſtrate this ſyſtematical claſſification of natural objects, let us ſelect a familiar example. Among the various creatures that paſs under our obſervation, a great number are poſſeſſed of life, of ſenſation, and voluntary motion; theſe we call *animals*, and of theſe we form the *animal kingdom*. On examining various groups of animals, we find that many have four extremities, and ſuckle their young by means of teats; theſe we call *quadrupeds*, or *mammalia*. We have thus formed a *claſs* of animals. Again we find that of the mammalia ſome have hoofed feet and blunt fore-teeth, and feed almoſt entirely on vegetables: theſe will conſtitute an *order* of the claſs of mammalia, to which Linnæus has given the name of *belluæ*. Of this order a certain number of animals agree in having ſix fore-teeth in both jaws, and form a *genus*, or tribe, diſtinguiſhed by this particular from the other animals of the ſame order, and commonly called the horſe tribe, or *equus* genus. Laſtly, in this tribe we find one *ſpecies* that has ſolid hoofs, a tail briſtly at the end, an upright mane, and a black croſs on the ſhoulder of the male: this ſpecies is the common aſs.

The principal writers on natural hiſtory among the ancients, whoſe writings have come down to us, are Ariſtotle, Theophraſtus, and Pliny. Of the firſt we may remark with Haller, that his writings on this ſubject exhibit a continued chain of phyſical and anatomical facts, which for the moſt part appear to have been the reſult of accurate obſervation. He relied leſs than any of the ancient naturaliſts on uncertain and fabulous report; he induſtriouſly collected and examined natural bodies, and appears to have himſelf diſſected many animals, eſpecially fiſhes, or at leaſt to have been preſent at their diſſection There are even to be found in his writings references by letters to figures, which he employed to illuſtrate his obſervations.

Theophraſtus wrote chiefly on the natural hiſtory of plants and foſſils, on winds, and on fire. His works have been edited by Heinſius; but, except in plants, they do not contain much that is worthy of our obſervation more than what is to be found in the writings of Ariſtotle.

The natural hiſtory of the elder Pliny is a valuable repoſitory of ancient knowledge; which, notwithſtanding all its errors and extravagances, we may venture to call, after the panegyric of his nephew, a comprehenſive and learned work, little leſs various than nature herſelf. The author, in the dedication of his work to Veſpaſian, ſenſible of the defects with which it abounds, apologizes for them, from the conſideration that the path which he took had been in a great meaſure untrodden, and held forth to the traveller few enticements; while ſome parts of his ſubject had been ſo often handled, that readers were become cloyed with them: that it was an arduous taſk to give what is old an appearance of novelty; to add weight and authority to what is new; to caſt a luſtre upon ſubjects that have been obſcured by time; to render acceptable what is become trite and diſguſting; to obtain credit to doubtful relations; and, in a word, to repreſent every thing according to nature, and with all its natural properties. His deſign muſt be acknowledged to be grand and noble; and, when we conſider that the work was compoſed in the midſt of important engagements, and chiefly at broken periods ſtolen from ſleep, we ſhall not wonder that it was imperfectly executed.

The ancients had no idea of methodical or ſyſtematic diſtinctions. As they were acquainted with but few bodies in compariſon with the moderns, and attended only to thoſe which were uſeful to man; they diſtinguiſhed them only by their uſual properties, their native country, their habitations, and the uſeful purpoſes to which they might be applied. From the few productions which they deſcribed, they were not led to perceive the neceſſity of ſearching among them for diſtinctive marks or relations which might prevent their being confounded with each other. They doubtleſs believed that their deſcriptions were ſufficient, and that the names which they impoſed would deſcend with their cuſtoms to poſterity, without being affected by the diſorders and alterations that have changed the face of countries and the ſeat of empires. But the revolutions that have deſolated the faireſt regions of the globe, by inſulating or diſplacing their inhabitants, or by confounding them with one another, and altering their language, have frequently almoſt extinguiſhed the lamp of ſcience. After many ages of ignorance and barbarity, we find in the few works of the ancient naturaliſts, which have eſcaped the ravages of war and the devaſtations of civil diſcord, little more than uncertainty and obſcurity, with reſpect to thoſe ſpecies which they have deſcribed. Notwithſtanding the labours of numerous commentators, we do not certainly know what ſpecies of plant is the *cicuta* employed by the Greeks for the execution of criminals, and which terminated the life of Socrates. We cannot be ſure that the animals, which we find beſt characterized in the ancient writings, bore the names which we attribute to them; nor are we more certain with reſpect to the ancient nomenclature of minerals.

As long as ſtudious men cultivated the ſciences only through the medium of the writings of the ancients, and attempted nothing beyond the interpretation of theſe, *natural hiſtory*, like every other branch of phyſics, remained obſcure and confuſed, and fiction or imagination took the place of facts; but, when they perceived the advantage of ſtudying nature herſelf, and interrogating her by obſervation, *methods* were erected, and diſtinctive characters for the ſpecies introduced. This fortunate revolution took place in the 16th century. Cæſalpinus firſt attempted to reduce vegetables to claſſes, and diſtinguiſh them into tribes according to their form. Geſner, beſides the fine hints that he firſt gave of the conſtant relation between the ſtructure of the ſeed and that of the other parts of plants, was the firſt who attempted any ſyſtematic and methodical arrangement of animals. In the 17th century, Moriſon, Ray, and Rivinus, improved on the hints of Cæſalpinus reſpecting the claſſification of vegetables; and Aldrovandus, Rhedi, and Swammerdam, upon thoſe of Geſner reſpecting animals; and in a ſhort time this firſt impulſe given to the art of arranging and diſtinguiſhing natural bodies by conſtant characters, was communicated to all thoſe who were employed in the ſtudy of nature. Tournefort, profiting by all the attempts towards method and ſyſtem in the claſſification of vegetables that had been made before him, advanced a conſiderable ſtep in botany, by his beautiful method of diſtinguiſhing plants according to the form of their flowers and fruits, which he publiſhed towards the end of the 17th century. See the article BOTANY, vol. iii. p. 289—294. for hitherto we have not been able to find a claſſification worth noticing in any other department of natural hiſtory.

But, at length, the ſame year of the eighteenth century (1707) gave birth to two men who have advanced the general ſcience of natural hiſtory far beyond any of their predeceſſors. We need ſcarcely mention the names of Linnæus and Buffon. The Swediſh naturaliſt extended his enlarged views through every branch of natural hiſtory; he arranged in his SYSTEMA NATURÆ and SYSTEMA VEGETABILIUM all the productions of nature, and diſtinguiſhed them by characters that were preciſe and ſimple; he created a new language for expreſſing with brevity all theſe characters, and thus preſented to the view, as in a compendious picture, all the properties of bodies. Buffon, proceeding in a different road, treated more copiouſly the moſt important parts of natural hiſtory, and of the animals that are moſt nearly allied to man, in a work which the fire of his genius and the brilliancy of his ſtyle have rendered a univerſal favourite. The rival of Ariſtotle and Pliny, whoſe genius he ſeems to have combined in the greatneſs of his views and extent of his plan, and altogether one of the firſt writers of his age, he inſpired a paſſion for the ſtudy of nature in numbers, who without his works would never have engaged in ſuch a ſtudy, and communicated to his countrymen that taſte which has ever ſince ſurvived him.

After what has been given in the particular treatiſes on natural hiſtory in this Encyclopædia, both as to the progreſs of the ſcience, and the principal works on each department of it, ſince the time of Linnæus and Buffon; it is unneceſſary for us to trace its progreſs beyond that period. The advances made within theſe few years are immenſe, our ſtock of information is prodigiouſly increaſed, and the modes of ſtudy greatly improved and facilitated. The labours of Cuvier, Geoffroy, Cépède, Lamarck, Sonnini, Bloch, Spallanzani, Juſſieu, Wildenow, Werner, St. Fond, Brochant, Brongniart, Klaproth, Fourcroy, Vauquelin, Shaw, Latham, Cateſby, Ellis, Smith, Withering, Woodville, Kirwan, Playfair, Thomſon, Jameſon, &c. with the aſſiſtance to be derived from the Annales du Muſeum National, the Naturaliſt's Miſcellany, the Linnæan Tranſactions, and the ſplendid plates of Merian, Schreber, Curtis, Sowerby, Sotheby, &c. afford ample proofs of the induſtry and ſucceſs with which this delightful field has been cultivated, and of the rich harveſt that has been derived from the united efforts of ſo many men of genius and talents.

The firſt ſyſtematic arrangements of animals were founded upon their external figure and moſt obvious habits of life; conſequently they were always imperfect, and often erroneous; thus, the diviſion of animals into terreſtrial, aërial, and aquatic, although apparently natural, included, under the ſame title, individuals no way allied to each other, except in the form of their bodies, and the element they inhabited. In proportion to the cultivation and advancement of the ſtudy of zoology, it became neceſſary to inſtitute claſſes and orders founded upon leſs obvious characters than the general appearance or economy of the animals; for which purpoſe, the number and arrangement of the toes, teeth, claws, beaks, ſcales, and other obſcure or minute parts, were employed; and by theſe means the primary diviſions and ſubdiviſions of the animal kingdom were made more numerous; the tranſition from them to the genera leſs abrupt; and the diſcrimination of ſpecies more eaſy and accurate.

It was on this plan that Linnæus proceeded in the formation of his great ſyſtem, which has been ſo much and ſo generally admired. The characters he choſe, however, were confeſſedly artificial; and, as his objects chiefly ſeemed to be the aſcertainment and deſcription of the ſpecies, he often diſregarded natural order, and thus brought together things in their nature very diſſimilar. See Linnæus, vol. xii. p. 756. But, upon the whole, no ſyſtem has been produced which can be ſaid to have fewer faults than his: his therefore we have followed. Had we departed from it, we could only, like ſome of our competitors, have formed a patchwork claſſification, from the various ſyſtems of modern French writers.

The Linnæan ſyſtem, then, conſiſts of three grand diviſions; viz. the animal, vegetable, and mineral, kingdoms; with the ſubdiviſions, mentioned before, of claſſes, orders, genera, ſpecies, and varieties.

It muſt be conſidered as a very difficult, though a very curious, problem, to aſcertain the number of ſpecies at preſent known throughout the ſeveral ſubdiviſions of Nature. From the different modes in which different naturaliſts have diſtributed the objects of their reſearch, and from the additions that are perpetually made to our knowledge, it may be impoſſible to fix the preciſe number of known ſpecies at any given time; but we may make a tolerably near approximation to the truth; and this we ſhall now attempt, going through the ſeveral *kingdoms*, *claſſes*, and *orders*, as they have been or will be treated of in the different parts of this work.

I. In the ANIMAL KINGDOM.

Claſs I. Mammalia, or Sucking Animals.

Names of the Orders.	No. of Genera.	No. of Species.
1. Primates	4	105
2. Bruta	9	31
3. Feræ	10	191
4. Glires	10	145
5. Pecora	8	75
6. Belluæ	4	14
7. Cete	4	24
	49	585

Claſs II. Aves, or Birds. See the article Ornithology.

1. Accipitres	4	300
2. Picæ	24	795
3. Anſeres	13	271
4. Grallæ	20	346
5. Gallinæ	10	124
6. Paſſeres	17	1099
	88	2935

Claſs III. Amphibia.

1. Reptilia	4	162
2. Serpentes	8	258
	12	420

Claſs IV. Pisces, Fiſhes. See Ichthyology.

1. Apodes	14	61
2. Jugulares	6	59
3. Thoracici	21	620
4. Abdominales	16	219
5. Branchioſtegi	10	111
6. Chondropterigii	6	71
	73	1141

Claſs V. Insectæ. See Entomology.

Orders.	Genera.	Species.
1. Coleoptera	55	4497
2. Hemiptera	14	1497
3. Lepidoptera	3	2796
4. Neuroptera	7	197
5. Hymenoptera	25	1573
6. Diptera	12	907
7. Aptera	15	722
	131	13185

Claſs VI. Vermes, Worms. See Helminthology.

1. Inteſtina	21	399
2. Molluſca	31	463
3. Teſtacea	36	2652
4. Zoophyta	15	488
5. Infuſoria	15	233
	118	4235

By adding the above numbers together, it will be ſeen that the number of known ſpecies in the animal kingdom may be eſtimated at about 22,501; and of theſe the claſs of inſects furniſhes more ſpecies than all the other claſſes put together.

II. In the VEGETABLE KINGDOM.

We ſhall not here enumerate the claſſes and orders of trees, plants, &c. as they are already given at length, with the number of genera in each, under the article Botany, vol. iii. p. 256, and 263 & ſeq. The total number of ſpecies is ſet down in the Encyclopædia Britannica at 14,807; but with the remark, that "many years ago the number of known ſpecies was reckoned at above twenty thouſand, and there is reaſon to believe that it exceeds 50,000."

III. In the MINERAL KINGDOM.

Claſs I. Earths.

Orders.	Genera.	Species.
1. Talcoſe	5	32
2. Ponderous	4	15
3. Calcareous	20	130
4. Argillaceous	12	106
5. Siliceous	17	79
6. Adamantine	1	1
7. Aggregate	6	300
Claſs II. Salts	8	48
Claſs III. Inflammables	7	28
Claſs IV. Metals	27	216
Claſs V. Petrifactions	8	85

Total number of ſpecies in the Mineral Kingdom	1040
in the Vegetable Kingdom	50,000
in the Animal Kingdom	22,501
Grand Total	73,541

Though the claſſification of natural bodies is of the higheſt importance towards making us acquainted with unknown ſpecies, and diſtinguiſhing them from thoſe which we already know, this alone is not ſufficient to form a *naturaliſt*. His principal object ſhould be to learn the habits, manners, and uſes, of the objects which he is ſtudying; and he may perhaps be aſſiſted in this object by the following obſervations:

1. In *Zoology*, or the natural hiſtory of the animal kingdom, it is neceſſary to aſcertain both the diſtinctive characters of each individual animal, and its peculiar habits, properties, and uſes.

The naturaliſt firſt learns that the lamb, for inſtance, is in the claſs mammalia, being one of thoſe animals that ſuckle their young; in the order pecora, becauſe it is hoofed, and has no cutting-teeth in the upper jaw; and that it is diſtinguiſhed from other animals of the ſame order, by its having ſeveral blunt wedge-like inciſive fore-teeth in the lower jaw only, hollow reclined horns, and no tuſks. This information would ſatisfy many, who call themſelves naturaliſts; but it is far from being all that is required: the philoſophical inveſtigator of Nature inquires into its habits; as its food, its period of geſtation, its ſeaſon of lambing, the weather and climate moſt ſuited to its health and vigour. He endeavours to learn what produces the difference in its fleece, whether climate, food, or ſome peculiarity in the breed; and is anxious to aſcertain what variety is moſt diſpoſed to fatten, and what food effects this ſpeedily; &c. &c.

The information of the firſt kind is of conſequence and even neceſſary in many caſes; but that of the latter is moſt uſeful. If a traveller diſcover an animal poſſeſſing any uſeful property, or producing any uſeful drug, if he have not the firſt kind of information, he gives ſo confuſed and inaccurate a deſcription of it, that others, miſtaking the animal, diſcredit the author's account, and the world loſes the benefit of his diſcovery. We have to lament this in peruſing many of the old books of travels.

2. *Botany*, or the natural hiſtory of the vegetable kingdom, in the uſual acceptation of the term, implies only the knowledge of the diſtinctive characters of plants; and he who knows the greateſt number, and is moſt accurate in determining the different ſpecies, is accounted the beſt botaniſt. This, however, conſtitutes but a ſmall part of the ſcience; there is another diſtinct department, which may properly be termed the *philoſophy of botany*, which is both more intereſting and more uſeful. This includes the knowledge of the ſtructure or the anatomy of plants; and the knowledge of the uſes or functions of their various parts; as of the leaves, the bark, the pith, the roots, the juices, &c. which is called the *phyſiology of plants*. It includes, alſo, an acquaintance with the ſoil and climate adapted to different vegetables, their mode of propagation, and the various uſes to which their ſeveral parts or productions may be applied.

Botany, in the firſt ſenſe, which may be called *practical botany*, is ſubſervient, and abſolutely neceſſary, to the ſtudy of the philoſophy of botany; for no one, who is acquainted with the claſſification of plants, can either convey to others his own information, or himſelf receive the benefit of that of others, reſpecting either the ſtructure and economy, or the habits and the uſes, of ſuch plants as may have been inveſtigated. If medical virtues are diſcovered in any vegetable production, without the accuracy of the practical botaniſt, to aſcertain and deſcribe the particular plant which affords it, the diſcovery is often loſt; or perhaps, what is worſe, the virtues are attributed to a different plant, and it is only by repeated failures, and in ſome caſes after much miſchief, that the error is detected. It is evident that the ſame may happen to the agriculturaliſt, the dyer, or any other artiſan, who has diſcovered in the vegetable kingdom the means of improving his art, but has not botanical knowledge ſufficient to give an accurate character of the plant to which he is indebted for his diſcovery.

3. In *Mineralogy*, or the natural hiſtory of the mineral kingdom, almoſt half the ſtudents are of that claſs, who content themſelves with collecting, and being able to arrange ſyſtematically, the minerals they meet with. But, in this department of natural hiſtory, as well as the other two which we have conſidered, ſomething more than arrangement is required. It is the man who can analyze and ſeparate the component parts of mineral productions; who knows the art of aſſaying, and who knows *à priori* the probable ſite of a quarry, or a mine, and can tell the direction of a ſtratum of coal, or of marble, that we may call a *mineralogiſt*. The mineralogiſt has often enriched individual proprietors of land, and benefited his country, by the diſcovery of mines; he is enabled to direct the planners of canals by warning them of obſtacles; and his knowledge has aided the phyſician in aſcertaining the virtues of minerals, and of mineral waters.

The natural hiſtory of the mineral kingdom includes *geology*, or the data upon which are founded the different theories of the formation of the earth. It includes the knowledge of thoſe facts, upon which the art of mining and the art of ſeparating and purifying metals are founded; and its object is to teach likewiſe the properties of thoſe metals, as well as of the earths, and other mineral productions, when ſeparated and in their ſimple ſtate.

It is to the naturaliſt that we are many times indebted for the introduction of foreign animals and foreign plants into our own country. Wheat, oats, barley, and other vegetables, which are now become neceſſary to our exiſtence, were not originally of Britiſh growth. The potatoe, now ſo general and ſo uſeful, was firſt introduced into this country by Gerard, a noted botaniſt, and was for ſome time cultivated in his garden as a rarity. The ſugar-cane, the bread-fruit tree, the farinaceous palms, the flax and hemp, have all been tranſported by naturaliſts of the preſent day to regions where they never grew before.

Beſides the above, and many ſimilar inſtances of advantage to be derived from ſtudying the different branches of natural hiſtory, theſe two incalculable benefits neceſſarily ariſe to the ſtudent himſelf, from attending to the whole, or any part, of the ſcience; namely, a power of abſtracting the mind, and reaſoning methodically; and a habit of contemplating the Creator in his works. *Skrimſhire's Eſſays.*

Of forming a Cabinet, or Muſeum, of Natural Hiſtory.

One material object in the ſtudy of natural hiſtory is the art of preſerving ſpecimens, ſo as to form a cabinet, or muſeum. This art, called by the French *Taxidermie*, is exceedingly curious, and would well deſerve a much fuller conſideration than we can here allot to it.

The art of preparing and mounting the ſkins of animals appears to be pretty old; but it made no great progreſs before the ſeventeenth century, when Reaumur made ſome attempts to preſerve the ſpecimens from the attacks of inſects. In the Journal de Phyſique for 1773, there is a memoir, addreſſed to the Royal Society of London, by M. Kuckhan, on the methods of preparing birds, which is very curious, but is liable to many objections. In the ſame volume is a memoir by Mauduit, principally reſpecting the means of preſerving animal ſpecimens from the attacks of inſects. His preſervatives are of a poiſonous nature; and, of courſe, their uſe is dangerous, while they do not appear to have been attended with the expected ſucceſs. The arſenical ſoap of Becœur, much celebrated about the ſame time, is liable to ſimilar objections. The lateſt, and probably the beſt, work on this ſubject, is that publiſhed a few years ago by M. Nicolas; and from this the following obſervations are derived.

The inſtruments employed in the preparation of ſpecimens are much the ſame as thoſe uſed by anatomiſts in their ordinary diſſections; conſiſting of ſmall knives or ſcalpels, forceps or pincers of various forms, probes, needles, and pins or wires. The preſervatives, employed by M. Nicolas to protect the ſpecimens from inſects, are principally of two kinds: 1. Sulphur, which he applies to the ſkins by means of fumigation, thus impregnating them with ſulphurous acid; 2. A liquor for macerating the ſkins, another liquor for rubbing over the hair, and a pomatum for anointing the inſide of the ſkin.

The firſt liquor is prepared by ſteeping a pound and a half of powdered oak-bark, and four ounces of powdered alum, in twenty Engliſh pints of cold water, for two days, taking care to ſhake the mixture from time to time. The liquor employed for preſerving the fur is prepared by infuſing an ounce of white ſoap ſhred very ſmall, two ounces of camphor broken into very ſmall pieces, the ſame of *colocynth* or bitter-apple groſsly powdered, in two Engliſh pints of ſpirit of wine, for four or five days, ſhaking the veſſel from time to time, after which the liquor is to be filtered through blotting-paper. The pomatum is prepared of a pound of white ſoap, half a pound of cauſtic potaſh, four ounces of powdered alum, two pints of water, four ounces of oil of petroleum, and the ſame of camphor. The ſoap, cut into ſmall pieces, is put in an earthen pipkin over a moderate fire; the water is then to be poured over it; and, when the whole is formed into a ſort of ſoft paſte, the alum and then the oil are added; the whole well ſtirred together, removed from the fire, and when it is nearly cold the camphor is added, being before-hand rubbed down in a mortar with a little ſpirit of wine. The pomatum, thus prepared, muſt be kept in glaſs veſſels, well ſtopped; and, when uſed, is to be lowered with water to the conſiſtence of thin cream, and laid on the ſkins by means of a pencil-bruſh.

M. Nicolas has given directions for preparing and preſerving ſpecimens of all the various claſſes of animals. We ſhall, as far as our limits permit, briefly follow him through each.

1. In ſkinning quadrupeds, he propoſes to make an inciſion along the middle of the back, from the haunches to the ſhoulders; except in thoſe animals whoſe ſkin is very thick and hard, or is ſet with ſpines, in which the opening muſt be made at the belly in the uſual manner. In detaching the ſkin from the fleſh, we muſt occaſionally employ the knife; and, as we proceed, muſt inſert tow between the ſkin and fleſh, to prevent ſoiling the fur. When the whole body is detached, and the ſkin drawn down as far as the feet, the noſe, and the tip of the tail, the whole body is to be cut away except the head and extremities, which are left to give a better form and ſupport to the ſpecimen. All the fleſhy and fatty parts, the brain, and the eyes, however, muſt be cut away, and nothing left but the bones, the ſpaces between which and the ſkin muſt be ſtuffed with tow cut fine; and a little ſoft clay muſt be put within the orbits, in order to fix the artificial eyes.

The ſkin, being thus detached, is now to be ſteeped for ſeveral days, from five to fifteen, according to the ſize of the animal, in the liquor firſt deſcribed; and, after ſteeping, the inſide is to be well anointed with the pomatum. When the legs and head are ſtuffed, the cavity of the ſkull filled with very dry moſs, and the eyes fixed, wires are to be paſſed through the inſide of the body, the extremities, and the head and tail, in the following manner. Three iron wires of a moderate ſize, well annealed, at leaſt twice as long as the animal, are to be twiſted together for nearly half their length; and, while one wire is left ſtraight, the other two are to be bent at each end, ſo as to form a croſs. When the ſkin is turned, ready for ſtuffing, theſe wires are to be placed within it in ſuch a manner as that the ſtraight wire ſhall paſs through the head and tail, and the croſſing wires through the extremities, coming out at the ball of each foot; and, in this way, after the cavity is filled up with tow, and the open part neatly ſtitched, the ſpecimen may be fixed on a board in its natural poſition. Nothing remains now but to impregnate the fur with the bitter liquor laſt deſcribed, which is done by means of a ſponge, with which the whole outſide is to be well waſhed, then covered with folds of linen, and dried in the ſhade.

2. The art of preſerving birds is perhaps the moſt curious part of the preſent ſubject, and is that to which the moſt attention has been given. M. Nicolas has explained at ſome length the mode recommended by M. Kuckhan in the Journal de Phyſique; that by Dr. Lettſom, in the Naturaliſt's and Traveller's Companion; that of Mauduit, inſerted in the fifth number of the Encyclopédie Methodique; and that of Dufreſne, adopted by M. Daudin, and inſerted in his Traité d'Ornithologie; after which he details his own. He deſcribes three methods of preparing birds, according as we can procure freſh-killed ſpecimens, whole dried ſkins brought from abroad, or detached parts of ſeveral individuals of the ſame ſpecies. We ſhall here confine ourſelves to the firſt of theſe, as being beſt adapted to the generality of our readers.

When a freſh-killed bird is procured, it is to be placed upon a table, upon its back, with the tail turned towards the operator, who, after having ſeparated with his fingers the feathers which cover the belly towards the right and left, is to make, with a ſcalpel, a longitudinal inciſion through the ſkin, from the point of the breaſt-bone to about the middle of the belly. The edges of the ſkin are now to be raiſed with a pair of flat pincers, on each ſide, carefully ſeparating the fleſh as occaſion may require with a knife, and inſerting a little cotton from time to time, to prevent ſoiling the feathers. In this way the ſkin is to be detached from the ſhoulders and neck, and as much as poſſible of the body laid bare; after which a pretty ſtrong thread is to be paſſed through the noſtrils, and tied under the lower mandible, leaving the ends of the thread, when tied together, at leaſt twice as long as the neck. Now, holding the bird by the thread, with the back turned towards him, the operator is to hold together the feathers on the two edges of the inciſion as well as thoſe which cover the breaſt, and, puſhing the head of the bird inwards with his thumb, ſo as to form the neck into an arch, is to cut this off near the body, detach from it the gullet and wind-pipe, and all the fleſhy parts, both of the neck and head, by drawing the ſkin as far back as poſſible towards the beak, and cutting off the neck-bones cloſe to the head; he is to empty the ſkull with a little iron inſtrument in the form of an ear-picker, and clean it properly with cotton. He is now to wrap cotton or tow about the head and neck, and to ſeparate the reſt of the ſkin, leaving the pinions and bones of the wings and legs, and the tail, as directed for quadrupeds. After this has been done, the ſkin is to be turned out like a glove, with all the feathers inwards; all the natural openings of the bird, as well as any ſhot-holes, &c. are to be ſtitched up with a needle and fine thread; then the whole ſkin, as well as the bones, are to be waſhed with a ſtrong infuſion of tan, with a little alum, by means of a pencil-bruſh, and the ſkin incloſed in a covered veſſel that it may not dry too haſtily.

In ten or twelve hours time we may waſh the ſkin and bones again with the aſtringent liquor. Twice waſhing in this manner will be ſufficient for very ſmall birds; but thoſe of a middling ſize will require maceration in the firſt liquor employed for quadrupeds during two days, and four or five days for thoſe of larger ſize. The ſkins, being well impregnated with the aſtringent liquor, are to be ſmeared with the ſoapy pomatum, have artificial eyes fixed in the orbits by means of wax, and ſtuffed and mounted much in the ſame manner as quadrupeds; except that the wires employed for this purpoſe are differently bent.

Great nicety is required in fixing the different parts of a bird in its natural poſition, and in arranging the feathers ſmoothly and evenly. M. Nicolas directs thin plates of lead to be placed ſo as to ſecure the wings in the proper poſition till the whole is completely arranged. To preſerve the feet and legs, he anoints them with linſeed-oil mixed with camphor, and applied a little warm.

The laſt operation conſiſts in enveloping the bird with bandages of muſlin or fine linen, pinned round the neck, breaſt, body, and rump, as well to ſecure the feathers in their places during drying, as to allow of their being drenched with the bitter liquor to preſerve them from the attacks of inſects.

3. In preparing ſpecimens of reptiles, after what has been ſaid above, little direction will be required. The ſkin is to be ſtript backwards as far as the head, which is to be cut off and cleaned as in other ſpecimens; after which the ſkin is to be macerated, anointed within with pomatum, ſtuffed and varniſhed as before.

4. In the preparation of fiſhes, M. Nicolas prefers the method of Mauduit to that given by Dr. Lettſom in the

Naturaliſt's and Traveller's Companion; but, as Mauduit's methods require much ſkill and addreſs, he recommends the following, eſpecially for the flat kinds of fiſh. He makes a longitudinal inciſion with ſciſſars along the belly of the fiſh from the anus to the lower mandible, and then gradually and carefully ſeparates the ſkin from the fleſh with the aſſiſtance of the blade and flat handle of a ſcalpel, till he has laid bare one ſide of the animal. He then paſſes to the other ſide, proceeding in the ſame manner to detach the ſkin from that part; after which he ſeparates the head from the body with a pair of ſciſſars, and clears away the fleſhy parts attached to the head. He now detaches the ſkin from the back as far as the anus; and then, laying the fiſh on the table, he paſſes the flat handle of the ſcalpel below the ſkin that covers the tail and neighbouring parts, in order to ſeparate it completely. This done, he puſhes the tail inwards, and, with the aſſiſtance of the ſcalpel and drawing the ſkin very gently, he detaches this as near as poſſible to the end of the tail, which he then ſeparates with ſciſſars, thus leaving the ſkin with nothing attached to it but the head and extremity of the tail. It only remains now to clear away the ears and eyes, and properly clean the head. The ſkin is now ſteeped for ſome days in the tanning liquor, then laid on a table, and, when the head is properly arranged, a model of the body of the fiſh, made of ſoft clay mixed with fine ſand, is placed within the ſkin, which is made to fit neatly over it, is then bound with little bandages of linen, and ſuffered to dry. When the clay is quite dry and hard, and the ſkin has acquired ſo much firmneſs as to retain its proper form, it is to be gently beaten all over to break the clay, ſo that it may be withdrawn through the opening. When this is done, the whole inſide of the ſkin and head is to ſmeared by a pencil-bruſh with the ſoap-pomatum; after which, it is to be entirely filled with cut tow, and the opening ſtitched up as neatly as poſſible. Then artificial eyes are to be placed in the orbits by means of ſoft wax, and the whole body is to be covered with a coat of white varniſh prepared by digeſting four ounces of clear turpentine, three ounces of ſandarac, and one ounce of maſtic in tears, with eight ounces of oil of turpentine, and four ounces of ſpirit of wine, in a bottle placed in a water-bath.

5. Under the article ENTOMOLOGY, vol. vi. p. 843, 4, we have given ſome directions for preſerving inſects; but thoſe directions were confined chiefly to what is called the *mounting*, or fixing them in a proper poſition, leaving them expoſed to the air till all their moiſture is evaporated. But this, in ſome of the larger inſects, as thoſe of the claſſes coleoptera and hemiptera, would take a conſiderable time; and therefore M. Nicolas recommends a proceſs ſomewhat ſimilar to that which is uſed for the more perfect animals. Each inſect is to be held between the thumb and fore-finger of the left hand, the wings to be raiſed by means of a pin, and held open with the middle finger, while the abdomen of the animal is ſlit open from the back, and the entrails abſtracted by means of an iron wire; the cavity as well as the edges of the wound are to be waſhed with the bitter ſpirituous liquor deſcribed before, by means of a very fine pencil. Then a ſmall cotton plug impregnated with oil of petroleum is to be ſtuffed into the cavity, with the point of a wire, till the cavity is ſufficiently full, when the wings are to be ſuffered to return to their natural ſituation, and the inſect is ready for mounting. For mounting inſects, M. Nicolas employs little ſquares of card, through the middle and acroſs which he paſſes a ſmall iron wire well annealed, and about the ſize of a harpſichord-ſtring. A very fine needle is now to be paſſed through the animal, as near as poſſible to the corſelet; and, after having covered the upright iron wire with a light coating of gum-water, he paſſes it through the hole made by the needle, and fixes the animal in ſuch a manner that its feet may reſt upon the card.

6. As to worms, the only mode of preſerving the molluſca, or thoſe with naked bodies, is to keep them in ſpirits; and of the teſtacea, or ſhell-fiſh, the only part thought worth preſerving is the ſhell; for the preparation of which, ſee CONCHOLOGY, vol. v. p. 36. Crabs, lobſters, ſtar-fiſh, and ſea-urchins, require but little preparation. In crabs the ſhell, and in lobſters the tail, is to be ſeparated from the reſt of the body; as much as poſſible of the meat is to be picked out from the body and large claws; the whole interior is to be ſmeared with the ſoap-pomatum; and, after having united the parts, the whole is to be ſuffered to dry. The ſtar-fiſh and urchins, if taken alive, ſhould be killed by plunging them in ſpirit of wine, and afterwards drying them in the ſun or in an oven moderately heated.

Full inſtructions for collecting and preſerving plants, ſo as to form an herbarium or hortus ſiccus, have been given under the article BOTANY, vol. iii. p. 300 & ſeq.

That the cultivation of an acquaintance with the objects of nature is attended with many and important benefits, is a poſition which needs only to be ſtated to obtain our conviction of its truth. It requires, ſurely, no labour of argument to demonſtrate that an occupation of this deſcription has a direct tendency to rouſe and to gratify the principle of curioſity; that it is eminently calculated to mature and improve our powers of taſte; that it influences the enlargement and melioration of our intellectual powers; that it generates and foſters thoſe diſpoſitions of mental compoſure and ſerenity, which reſult from contemplation and reflection, and which, if not abſolutely virtuous, are at leaſt akin to virtue, and conſpire to its production and maintenance; and that it contributes, more powerfully than the purſuit of any other branch of human knowledge, to ſtimulate and invigorate our ſentiments of piety and religion. The proofs of the exiſtence of a Supreme Cauſe, deduced from abſtract and metaphyſical argumentation, are capable of being apprehended only by a few individuals of leiſure and learning: but the works of creation exhibit, in language intelligible to all, the moſt irrefragable and aſtoniſhing diſplays of power, deſign, wiſdom, and goodneſs. It is impoſſible to examine a blade of graſs, or the loweſt modification of animal exiſtence, without reflecting that the models of their organization, which have remained unaltered for thouſands of years, could never reſult from blind or fortuitous impulſe. The kind proviſions which have been inſtituted for the preſervation of the various ſpecies, with the countleſs inſtances of the wonderful adaptation of means to ends, cannot fail to inſpire us with the conſoling and animating truth, that the Deity exerciſes his paternal protection over all the creatures which he has made, and that not an atom can change its form or aſpect without his permiſſion.

Thus, then, a more rational pleaſure cannot poſſibly occupy the attention or captivate the affections of mankind, than that which ariſes from a due conſideration of the works of Nature. Pleaſure, we know, is a neceſſary ingredient in human life, in order in ſome meaſure to counterbalance the pains, the evils, and the liſtleſſneſſes, which are at times perhaps unavoidable, and in order to render life tolerable. It is the part, then, of the moraliſt, and it has been frequently his buſineſs, to point out and recommend ſuch pleaſures as are highly gratifying, and are yet perfectly innocent. The Spectator, whoſe works will be admired as long as the language in which they are written is underſtood, recommends ſtrongly and elegantly the pleaſure of a garden; and a later writer, of no common degree of merit, and of very conſiderable fame, has an eſſay on the ſame ſubject, from which we ſhall ſelect a few obſervations.

“ Not he alone (ſays this elegant writer) is to be eſteemed a benefactor to mankind, who makes an uſeful diſcovery; but he alſo who can point out and recommend an innocent pleaſure. Of this kind are the pleaſures ariſing from the obſervation of Nature; and they are highly agreeable to every taſte uncorrupted by vicious indulgence.

dulgence. Rural ſcenes of almoſt every kind are delightful to the mind of man. But the misfortune is, that the greater part are hurried on in the career of life with too great rapidity to be able to give attention to that which ſolicits no paſſion. The darkeſt habitation in the dirtieſt ſtreet of the metropolis, where money can be earned, has greater charms with many, than the groves of Hagley. The patron of refined pleaſure, the elegant Epicurus, fixed the ſeat of his enjoyment in a garden. He was of opinion, that a tranquil ſpot, furniſhed with the united ſweets of art and nature, was the beſt adapted to delicate repoſe. And even the ſeverer philoſophers of antiquity were wont to diſcourſe in the ſhade of a ſpreading tree, in ſome cultivated plantation. It is obvious, on intuition, that Nature often intended ſolely to pleaſe the eye in her vegetable productions. She decorates the floweret that ſprings beneath our feet in all the perfections of external beauty. She has clothed the garden with a conſtant ſucceſſion of various hues. Even the leaves of the tree undergo a pleaſing viciſſitude. The freſh verdure which they exhibit in the ſpring, the various ſhades which they aſſume in ſummer, the yellow and ruſſet tinge of autumn, and the nakedneſs of winter, afford a conſtant pleaſure to a lively imagination. From the ſnowdrop to the moſs-roſe, the flower-garden diſplays an infinite variety of ſhape and colour. The taſte of the floriſt has been ridiculed as trifling; yet ſurely without reaſon. Did Nature bring forth the tulip and the lily, the roſe and the honeyſuckle, to be neglected by the haughty pretender to ſuperior reaſon? To omit a ſingle ſocial duty for the cultivation of a polyanthus were ridiculous as well as criminal; but to paſs by the beauties laviſhed before us, without obſerving them, is no leſs ingratitude than ſtupidity. A bad heart finds little amuſement but in a communication with the active world, where ſcope is given for the indulgence of malignant paſſions; but an amiable diſpoſition is commonly known by a taſte for the beauties of the animal and the vegetable creation." *Knox's Eſſays.*

It is difficult to ſay, whether the natural or the moral world affords the moſt conſpicuous and ſtriking diſplays of the wiſdom of God. In proportion as human knowledge has enlarged the ſphere of reſearch and diſcovery, in the ſame proportion has the wiſdom of the Creator ſtruck the minds of all inquirers and obſervers with the higheſt admiration. Thus the greateſt philoſophers have been the moſt devout men. All nature is in truth a ſcene of wonders. In the diſpoſition of the heavenly bodies, and the general arrangement of the ſyſtem of the univerſe; in the ſtructure of the earth, in the endleſs variety of living creatures that fill it, and in the proviſion made for them all to enable them to fulfil the ends of their being, it is not eaſy to determine whether power, wiſdom, or goodneſs, be moſt conſpicuous. It belongs not only to *the heavens* to *declare the glory of God, and* to *the firmament* to *ſhow forth his handy-work*;—but in the ſmalleſt and moſt inconſiderable, as well as in the moſt illuſtrious, of the works of God, equal marks appear of profound deſign and conſummate art. It has been juſtly ſaid, that there is not a vegetable that grows, nor an inſect that moves, but what is ſufficient to confound the atheiſt, and to afford the candid obſerver endleſs materials for devout adoration and praiſe. *Blair,* Sermon 20. vol. iv.

NAT'URAL PHILOS'OPHY is commonly defined to be that branch of knowledge which conſiders the powers and properties of natural bodies, and their mutual actions on one another. The province of moral philoſophy is the mind of man; its inquiries and reſearches are into the intellectual world. Natural philoſophy, on the other hand, is only concerned with the material part of the creation. Indeed, the firſt and principal part of this ſcience is to collect all the manifeſt and ſenſible appearances of things, and reduce them into a body of natural hiſtory. Philoſophy has often been ſaid, and is even now very generally thought, to mean an inquiry into all the cauſes of things; but experience informs us, that, though we are acquainted with a good number of effects, we can trace but few of their cauſes; ſo that philoſophy itſelf will really be found to be in general but a collection of facts. Still, however, it differs from natural hiſtory in its appropriated ſenſe; the buſineſs of which is only to obſerve the appearances of natural bodies ſeparately, and from theſe appearances to claſs them with other bodies; natural philoſophy goes farther, and recites the action of two or more bodies of the ſame or different kinds upon one another; and, though it can neither inveſtigate nor point out the cauſes of thoſe effects, whatever they are, yet, from mathematical reaſoning, combined with experience, it can be demonſtrated that in ſuch circumſtances ſuch effects muſt always take place.

Natural philoſophy was till lately divided only into four parts, commonly called the *four branches*; viz. 1. Mechanics; 2. Hydroſtatics; 3. Optics; and 4. Aſtronomy; and theſe again are ſub-divided into various parts. Modern diſcoveries have added, however, two more parts to the number; viz. 5. Magnetiſm, and 6. Electricity. It is remarkable, that in the Engliſh univerſities theſe two latter branches are never taken notice of in lecturing on natural philoſophy, the old diviſion being ſtill retained, without any mention of theſe two important articles. The reaſon may be, that they are only ſubject to experiment, and not yet reduced to mathematical reaſoning; which is the method of teaching philoſophy in one of thoſe celebrated ſeminaries. Of theſe branches of this extenſive ſcience, it is not our intention to take even a general view in this place. We muſt, therefore, refer our readers to each parcular article, where they will find them treated at conſiderable length.

NAT'URALISM, *ſ.* Mere ſtate of nature.—Lord Bolingbroke died in 1751, and his philoſophical works were publiſhed in 1753. Every one knows the principles and preſumption of that unhappy nobleman. He was of that ſect, which, to avoid a more odious name, chooſes to diſtinguiſh itſelf by that of *naturaliſm*. *Hurd's Life of Warburton.*

NAT'URALIST, *ſ.* A ſtudent in phyſics or natural philoſophy.—Admirable artifice! wherewith Galen, though a mere *naturaliſt*, was ſo taken, that he could not but adjudge the honour of a hymn to the wiſe Creator. *More.*—It is not credible that the *naturaliſt* could be deceived in his account of a place that lay in the neighbourhood of Rome. *Addiſon on Italy.*

NATURAL'ITY, *ſ.* Naturalneſs. Not in uſe.—This diſtinction will be found of moſt general uſe, foraſmuch as there is ſuch an intricate mixture of *naturality* and preter-naturality in age. *Smith on Old Age,* 1666.

NATURALIZA'TION, *ſ.* [from *naturalize*.] The act of inveſting aliens with the privileges of native ſubjects.—The Spartans were nice in point of *naturalization;* whereby, while they kept their compaſs, they ſtood firm; but, when they did ſpread, they became a windfal. *Bacon.*—Encouragement may be given to any merchants that ſhall come over and turn a certain ſtock of their own, as *naturalization*, and freedom from cuſtoms the two firſt years. *Temple.*

In France, before the revolution, the Swiſs, Savoyards, and Scots, needed not any naturalization; being reputed *regnicoles*, or natives. As for other foreigners, the king might naturalize them by his prerogative; but in England this is only to be done by act of parliament. But none can be naturalized unleſs they have received the ſacrament within one month before the bringing in of the bill, and taken the oaths of allegiance and ſupremacy in the preſence of the parliament. A perſon who is naturalized may have lands by deſcent as heir-at-law, as well as obtain them by purchaſe; but he is diſabled from being a member of the privy-council or parliament, or from holding offices. 7 *Jac.* I. c. 2. 12 *Will.* III. c. 2. All children born out of the king's dominions, whoſe fathers were or are ſubjects of this kingdom at the time of their birth, are adjudged to be natural-born ſubjects of this realm, except children of parents attainted of treaſon, or that are in the actual ſervice of a foreign prince at enmity with us. 4 *Geo.* II. c. 21. See Alien. Every foreign ſeaman, who in time of war ſerves two years on-board an Engliſh ſhip, is *ipſo facto* naturalized. 13 *Geo.* III. c. 3. And all foreign Proteſtants and Jews, upon their reſiding ſeven years in any of the Britiſh colonies, without being abſent above two months at a time, or ſerving two years in a military capacity there, are, upon taking the oaths, naturalized to all intents and purpoſes, as if they had been born in this kingdom; and therefore are admiſſible to all ſuch privileges, and no other, as Proteſtants or Jews born in this kingdom are entitled to.

When it was propoſed in May laſt (1818), to revive the alien-bill, it was diſcovered, (for the knowledge of it ſeems to have been for many years totally loſt,) that, by an act of the Scotch parliament in 1695, confirmed at the Scottiſh union, and by ſeveral acts ſince, every foreigner, who purchaſed 100l. ſtock in the Bank of Scotland, became to all intents and purpoſes *naturalized.* Such an act, though conſidered as obſolete, might become the means of defeating any alien-bill that could be paſſed in the united kingdom; it ſhould, therefore, have been long ſince repealed, though it was originally framed with a very good intent; namely, that of encouraging foreigners to ſettle among us, and to inveſt their money in a bank which the Scotch themſelves were too poor to make effective. Miniſters were puzzled by the diſcovery; but, as it had been previouſly determined to prorogue and diſſolve the parliament immediately, there was not time for the total repeal of the act; a clauſe was therefore added to the alien-bill for "ſuſpending its effects till a certain time after the meeting of the enſuing parliament," when no doubt it will be repealed.

To NAT'URALIZE, *v. a.* [*naturalizer,* Fr.] To adopt into a community; to inveſt with the privileges of native ſubjects.—The lords informed the king, that the Iriſh might not be *naturalized* without damage to themſelves or the crown. *Davies.* To make natural; to make eaſy like things natural.—He riſes freſh to his hammer and anvil; cuſtom has *naturalized* his labour to him. *South.*

NAT'URALLY, *adv.* According to the power or impulſes of unaſſiſted nature.—Our ſovereign good is deſired *naturally;* God, the author of that natural deſire, hath appointed natural means whereby to fulfil it; but man, having utterly diſabled his nature unto theſe means, hath had other revealed, and hath received from heaven a law to teach him how that which is deſired *naturally* muſt now ſupernaturally be attained. *Hooker.*—If ſenſe be not certain in the reports it makes of things to the mind, there can be *naturally* no ſuch thing as certainty of knowledge. *South.*—According to nature; without affectation; with juſt repreſentation.—The thoughts are to be meaſured only by their propriety; that is, as they flow more or leſs *naturally* from the perſons and occaſions. *Dryden.*

Theſe things ſo in my ſong, I *naturally* may ſhow;
Now as the mountain high; then as the valley low;
Here fruitful as the mead; there, as the heath be bare;
Then, as the gloomy wood, I may be rough, though rare.
Drayton.

Spontaneouſly; without art; without cultivation: as, There is no place where wheat *naturally* grows.

NAT'URALNESS, *ſ.* The ſtate of being given or produced by nature.—The *naturalneſs* of a deſire is the cauſe that the ſatisfaction of it is pleaſure, and pleaſure importunes the will; and that which importunes the will, puts a difficulty on the will refuſing or forbearing it. *South.*—Conformity to truth and reality; not affectation.—Horace ſpeaks of theſe parts in an ode that may be reckoned among the fineſt for the *naturalneſs* of the thought, and the beauty of the expreſſion. *Addiſon.*

NA'TURE, *ſ.* [Fr. from *natura,* Lat.] An imaginary being ſuppoſed to preſide over the material and animal world.—When it was ſaid to Anaxagoras, The Athenians have condemned you to die; he ſaid, And *nature* them. *Bacon.*

Thou, *nature,* art my goddeſs; to thy law
My ſervices are bound. *Shakeſpeare's K. Lear.*

The native ſtate or properties of any thing, by which it is diſcriminated from others.—The *nature* of brutes, beſides what is common to them with plants, doth conſiſt in having ſuch faculties, whereby they are capable of apprehending external objects, and of receiving pain or pleaſure from them. *Wilkins.*

Why leap'd the hills, why did the mountains ſhake;
What ail'd them their fix'd *natures* to forſake? *Cowley.*

The conſtitution of an animated body:

Nature, as it grows again tow'rd earth,
Is faſhion'd for the journey, dull and heavy. *Shakeſpeare.*

We're not ourſelves,
When *nature,* being oppreſs'd, commands the mind
To ſuffer with the body. *Shakeſpeare's K. Lear.*

Diſpoſition of mind; temper:

Nothing could have ſubdued *nature*
To ſuch a lowneſs, but his unkind daughters. *Shakeſpeare.*

The regular courſe of things:

My end
Was wrought by *nature,* not by vile offence. *Shakeſpeare.*

The compaſs of natural exiſtence.—If their dam may be judge, the young apes are the moſt beautiful things in *nature. Glanville.*—The conſtitution and appearances of things.—The works, whether of poets, painters, moraliſts, or hiſtorians, which are built upon general *nature,* live for ever; while thoſe which depend for their exiſtence on particular cuſtoms and habits, a partial view of nature, or the fluctuation of faſhion, can only be co-eval with that which firſt raiſed them from obſcurity. *Reynolds.*—Natural affection, or reverence; native ſenſations:

Have we not ſeen
The murdering ſon aſcend his parent's bed,
Through violated *nature* force his way,
And ſtain the ſacred womb where once he lay! *Pope.*

The ſtate or operation of the material world:

He, binding *nature* faſt in fate,
Left free the human will. *Pope.*

Sort; ſpecies.—A diſpute of this *nature* cauſed miſchief in abundance betwixt a king and an archbiſhop. *Dryden.*—Sentiments or images adapted to nature, or conformable to truth and reality.—Only *nature* can pleaſe thoſe taſtes which are unprejudiced and refined. *Addiſon.*—*Nature* and Homer were, he found, the ſame. *Pope.*—Phyſics; the ſcience which teaches the qualities of things:

Nature and *nature's* laws lay hid in night,
God ſaid, Let Newton be, and all was light. *Pope.*

Of this word which occurs ſo frequently, with ſignifications ſo various, and ſo difficultly defined, Boyle has given an explication, which Dr. Johnſon has epitomiſed as follows:

Nature ſometimes means the Author of Nature, or *Natura Naturans;* as, *Nature* hath made man partly corporeal and partly immaterial. For *Nature* in this ſenſe may be uſed the word *Creator.*

Nature ſometimes means that on whoſe account a thing is what it is, and is called; as when we define the nature of an angle. For *nature* in this ſenſe may be uſed *eſſence,* or *quality.*

Nature ſometimes means what belongs to a living creature at its nativity, or accrues to it by its birth, as when we ſay, a man is noble by *nature,* or a child is *naturally* forward.

ward. This may be expreſſed by ſaying, The man was born ſo; or, The thing was generated ſuch.

Nature ſometimes means an internal principle of local motion, as we ſay, The ſtone falls, or the flame riſes, by *nature;* for this we may ſay, that "the motion up or down is ſpontaneous, or produced by its proper cauſe."

Nature ſometimes means the eſtabliſhed courſe of things corporeal; as *Nature* makes the night ſucceed the day. This may be termed *eſtabliſhed order*, or *ſettled courſe.*

Nature means ſometimes the aggregate of the powers belonging to a body, eſpecially a living one; as when phyſicians ſay, that *Nature* is ſtrong, or *Nature* left to herſelf will do the cure. For this may be uſed, *conſtitution, temperament,* or *ſtructure of the body.*

Nature is put likewiſe for the ſyſtem of the corporeal works of God; as, There is no phœnix or chimera in *nature.* For *nature,* thus applied, we may uſe *the world,* or *the univerſe.*

Nature is ſometimes indeed commonly taken for a kind of ſemi-deity. In this ſenſe it is beſt not to uſe it at all. *Boyle's Free Enq. into the Received Notion of Nature.*

Father Malebranche ſays, that the Nature, ſo much talked of in the ſchools, is fit for nothing but to lead us back to idolatry; the ancient heathens hereby underſtanding ſomething, which, without being God, acts continually throughout the univerſe. Thus the idol Nature muſt be an actual principle, which, in concurrence with God, is the next and immediate cauſe of all the changes which befal matter. This ſeems to fall in with the opinion of the *anima mundi;* as if Nature were a ſubſtitute of God, or a collateral cauſe with God, or a middle being between God and created things.

NA'TURE, in mythology, is uſed by the poets ſometimes for the mother, ſometimes for the daughter, and at other times for the companion, of Jupiter. She is deſcribed by the ſymbols of the Diana of Epheſus.

NA'TURE, Laws of, are axioms, or general rules, of motion and reſt, obſerved by natural bodies in their action on one another, and in all the changes which befal them in their natural ſtate. The laws of nature, and of motion, are, in effect, the ſame; for which ſee the article MECHANICS, vol. xiv. p. 626, 7. but ſome new laws have lately been propoſed, as to which ſee MOTION, p. 108 & ſeq. of the preſent volume.

To NA'TURE, *v. a.* To endow with natural qualities. —We have long ceaſed to uſe the verb, but we retain the participle in good-*natured,* ill-*natured,* and other compounds. *Johnſon.*

He whiche *natureth* every kynde,
The myghty God, ſo as I fynde,
Of man, whiche is his creature,
Hath ſo devyded the nature. *Gower's Conf. Am.*

NA'TURED, *adj.* [from *nature,* chiefly uſed in compoſition.] Conditioned; diſpoſed by nature; as, good-natured, ill-natured. *Aſh.*

NATU'RITY, *ſ.* The ſtate of being produced by nature.—This cannot be allowed, except we impute that unto the firſt cauſe which we impoſe not on the ſecond; or what we deny unto nature we impute unto *naturity.* *Brown.*

NA'VA, in ancient geography, a river of Belgica, which runs north-eaſt into the left or weſt ſide of the Rhine. Now the NAHE, which ſee.

NA'VA, a town of Italy, in the department of the Mela: five miles north of Breſcia.

NA'VA, a town of Spain, in the province of Leon: twenty-two miles ſouth-weſt of Valladolid.

NAVA'CE (La), a ſmall iſland in the Weſt-Indies, between Jamaica and Hiſpaniola. Lat. 18. 23. N. lon. 74. 50. W.

NAVACEL'LE, a town of France, in the department of the Gard: thirteen miles north-weſt of Uzes.

NAVACOT'TA, a town of Lamjungh: 150 miles north of Fyzabad. Lat. 28. 56. N. lon. 83. 36 E.

NAVÆ'US (Joſeph), a celebrated catholic divine of the dioceſe of Liege, was born in the year 1651, at the village of Vieſme in Heſbaye, within the dioceſe of Liege. He purſued his academical ſtudies at the univerſity of Louvain, where he diſtinguiſhed himſelf by his exerciſes while paſſing through his courſes of philoſophy and divinity, and obtained the character of being one of the fineſt geniuſes and beſt divines in the Low Countries; at the ſame time that he rendered himſelf reſpected and beloved by all who knew him, for his piety, exemplary moral conduct, and amiable manners. He was made profeſſor of poetry in the college of the Trinity at Louvain, and retained that ſituation till he took the degree of licentiate in divinity. He undertook to confute the ſentiments advanced by the ſieur du Bois, who filled the chair of public lecturer on the ſacred Scriptures in the univerſity of Louvain; and the pieces which he produced in this controverſy were afterwards collected together in a volume, under the title of "Recimations," which is held in much eſteem. Afterwards he accepted of an invitation to become profeſſor of philoſophy at Liege, and diſcharged the duties of that office during ſeveral years with very high reputation. He became involved in controverſies with the Jeſuits, on account of the efforts which they made to introduce themſelves into the profeſſorſhips in the ſeminary at Liege; and alſo in defence of M. Dennis, profeſſor of divinity at Liege, and other leading men in the Janſeniſt party, whom they accuſed of heterodoxy. In Moreri the reader may find the titles of the principal works of our author, which theſe controverſies occaſioned. About the year 1701, the infirm ſtate of his health obliging him to reſign the philoſophical chair, he was made canon of the collegiate church of St. Paul at Liege, where he punctually officiated as long as his infirmities permitted him. He is alſo deſerving of being commemorated among the friends of humanity, for the very active part which he took in forming the regulations of the Hoſpital of Incurables at Liege, and in founding the Houſe for penitent Proſtitutes. Towards the end of his days, finding that he was no longer able perſonally to diſcharge the duties of his canonry, he reſigned that preferment, and devoted the remainder of his ſtrength and fortune to the private inſtruction and conſolation of the poor. He died at Liege in 1705, at the age of fifty-four. He was the author of ſeveral pious treatiſes; of which that moſt known is entitled, "The Foundation of the Chriſtian Life, &c."

NAVÆ'US (Matthias), another catholic divine of the dioceſe of Liege in the ſame century, concerning the time and place of whoſe birth we have no information. He became a member of the univerſity of Douay, where he took the degree of doctor of divinity, and was made paſtor of the church of St. Peter in that city. Afterwards he was promoted to a canonry of Seclin, and finally to the ſame dignity in the cathedral church of Tournay. He had been appointed to the office of cenſor of books, for which he is ſaid to have been well qualified by the ſolidity of his judgment, the quickneſs of his penetration, and the ample ſtores of learning with which he had furniſhed his mind in the courſe of a ſtudious life. He died about the middle of the ſeventeenth century. He was the author of ſeveral works which are held in eſteem, among which are, 1. Catecheſis, ſive de Sacramentorum Inſtitutione, Confeſſione Sacramentali, extrema Unctione, et Matrimonio, Conciones Sexdecim, 1633, 8vo. 2. Prælibatio Theologicæ et Sacræ Scripturæ præcipuas Difficultates, &c. 1640, 4to. 3. Tri-Octava Sermonum de Venerabili Sacramento et Sacrificio, 1645, 8vo. and other pieces, of which the titles may be ſeen in *Valerii Andreæ Bibl. Belg.*

NAVAGE'RO (Andrea), an eminent Italian poet and orator, was born at Venice, of a patrician family, in 1483. He received his firſt inſtructions from Antonio

Sabellico, and from an early age diſplayed extraordinary powers of memory, and a happy diſpoſition for literary purſuits. He then repaired to Padua, where he ſtudied Greek with great aſſiduity under Muſuro, and philoſophy under Pomponazzi. In that univerſity he formed connexions of friendſhip with Bembo, Contarini, Fracaſtoro, Ramuſio, the Torriani, and other diſtinguiſhed perſons, which continued unbroken during his life. After paſſing ſome time at Pordanone, where the celebrated general Alviano had founded a literary academy, he returned to Venice, and became a zealous ſupporter of the learned labours of Aldo Manuzio, whom he aſſiſted in the collection and examination of manuſcripts, for the purpoſe of giving correct editions of the ancient writers. His reputation for eloquence cauſed him to be choſen by the republic to recite the funeral orations of Alviano, the doge Loredano, and Catharina Cornara, queen of Cyprus. He was afterwards appointed keeper of the library of cardinal Beſſarion, and hiſtoriographer to the ſtate. He was ſent to Spain on an embaſſy in the ſpring of 1525. He remained in that country till January 1528, when he was ſent to France on an embaſſy. He reached Blois, where he was attacked with a fever, which carried him off in May 1529, at the age of forty-ſix, to the deep regret of all who knew him.

As a writer, Navagero holds a place rather among the moſt poliſhed than the moſt conſiderable of his time. In Latin poetry he was diſtinguiſhed by elegance, grace, and a kind of Grecian ſimplicity that denoted great purity of taſte. To this ſimplicity he was attached to a degree that perhaps deſerves the name of pedantic; for he not only ſacrificed to it ſeveral of his own juvenile productions, but was accuſtomed annually to commit to the flames a copy of the epigrams of Martial, whom he regarded as the great corrupter of that ſpecies of compoſition as it exiſted in Grecian models. His funeral orations are rather elegant and methodical diſcourſes than ſtriking pieces of eloquence. His hiſtorical powers are unknown, as he committed to the flames the little he had compoſed on the Venetian hiſtory. In Italian poetry he diſplayed the elegance and purity which characterized him, but without attaining excellence. Some letters, which he wrote from Spain to Ramuſio, exhibit him as a minute obſerver of every thing curious preſented by a foreign country, and as a learned antiquary and geographer. In the year after his death, a publication appeared of his funeral orations for Alviano and Loredano, and his Latin poems. Theſe were his only memorials, till the brothers Volpi, in 1718, publiſhed, at the Cominian preſs in Padua, a quarto volume, containing, together with the above-mentioned pieces, all the works of Navagero that could be collected. A life of the author was prefixed by Gianantonio Volpi. *Roſcoe's Leo X.*

NAVAGE'RO (Bernard), an eminent Italian prelate and cardinal, was of the ſame family with the preceding, and born at Venice in the year 1507. He poſſeſſed excellent natural abilities, which he cultivated by a diligent application to his ſtudies, and made a conſiderable progreſs in literature. He was alſo diſtinguiſhed by his talents for buſineſs and his powers of eloquence. Theſe qualifications pointed him out as a fit perſon to fill ſome of the moſt important ſtations in the ſervice of the republic. Accordingly, he was ſent ſyndic to Dalmatia; appointed baily at Conſtantinople; and afterwards nominated ambaſſador to Rome, to France, and to the court of the emperor. He was highly eſteemed by Andrew Gritti, doge of Venice, and married the grand-daughter of Lando, the ſucceſſor of Gritti in that dignity. Having the misfortune to loſe his wife when ſhe was very young, he gave up all thoughts of a ſecond marriage, and made his books his favourite companions. His life was exceedingly ſolitary; for he ſcarcely quitted his ſtudy, unleſs when called upon to render ſervice to his country. In 1561, pope Pius V. created him a member of the Sacred College, and promoted him to the biſhopric of Verona. Afterwards that pontiff ſent him in the capacity of his legate to Trent, where he was preſent at the termination of that famous council. He then retired to his dioceſe, where he was occupied in the diligent diſcharge of the paſtoral functions till his death, which took place in 1565, when he was fifty-eight years of age. He was the author of, 1. Harangues. 2. The Life of Pope Paul IV. *Gen. Biog.*

NAVAL', a town of Spain, in Arragon: eight miles ſouth of Ainſa.

NA'VAL, *adj.* [Fr. from *navalis*, Lat.] Conſiſting of ſhips:

Encamping on the main,
Our *naval* army had beſieged Spain;
They, that the whole world's monarchy deſign'd,
Are to their ports by our bold fleet confin'd. *Waller.*

As our high veſſels paſs their watery way,
Let all the *naval* world due homage pay. *Prior.*

Belonging to ſhips.—Maſters of ſuch numbers of ſtrong and valiant men, as well as of all the *naval* ſtores that furniſh the world. *Temple.*

NA'VAL AR'CHITECTURE. See SHIP-BUILDING.

NAVALCARNE'RO, a town of Spain in Old Caſtile: forty-two miles ſouth of Segovia.

NAVA'LIA, *ſ.* among the Romans, were docks or ports where ſhips uſed to be laid up after building. Likewiſe the wharfs or quays at Rome, where the ſhips uſed to load and unload their goods; all which were near the Sublician bridge.

NAVALPE'RA, a town of Hindooſtan, in Baglana: forty-five miles eaſt of Baſſeen.

NA'VALS, *ſ. pl.* Uſed by Clarendon for naval affairs; perhaps by no other writer.—It was a day of ſignal triumph, the action of it having much ſurpaſſed all that was done in Cromwell's time, whoſe *navals* were much greater than had ever been in any age. *Clarendon's Life.*

NAVAMORQUEN'DA, a town of Spain in Old Caſtile: thirty-ſeven miles ſouth of Avila.

NAVAN', a poſt-town of Ireland, in the county of Meath, ſituated on the river Boyne. Navan was an ancient palatinate, and in former ages was high in repute. It is beautifully ſituated, but very ill built: it has, however, been rapidly increaſing in wealth and extent; and is much ſerved by the Boyne having been rendered navigable to it. It population was, many years ago, eſtimated at 4000, and muſt have conſiderably increaſed: it is, according to Mr. Wakefield, chiefly Roman-catholic. The manufacture of ſacking employs near 300 looms; here are likewiſe very extenſive flour, cotton, and paper, mills, a brewery, a diſtillery, with other manufactures incident to the ſituation and trade of the place. A good cattle-fair is held four times in the year; and there is alſo a weekly market, which ſtands unrivalled in the county for live-ſtock, bacon, hogs, butter, and every variety of rural produce; beſides coarſe linen, friezes, and yarn. Mr. Wakefield ſpeaks of the wheat in this neighbourhood as excellent, but condemns the exhauſting ſyſtem that is purſued. The commons of Navan are very large, and very badly regulated, ſo that they are a public nuiſance, by affording ſupport to a number of unprincipled vagabonds. Navan has another nuiſance, now, however, in a fair way of being removed by the legiſlature: a ſchoolmaſter enjoying a large revenue, without making any return. The lands of the endowed ſchool of this place are ſaid to let for near 1500l. a-year, which income was converted into a ſinecure; but, the commiſſioners appointed to inveſtigate the ſtate of public ſchools in Ireland, on the motion of ſir John Newport, bart. having expoſed this and many ſimilar abuſes, meaſures have been taken to render the ſchools effective and uſeful. Here was formerly an abbey of regular canons, on the ſite of which horſe-barracks are now erected. Before the union it ſent two members to the Iriſh parliament: ſeven miles north-eaſt of Trim, and twenty-three north-weſt of Dublin. Lat. 53. 38. N. lon. 6. 41. W.

NAVAPOU'R, a town of Hindooſtan, in Canara: fifteen miles ſouth-eaſt of Barcelore.

NA'VARCHY, *ſ.* [*navarchus*, Lat. captain of a ſhip.] Knowledge of managing ſhips.—*Navarchy*, and making models for buildings and riggings of ſhips. *Sir W. Petty's Adv. to Hartlib.* 1648.

NAVARDUN', a town of Spain, in Arragon: twenty-ſeven miles weſt of Jaca.

NAVAREDON'DA, a town of Spain, in the province of Leon: fifty miles eaſt-ſouth-eaſt of Civdad Rodrigo.

NAVAREDON'DA, a town of Spain, in the province of Leon: twenty-one miles eaſt of Civdad Rodrigo.

NAVARET'TA, a town of Spain, in Old Caſtile, ſituated on a mountain: nine miles weſt of Logrogno.

NAVARET'TE (Fernandez), a diſtinguiſhed miſſionary of the order of St. Dominic, was born at Pennafiel in Old Caſtile. He had already occupied ſeveral poſts in his order, when, in 1646, he left Spain for the purpoſe of preaching the Chriſtian faith in China. He was long detained in America, and did not arrive at the Philippine Iſlands till 1648. He was appointed a profeſſor of theology in Manilla, and employed himſelf in making proſelytes in thoſe iſlands and at Macaſſar, and at length reached China in 1659. He applied with ſo much aſſiduity to the language, that he ſoon became able to ſpeak and write it with facility. He was chief of the miſſion in the province of Che-kiang in 1665, when a perſecution was excited in conſequence of the Ephemerides of father Adam, a Jeſuit, and the miſſionaries had orders all to repair to Pekin, whence they were ſent to Canton, with permiſſion to leave the empire. Of this Navarette did not immediately avail himſelf; and it was not till 1672 that he arrived at Madrid. He ſoon after went to Rome, where he gave an account of his miſſion, which did him ſo much honour, that he had the offer of returning thither with the epiſcopal dignity. This he declined, and in 1678 was conſecrated archbiſhop of St. Domingo, in the poſſeſſion of which ſee, which he governed with much prudence, he died in 1689. This miſſionary wrote a detailed account of his Travels, and particularly of what he obſerved in China, in three volumes, of which the firſt appeared at Madrid 1676, folio, in Spaniſh. It is eſteemed one of the moſt faithful and curious accounts of that country, though marked with the prejudices and narrow views of his profeſſion. It is given in an Engliſh tranſlation in Churchill's Collection. The printing of the ſecond volume was far advanced, when Don John of Auſtria, Navarette's protector, died, which gave the Inquiſition power to ſuppreſs it. The freedom with which he ſpoke of the conteſts between the Jeſuits and the other orders in China was probably the cauſe of its ſuppreſſion. It has, however, been often quoted by the Jeſuit writers, who, doubtleſs, obtained a copy. It is not known what became of the MS. of the third volume.

NAVARIN', a ſea-port town on the weſt coaſt of the Morea, ſituated on the gulf of Zonchio. The harbour is large, and the moſt frequented in the Morea: it is fortified, and defended with a citadel: ſeventy-two miles ſouth-weſt of Argos, and eighty-eight ſouth-weſt of Corinth. Lat. 37. 5. N. lon. 21. 25. E.

NAVAR'RE, a province of Spain, and anciently a kingdom; bounded on the north-eaſt by France, on the eaſt by Arragon, on the ſouth by Old Caſtile, and on the weſt by Guipuſcoa and Alava. The form is that of a lozenge. Its extent from north-eaſt to ſouth-weſt about fifty-four miles, and from north-weſt to ſouth-eaſt about forty-five. The climate is as pure and healthy, and withal as temperate and as pleaſant, as can be deſired, which may compenſate for ſome defects in the ſoil; that, generally ſpeaking, is none of the moſt fertile. In ſome of the valleys, however, they have very good corn, excellent wine, both white and red; the former equal to any in France, the latter very little inferior to Burgundy. It abounds in good paſtures, exceedingly well ſtocked with ſheep and goats. They have likewiſe tolerable black cattle, and a very good breed of horſes. The mountains are covered with timber; and very few countries have veniſon and wild fowl in greater plenty. It can ſcarcely boaſt of any great river, except the Ebro; and this ſerves only for its frontier. The north-eaſt ſide is bounded by the Pyrenean mountains, through which there are ten paſſes into France, ſeven or eight of which are difficult and dangerous. The valley of Roncevaux lies to the north-eaſt of Pampeluna, and leads, through a village called Burguet, which is the laſt in Navarre, to St. Jean Pié de Port, in France: this is the eaſieſt and moſt frequented paſs, and is famous for the defeat of the emperor Charlemagne. The king of Spain receives no revenue from this country, all the impoſts and duties being by compact to be employed in the public ſervice. Navarre, from the year 718 to 1512, had its peculiar kings, of different families: but in the laſt-mentioned year was reduced by king Ferdinand the Catholic, under the frivolous pretence, that John d'Albert its king, as ally of Louis XII. of France, with whom pope Julius II. was at variance, had been declared an enemy to the church, and excommunicated by that pope. This province is divided into five *merindades*, or juriſdictions. Pampeluna is the capital.

Navarre was formerly very populous, but towards the end of the 16th century there was a conſiderable emigration of its inhabitants, who removed into the province of France which took its name. According to the enumeration of the years 1787 and 1788, the number of inhabitants ought to be now 287,382; in which number are reckoned 753 pariſh prieſts, 1166 ſecular prieſts, 1120 monks, 510 nuns, 13,054 nobles, 172 writers, 1163 ſtudents, and 9910 ſervants. The manufactures of Navarre have never been conſiderable. Of brandy there are ſome diſtilleries at Eſtella, Fuente de la Reyna, and Sangueſa. Cloth-manufactories are not ſo frequently met with in Tudela as in other towns. At Tudela there are ſix ſoap-manufactories, and others of tiles, bricks, and pottery. Eſtella has ſome looms of coarſe woollens. One league from Eguy there is a manufactory of caſt-iron bombs and balls, on the king's account; and the town of Corella, containing about 4000 inhabitants, has a manufacture of liquorice-juice, which is extracted from the wood of this tree, of which they make a ſubſtance: this is exported in great quantities to the north of Europe, and is called with us *Spaniſh liquorice*. The commerce of Navarre is entirely confined to imports. Of late the roads, which were formerly impediments to trade, have been improved; and the rivers Ebro and Bidazao afford an eaſy communication, of which the inhabitants might avail themſelves as an incentive to induſtry and activity. Iron-mines in this province are rather abundant. Near Pampeluna there is a copper-mine, which was worked about the middle of the eighteenth century. On the ground near Valtierra is a mine of white rock-ſalt, which is very abundant, in layers of gypſum: the interior of this mine reſembles an ancient church in the Gothic ſtyle. The mountains ſupply plenty of game, hares, roebucks, foxes, wolves, wild boars, &c. This province has various mineral waters. The language of Navarre is the Caſtilian, altered by a mixture of Biſcayan, Catalan, and French.

Navarre has ſtill preſerved the ancient form of its government and conſtitution, though we have heard of ſome late encroachments ſince the return of Ferdinand the Beloved. It is governed by a viceroy. The courts, in their form, powers, and legal proceedings, differ entirely from thoſe of Spain. It is not only governed by its ancient laws, civil and criminal, but has preſerved its own ſtates, compoſed of the three orders, the clergy, the nobility, and the deputations of towns. The ancient money has alſo been preſerved, viz. the cornado (half a maravedi), the ocharo (two maravedis), and the gros (ſix maravedis), which are fractions of pence; the tarja, or eight maravedis; 4$\frac{2}{7}$ tarjas are equal one real of vellon, or 2$\frac{1}{2}$d.

Navarre alſo maintains the privilege of receiving the greater part of foreign merchandiſe without ſearch or duty; nor is it ſubject to the cuſtoms, except when they leave Navarre for Old Caſtile; the firſt cuſtom-houſe is at Agreda. *Laborde's View of Spain*, vol. ii.

NAVAR'RE (Lower). This country was originally one of the ſix provinces which formerly compoſed the kingdom of Navarre, and by the Spaniards was called *Merindada de Ultra Puertos*, it being to them beyond the Pyrenees, and the road which leads over them, in their language called *Puertos*, i. e. Gates. Ferdinand, king of Arragon and Caſtile, having, in 1512, poſſeſſed himſelf of the kingdom of Navarre, all that Catharine the lawful heireſs, and her huſband John d'Albert, could procure to be reſtored to them, was this little ſpot. John their ſon had no better ſucceſs, his ſovereignty being confined to this ſcanty remnant of Navarre, though with the title of a kingdom. Johanna, his daughter by his ſpouſe Margaret, in 1548 was married to Anthony of Bourbon, to whom ſhe brought the above-mentioned remnant as a dowry. Their ſon Henry IV. arrived to be king of France, and his ſon Louis XIII. in 1630, annexed Lower Navarre and Bearn to the crown of France. St. Jean Pié de Port was the capital. It now forms the department of the Lower Pyrenees.

NAVAR'RE (New), a province of New Mexico, bounded on the north by a country unknown, on the eaſt by New Mexico Proper and New Biſcay, on the ſouth by Culiacan, and on the weſt by the gulf of California. This country was conquered by the Spaniards in the year 1552. The inhabitants conſiſted of divers tribes of Indians. St. Juan Cinaloa is the chief Spaniſh town.

NAVAR'RE (Peter), a celebrated warrior in the ſixteenth century, was born in Biſcay. He was brought up to the ſea-ſervice, but after a time engaged himſelf as valet to the cardinal Arragon, and then ſerved in the army of the Florentines. He was next employed by Gonſalvo de Cordova in the Neapolitan wars as captain; and he contributed very much to the capture of Naples. On account of his good conduct, the emperor gave him large domains in Naples, and the title of Count of Navarre. He afterwards ſailed againſt the Moors in Africa, and took poſſeſſion of Oran, Tripoli, and other places. His campaigns in Italy after this were unfortunate, and he was taken at the battle of Ravenna in 1512. Upon his liberation, thinking himſelf ill-treated by the Spaniſh king, he determined to enter into the ſervice of Francis I. In his attempt to relieve Genoa, he was taken by the imperial troops; and, for the ſpace of three years, languiſhed in the dungeons of the Caſtel del Ovo, till the treaty of Madrid ſet him free. He was again taken priſoner at the retreat of Averſa, and ſent to the ſame priſon. Here his life was ſpared by the duke of Orange, in compaſſion for his misfortunes and his valour. He died ſoon after, though it was aſſerted that he was ſtrangled in his bed.

NAVAR'RE (Martin), ſurnamed *Azpilcucta*, becauſe he was born in the kingdom which bears that name, an eminent Spaniſh lawyer, ſucceſſively profeſſor of juriſprudence at Toulouſe, Salamanca, and Coimbra, was conſulted from all quarters as the oracle of law. For a part of his knowledge he was indebted to the ſchools of Cahors and Toulouſe, in which he had ſtudied. His friend Barthelemi Carewza, a Dominican, and archbiſhop of Toledo, having been charged with hereſy by the court of inquiſition at Rome, Navarre ſet out at the age of 80 years to defend him. Pius V. appointed him aſſeſſor to cardinal Francis Alciat, vice-penitentiary. Gregory XIII. never paſſed his gate without ſending for him; and ſometimes would converſe with him for an hour together in the ſtreet: he even deigned to viſit him, accompanied by ſeveral cardinals. Theſe honours did not render him more haughty. His character became ſo eminent, that even in his own time the greateſt encomium that could be paid to a man of learning was, to ſay that he was a *Navarre*: this name thus included the idea of erudition, as that of Roſcius formerly marked an accompliſhed comedian. Azpilcucta was the oracle of the city of Rome, and of the whole Chriſtian world. For the influence which he had acquired, he was indebted not only to his knowledge, but alſo to his probity and virtue. Faithful to the duties which the church preſcribed, his temperance and frugality preſerved to him a vigorous conſtitution; and at a very advanced age his genius was equal to the ſevereſt ſtudy. His ſavings enabled him to give liberal aſſiſtance to the poor. His charities, indeed, were ſo great, that his mule, it is ſaid, would ſtop as ſoon as ſhe perceived a beggar. He died at Rome, in 1586, at the age of ninety-two. His works were collected and printed in ſix vols. folio at Lyons in 1597, and at Venice in 1602. They diſplay more learning than judgment; and are now very ſeldom conſulted. Navarre was uncle by the mother's ſide to St. Francis of Sales.

NAVARREI'NS, a town of France, in the department of the Lower Pyrenees: ten miles north-weſt of Oléron, eighteen weſt of Pau.

NAVARU', a town of Hindooſtan, in Viſiapour: ſixteen miles eaſt-north-eaſt of Viſiapour.

NA'VAS DEL MAR'QUES, a town of Spain, in New Caſtile: fifteen miles weſt of Eſcurial.

NA'VAS DE TOLO'SA, a village of Spain, in the province of La Mancha, ſo called from a defile in the neighbouring mountains; where, in the year 1212, Alphonſo IX. king of Caſtile, Peter II. of Arragon, and Sancho VII. of Navarre, with their joint forces, attacked and cut to pieces the army of Mahomet, king of Morocco.

NAVA'SIA, a ſmall iſland in the windward paſſage, between Hiſpaniola and Cuba.

NAVAS'QUE, a town of Spain, in Navarre, : twenty-two miles ſouth-eaſt of Pampeluna.

NAVATI'R, a town of Arabia Petræa: eighteen miles eaſt-ſouth-eaſt of Adjerud.

NAVAZ'ZA. See Navace, p. 605.

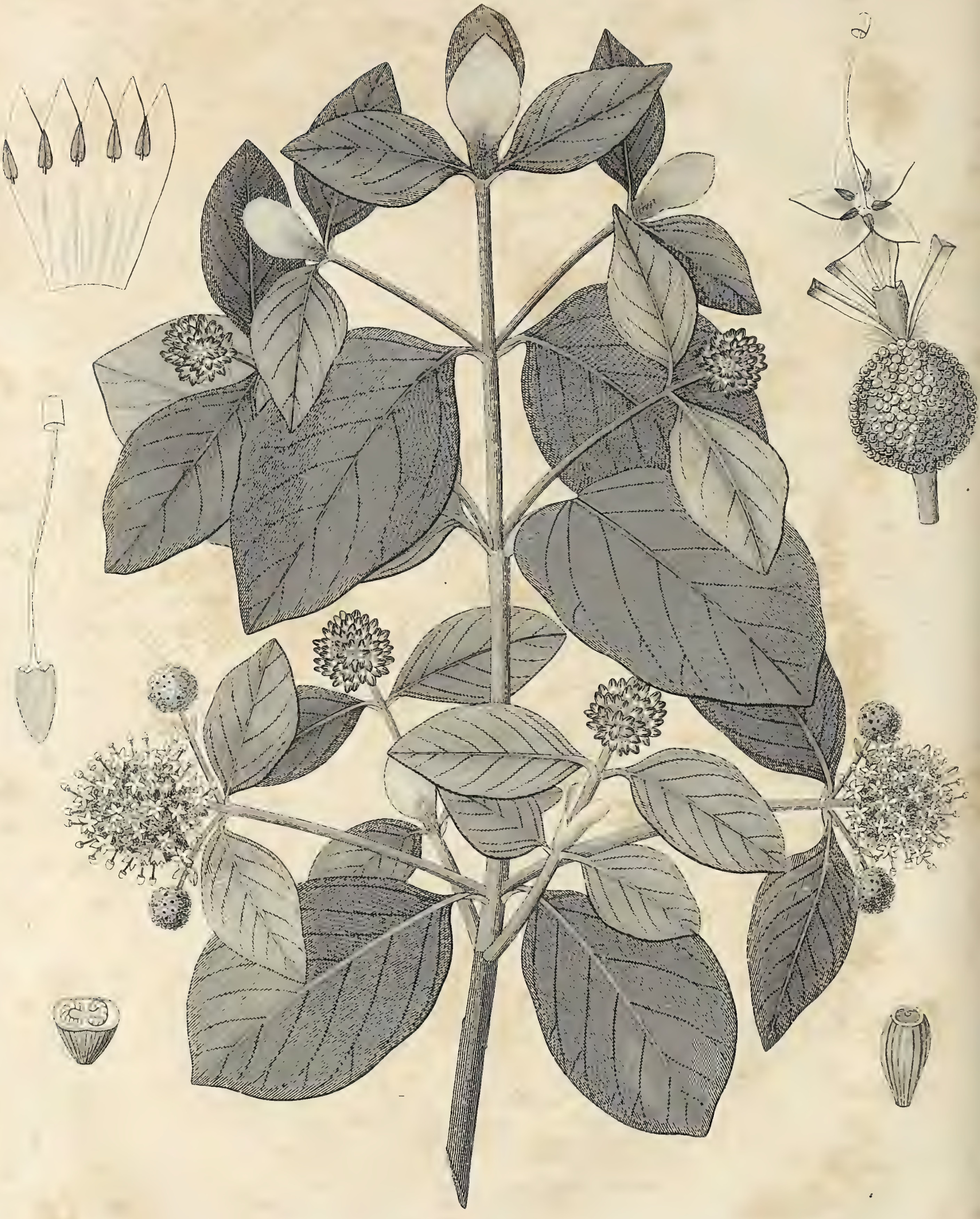
NAUCEL'LE, a town of France, in the department of the Aveiron: two miles ſouth-eaſt of Sauveterre.

NAUCLE'A, *ſ.* [probably from ναυς, a ſhip, and κλειω, to encloſe; becauſe the ſeed, or more properly the half-capſule, is ſhaped like the hull of a veſſel, and contains the kernels in its cavity. Linnæus, the author of the name, has not given its derivation, nor has Mr. Profeſſor Martyn attempted any explanation.] In botany, a genus of the claſs pentandria, order monogynia, natural order of aggregatæ, (rubiaceæ, *Juſſ.*) Generic characters—Calyx: common, none; receptacle, common, globular, ſubvilloſe, covered all over with florets: perianthium, proper, one-leafed, oblong, incruſting the germ; mouth contracted, entire. Corolla: proper, one-petalled, funnel-form, placed on the mouth of the perianthium; tube filiform, longer; border ſhort, five-parted; ſegments ovate, blunt, recurved. Stamina: filaments five, very ſhort, in the throat of the corolla; antheræ ovate, the length of the tube. Piſtillum: germ inferior, oblong; ſtyle capillary, erect, longer than the corolla; ſtigma obovate. Pericarpium: capſule incruſted with the calyx, turbinate, attenuated below, blunt at the top, two-grained, two-celled; grains faſtened by a thread at the top. Seeds ſeveral, ſmall, ovate, compreſſed a little, membranaceous-margined, attenuated into a briſtle-ſhaped tail, faſtened to the ſuture.—*Eſſential Character.* Corolla funnel-form; ſeed one, inferior, two-celled; receptacle common, globular, hairy. There are thirteen ſpecies in two diviſions.

I. With the heads of flowers terminal.

1. Nauclea orientalis, or broad ſharp-leaved nauclea: leaves ovate, obtuſe, peduncles terminating ſolitary. This is a large tree, with a ſtraight trunk, and ſpreading branches. Leaves quite entire, large, ſmooth, petioled, oppoſite, with thick parallel curved nerves. Flower on a long peduncle, compoſed of very many yellow florets gathered into a ball two inches in diameter. Proper

NAUCLEA.



Small round-leaved Nauclea.

perianth fleſhy, unequally many-cleft. Corolla uſually five-cleft, with as many ſtamens. Style very long, conglobate every way into a large hoary head, by their united force concealing the golden florets. Stigma entire, turbinate, acuminate. Fruit: a berry compounded of the fleſhy perianths of the florets, coaleſcing irregularly into a globular lacunoſe body. Gærtner deſcribes it as a capſule, inferior, ſmall, turbinate, corticate, crowned with a callous ring, the remains of the fallen flower, ſmooth, two-grained: rind coriaceous, opened at top by the gaping grains; which are cartilaginous, hard, whitiſh, convex on one ſide, ſlightly concave on the other, one-celled, opening elaſtically two ways at top. Receptacle triple: firſt, of the fructification, globular; ſecondly, of the fruit, filiform, between the grains, and inſerted into their upper part, as in umbellate plants; thirdly, of the ſeed, a prominent nerve of the gaping ſuture of the grains, by which the ſeeds hang. Seeds in each grain about ſixteen, ſmall, ovate, compreſſed a little, or ſomewhat angular, membranaceous-margined, attenuated at top into a briſtle-ſhaped tail, rufeſcent. Native of the Eaſt Indies, Cochin China, and the Society Iſles. The wood is yellow, ſolid, beautiful and fit for all works within doors; expoſed to air and wet, it rots quickly.

2. Nauclea parvifolia, or ſmall round-leaved nauclea: leaves oval, peduncles terminating ſolitary or in threes. Trunk ſtraight, with a browniſh-grey cracked bark. Branches oppoſite, numerous, ſpreading, forming a large oval ſhady head. Leaves oppoſite, decuſſated, entire, ſmooth. Petiole channelled; ſtipules large, oblong, obtuſe, glutinous, falling; peduncles ſingle or three; when three, the middle one is ſhorteſt, near the apex jointed, and bracted, each ſupporting a ſingle globular naked head of florets. Flowers ſmall, light yellow. Receptacle chaffy: chaffs wedge-form, hairy at their inſertions. Calyx very minute, entire; diviſions of the corolla pointed, ſpreading; filaments inſerted juſt within the mouth of the tube; antheræ erect, oblong, pointed above; ſtyle nearly twice the length of the corolla; ſtigma large, reſting on the ſtyle; capſules turbinate, covered with a ſcabrous cruſt or bark, which ſplits irregularly when the ſeeds are ripe: within is the proper two-celled capſule, each conſiſting of one valve, opening round the apex, and down on the inſide. Seeds ſeveral, very minute, oblong, tailed, inverſe, imbricated round the outſide of their receptacles with the inſertion downwards. This grows to a large tree, and is a native of almoſt every part of the coaſt of Coromandel, but chiefly among the mountains, flowering during the cold ſeaſon. It is called *botu-cadamie* by the Telingas. The wood is of a light cheſtnut colour, firm and cloſe-grained. It is uſed for various purpoſes, where it can be kept dry; but, if expoſed to wet, it ſoon rots. This ſpecies is repreſented on the annexed Plate.

3. Nauclea purpurea, or purple nauclea: leaves oblong, pointed, peduncles terminating ſolitary or in threes. Trunk irregular, with a ſcabrous aſh-coloured bark. Branches oppoſite, decuſſated. Leaves oppoſite, decuſſated, ſhort-petioled, quite entire, very ſmooth and ſhining both above and below, from four to nine inches long. Flowers larger than in either of the former, and purple. It is a ſmall tree: a native of the moiſt valleys among the Circar mountains, flowering in April or the beginning of the hot ſeaſon.—Bagada of the Telingas.

4. Nauclea Africana, or ſeſſile-flowered nauclea: leaves oblong-ovate, pointed; thorns none; heads of flowers ſeſſile, terminal; ſtamens longer than the tube of the corolla, reflexed; ſtigma oblong. Gathered by Iſert in Guinea.

5. Nauclea latifolia, or broad-leaved African nauclea: leaves large, roundiſh, ſmooth; thorns none; heads of flowers terminal, on ſhort ſtalks; ſtigma oblong, furrowed; ſtipules triangular, deeply divided. Gathered by the late Mr. Smeathman at Sierra Leone.

6. Nauclea coadunata, or combined nauclea: leaves heart-ſhaped, obtuſe, ſomewhat downy; thorns none; ſtigma pyramidal; ſtipules rounded, reticulated, combined at the baſe. Communicated by Dr. Roxburgh from Calcutta under the above name. The leaves are not unlike thoſe of Ficus Bengalenſis in ſhape and ſize, but leſs coriaceous. Flowers orange-coloured.

II. Heads of flowers axillary.

7. Nauclea gambir, or gambeer-nauclea: leaves ovate, pointed, ſmooth; ſtem climbing; branches round; ſtipules undivided; flower-ſtalks axillary, becoming hooked ſpines. Native of Amboyna, in thickets, eſpecially near the coaſt. It is cultivated, according to Mr. Hunter, ſecretary to the Aſiatic Society, for the ſake of the drug called *gambeer*, which is an inſpiſſated extract from its leaves. In the Prince of Wales's Iſland, where this gentleman made his obſervations, a Chineſe prepared the gambeer under his inſpection. This article had previouſly been ſuppoſed the produce of the Mimoſa catechu. The plant, however, is cultivated for this purpoſe in Sumatra, along the Malay coaſt, and other places. A red rich ſoil is preferred, on the ſide of the hill, as the ſhrubs do not thrive in inundated ſituations, though a rainy ſeaſon is favourable to the crop. They are propagated from ſeed, and are tranſplanted when nine inches high. Nine pounds of leaves yield above ten ounces of gambeer. The qualities of this drug are aſtringent and tonic. Its firſt taſte is bitter and auſtere, but a permanent ſweetneſs remains. A purified white ſort is preferred for chewing with the leaves of betel, its moſt frequent uſe. The coarſer kind ſerves for tanning and dyeing, in China and Java. The ſtem of this ſhrub climbs to a great height, when it meets with ſupport; and has a rough brown bark. The branches are crowded, round, ſmooth, the young ones oppoſite, widely ſpreading. Leaves oppoſite, on ſhort ſtalks, undulated, entire, above three inches long, and near an inch and a half wide, ſmooth and ſhining on both ſides, paler beneath, with ſome axillary hairineſs where the veins branch from the mid-rib. Flower-ſtalks ſolitary, ſtraight and horizontal, not half the length of the leaf, round, ſlightly thickened at the baſe, furniſhed with a bracteated joint towards the extremity, which finally ſeparates, after the ſeeds are ripe, the lower part of the ſtalk being permanent, and becoming a recurved hooked ſpine. The flowers compoſe a globe, about an inch in diameter; and are deſcribed by Rumphius as purpliſh and inodorous. The ſlender capſules, almoſt an inch long, are elevated on ſtalks nearly their own length. Seeds numerous, imbricated, minute, with an oblong, jagged, membranous appendage at each end. The branches, which have attained the thickneſs of two fingers, are ſaid by Rumphius to diſcharge, when wounded, a copious limpid fluid, which is a wholeſome and pleaſant drink.

8. Nauclea acida, or acid-leaved nauclea: leaves ovate, pointed; ſmooth; ſtem climbing: branches quadrangular; ſtipules deeply divided; flower-ſtalks axillary, becoming hooked compreſſed ſpines. Sent by Mr. Hunter from Soongey Clooan, in the Prince of Wales's Iſland. It differs from the laſt very eſſentially in the deep diviſions of its broad permanent ſtipules. The flower-ſtalks are ſhorter, and, when they become ſpines, much broader and compreſſed, ſo much incurved as frequently to complete a circle. The leaves have an acid taſte. This ſpecies is very common in Amboyna: the flowers appear in February, and are of a dirty white, but much admired for their grateful and permanent ſcent, like oil of cinnamon, or like jaſmine.

9. Nauclea ſcandens, or climbing hairy nauclea: leaves ovate, pointed, hairy, as well as the branches; ſtem climbing; ſtipules in two deep linear ſegments; flower-ſtalks axillary, becoming hooked hairy ſpines. Native of various parts of the Eaſt Indies: communicated by Dr. F. Buchanan. Diſtinguiſhed from the two laſt by the ruſty hairineſs of its ſquare branches, the narrowneſs of

the deeply-divided ſtipules, and the roughneſs of the upper ſide of its leaves, whoſe under ſide is paler and more ſoftly downy. Rumphius ſays the branches yield a limpid and pleaſant fluid, which by keeping turns ſlightly bitter and aſtringent; and that the flowers are white, with a mixture of yellow, but without any peculiar ſmell.

10. Nauclea aculeata, or Guiana nauclea: leaves ovate, pointed, ſmooth; ſtem climbing; branches quadrangular; ſtipules triangular, undivided; flower-ſtalks axillary, becoming hooked compreſſed ſpines. Gathered by Aublet on the banks of creeks and rivers in Guiana, flowering in May and June. This has a great affinity to the three laſt, as the editors of Aublet have noticed. It moſt reſembles N. acida, in its ſquare branches, ſmooth leaves, and compreſſed greatly-recurved ſpines; but differs eſſentially in having undivided ſtipules. Aublet ſays it climbs to the tops of the loftieſt trees, crowning them with flowers, which are extremely variable in colour, being either yellow, white, or of a more or leſs deep red, with a very ſweet ſmell. The fruit is ſaid to be ſoft and blue, the ſize of a red gooſeberry, but of two cells, ſeparated by a membrane, to which are attached numerous hard coriaceous black ſeeds.

11. Nauclea ſclerophylla, or rigid-leaved nauclea: leaves elliptical, ſcarcely pointed, ſhining, rigid: reticulated and rough beneath; ſtem climbing; branches quadrangular, downy; ſtipules lunate, divided; flower-ſtalks axillary, compreſſed, downy, becoming hooked ſpines. Communicated by Mr. Hunter, from the top of the hill at Soongey Clooan, Prince of Wales's Iſland. This is truly a magnificent ſpecies, remarkable for the great ſize of all its parts. The branches and ſtalks are all clothed with an extremely-fine cloſe ferruginous down. Leaves five inches long, and three broad, ſlightly heart-ſhaped at the baſe, wavy, but hardly crenate, with a very ſlight blunt point; their ſubſtance rigid and coriaceous; their upper ſide ſmooth as if varniſhed; the under pale, opaque, with innumerable repeatedly-ſubdivided, reticulated, parallel, prominent, minutely-rough, veins, between which the whole leaf is exquiſitely dotted. Flower-ſtalks two inches long, ſtout, rigid, ruſty, compreſſed; finally recurved and pointed. Head of flowers above two inches in diameter, with ſix lanceolate whorled deciduous bractes under it, at the joint of the ſtalk; calyx coriaceous; corolla clothed with long, prominent, ſhining, tawny, briſtles.

12. Nauclea cordifolia, or heart-leaved nauclea: leaves heart-ſhaped, pointed, downy; ſtem erect; ſtipules obovate, undivided; flower-ſtalks axillary, downy, uſually in pairs. Communicated by Dr. Roxburgh, from the mountainous parts of the coaſt of Coromandel, where it flowers in the wet ſeaſon, the ſeeds ripening about April. The natives call it *daduga*. This is a large and valuable timber-tree, very different in habit from all we have hitherto deſcribed in this ſection. The wood is yellow, exceedingly beautiful, like box, but lighter, and at the ſame time very cloſe-grained. It is excellent for furniture, but not laſting when expoſed to wet. The branches form a very large ſhady head, and are roundiſh, ſomewhat compreſſed, tortuous, downy when young. Leaves on downy ſtalks, which are about two inches long, of a roundiſh heart-ſhaped figure, thin and pliant, five or ſix inches long when full-grown, and nearly as broad; entire, wavy, bright green; roughiſh above, paler and downy beneath; with one rib, and numerous forked veins, whoſe ultimate ramifications are finely reticulated. Head of flowers about an inch in diameter, yellowiſh. Dr. Roxburgh ſays the number of flower-ſtalks varies from one to four.

13. Nauclea adina, or myrtle-leaved nauclea: leaves elliptic-lanceolate, pointed, ſmooth; ſtem erect; ſtipules deeply divided, acute; flower-ſtalks axillary, downy, ſolitary. Native of China. It is ſaid to have come up in the earth of ſome plants ſent from Canton to the late Rt. Hon. Charles Greville, with whom it flowered in July and Auguſt. The ſtem is ſhrubby, round, with numerous oppoſite ſpreading ſlender branches, minutely downy when young. Leaves on ſhort ſtalks, elliptic-lanceolate, two inches long, entire, thin, ſmooth, moderately veiny, tapering at the baſe, terminating in a blunt point. The head of flowers is ſmaller than in the laſt, yellowiſh. *Saliſb. Parad.* 116. *Roxb.* vol. i. *Linn. Tranſ.* vol. ix.

NAUCRA'RI, *ſ.* among the Athenians, was the name given to the chief-magiſtrates of the *δημοι*, "boroughs or townſhips;" which were likewiſe called *ναυκραριαι*, becauſe each was obliged, beſides two horſemen, to furniſh out one ſhip for the public ſervice.

NAU'CRATES, a Greek poet, who was employed by Artemiſia to write a panegyric upon Manſolus.—An orator who endeavoured to alienate the cities of Lycia from the intereſt of Brutus.

NAU'CRATIS, in ancient geography, a city of Egypt, on the left ſide of the Canopic mouth of the Nile. It was celebrated for its commerce; and no ſhip was permitted to land at any other place, but was obliged to ſail directly to the city, there to depoſit its cargo. It gave birth to Athenæus.

NAUCRATI'TES NO'MOS, a diviſion of the Delta, ſo called from the above town.

NAU'CYDES, a ſtatuary who lived about four centuries before the Chriſtian era.

NAUDE' (Gabriel), a philoſopher and man of letters, was born at Paris in 1600. He received his elementary education in a religious community, and then ſtudied at the univerſity of Paris, where he took the degree of M. A. Having commenced the ſtudy of medicine, he was for a time interrupted in it by accepting the office of librarian to Henry de Meſmes, preſident à mortier in the parliament of Paris. This he reſigned in 1626, and went to Padua to complete his medical ſtudies. The death of his father recalled him to Paris, where the faculty of medicine choſe him to deliver the annual diſcourſe on the reception of licentiates, on which occaſion he wrote and printed his oration "De Antiquitate & Dignitate Scholæ Medicæ Pariſienſis." His views, however, do not ſeem to have been directed to the practice of phyſic; for he attached himſelf to the cardinal de Bagni as his librarian and Latin ſecretary, and accompanied him to Rome in 1631. Having been appointed titular phyſician to Louis XIII. he took his doctor's degree at Padua in 1633; he however continued with the cardinal de Bagni at Rome till the death of that prelate in 1641. He then remained ſome time with cardinal Barberini; but, being recalled by cardinal Richelieu, he returned to Paris in 1642. Before his return, he had been deſired by cardinal Richelieu to make inquiries reſpecting the true author of the celebrated work "De Imitatione Chriſti," which the Benedictines of St. Maur choſe to attribute to John Gerſon, a monk of their order. Naudé's reſearches were unfavourable to his claim; and a canon of St. Genevieve gave an edition of the book under the name of Thomas à Kempis, prefixing to it Naudé's account of his examination of the manuſcripts in Italy, upon which he had decided againſt Gerſon. The Benedictines, highly irritated at this procedure, calumniated Naudé with having falſified the manuſcripts, and ſold his teſtimony to the canons of St. Genevieve for a priory; and a warm controverſy was carried on for ſeveral years on the ſubject, till both parties became ridiculous. A legal deciſion at length juſtified Naudé, and adjudged the work to Thomas à Kempis.

After the death of Richelieu, Naudé was engaged by cardinal Mazarin as his librarian; and entirely formed for him a noble library, amounting in ſeven years to forty thouſand volumes. He had the chagrin to witneſs its diſperſion when the cardinal was obliged to quit France; and he purchaſed out of it all the medical books. Mazarin rewarded his ſervices by two ſmall benefices. On becoming unemployed, he accepted an invitation from queen Chriſtina of Sweden to take the office of her librarian; but he ſoon reſigned it, through diſlike of the climate.

mate. The fatigue of his journey on his return threw him into a fever, which obliged him to ſtop at Abbeville, where he died in 1653, at the age of fifty-three.

Naudé was a man of regular manners, of extenſive erudition and penetrating judgment, free in his opinions and language. One of the beſt proofs of his freedom from common prejudices is given in his "Apologie pour les grands Perſonages fauſſement ſoupçonnés de Magie," 1625, 12mo. often reprinted. This is a valuable performance, in which the characters of ſeveral eminent men have been vindicated from the abſurd imputations thrown upon them by ſuperſtition and ignorance. It is to be wiſhed, for his own reputation, that he had not regarded among prejudices, the indignation felt by all honeſt men againſt the execrable maſſacre of St. Bartholomew's, which he directly vindicates in his "Conſidérations Politiques ſur les Coups d'Etat." His political education at the court of Rome, and under Richelieu and Mazarin, will account for his ſentiments on this tranſaction, which he ſeems to have conſidered as a coup d'état againſt a dangerous civil faction, rather than as an act of religious bigotry. His other numerous publications, many of them ſcarce and curious, are chiefly upon local or temporary topics. His thoughts, and anecdotes of his life, were collected in the *Naudæana*, printed in 1701, along with the *Patiniana*.

NAUDE' (Philip), an able profeſſor of mathematics at Berlin, was born at Metz in Lorraine, in the year 1654. At the age of about twelve, he was taken into the ſervice of the court of Eyſenach, in the capacity of page and attendant on the young princes. In this ſituation his behaviour ſecured him the eſteem of all who knew him; and, while he continued here, he learned the German language, which afterwards proved of great uſe to him. When he had ſpent about four years at Eyſenach, his father choſe to take him home; but how he was employed during the next fifteen years of his life we are not informed. We are only told that his father had neither the intention nor the means of affording him a learned education; but that, notwithſtanding the diſadvantages of his condition, having an unconquerable thirſt for knowledge, he became his own maſter, and made conſiderable proficiency in different branches of learning, particularly in the mathematical ſciences. As he was in principle a Proteſtant, when the edict of Nantes was revoked in 1685, he left France with his wife and young child about nine months old, and reſided about two years at Hanau. Hence he removed to Berlin, where he contracted an intimacy with M. Langerfield, mathematician to the court, and tutor to the pages. This gentleman, who knew how converſant he was with the ſciences, adviſed him to open a mathematical ſchool, and recommended pupils to him. In 1687, he received an appointment to teach arithmetic and the elements of the mathematics at the college of Joachim; and in 1690, he was made ſecretary interpreter. Upon the death of M. Langerfield, Naudé ſucceeded him, in 1696, both in his employments at court, and the profeſſorſhip in the Academy of Sciences. In 1701 he was elected a member of the Academy of Sciences; and, in 1704, when the king founded the Academy of Princes, M. Naudé was attached to it by a ſpecial patent, as profeſſor of mathematics. He died at Berlin in 1729, at the age of ſeventy-five, highly reſpected for his integrity and general excellence of character.

Though the mathematics chiefly occupied his attention, he was not unacquainted with the other ſciences; and, as he was zealous for the religion which he profeſſed, he had made divinity his particular ſtudy, and written ſeveral treatiſes on religious and moral ſubjects. In mathematics, his ſole publication was "Elements of Geometry," 4to. written in German, and printed at Berlin for the uſe of the Academy of Princes; and ſome ſmaller pieces, which appeared at different periods in the Miſcellanea Berolinenſia. Among his theological and moral productions were, 1. Sacred Meditations, 1690, 12mo. 2. Evangelical Morality, 1699, 2 vols. 12mo. 3. The Sovereign Perfection of God in his Divine Attributes, and the perfect Integrity of the Scriptures, in the Senſe maintained by the firſt Reformers, 2 vols. 12mo. 1708, written againſt Mr. Bayle; which, being attacked in a pamphlet, he defended in, 4. A Collection of Objections to the Treatiſe on the Sovereign Perfection of God, with Anſwers to the ſame, 1709, 12mo. 5. An Examination of two Treatiſes of M. de la Placette, 1713, 2 vols. 12mo. 6. Dialogues in Solitude, partly tranſlated from the Dutch of William Teclink, 1717, 12mo. 7. A Refutation of the Philoſophical Commentary, 1718, 12mo. *Gen. Biog.*

NAU'DERS, a town of the Tyroleſe: eight miles north of Glurentz.

NAUDOW'ESIES. See NAWDOWESSIES.

NAVE, *ſ.* [naꝼ, Sax.] The middle part of the wheel in which the axle moves.—In the wheels of waggons the hollows of the *naves*, by their ſwift rotations on the ends of the axle-trees, produce a heat ſometimes ſo intenſe as to ſet them on fire. *Ray.*

Out, out, thou ſtrumpet Fortune! all you gods
In general ſynod take away her power;
Break all the ſpokes and fellies from her wheel,
And bowl the round *nave* down the hill of heav'n,
As low as to the fiends. *Shakeſpeare's Hamlet.*

[From *nave*, old Fr.] The middle part of the church, diſtinct from the *aiſles*, or wings.—It comprehends the *nave* or body of the church, together with the chancel. *Ayliffe's Parergon.*

NAVE, a town of Africa, in Bondou. Lat. 14. 20. N. lon. 10. 40. W.

NAVE'ILS, a town of France, in the department of the Loire and Cher: three miles ſouth-weſt of Vendôme.

NA'VEL, *ſ.* [Saxon.] The point, in the middle of the belly, by which embryos communicate with the parent.—The uſe of the *navel* is to continue the infant unto the mother, and by the veſſels thereof to convey its aliments. *Brown.*

Imbraſides addreſt
His javeline at him, and ſo ript his *navill*, that the wound,
As endleſsly it ſhut his eyes, ſo open on the ground
It powr'd his entrailes. *Chapman.*

The navel-ſtring:

Me from the womb the midwife muſe did take,
She cut my *navel*. *Cowley.*

The middle; the interior part:

Within the *navel* of this hideous wood,
Immur'd in cypreſs ſhades, a ſorcerer dwells. *Milton.*

NA'VEL-GALL, *ſ.* *Navel-gall* is a bruiſe on the top of the chine of the back, behind the ſaddle, right againſt the *navel*, occaſioned either by the ſaddle being ſplit behind, or the ſtuffing being wanting, or by the crupper-buckle ſitting down in that place, or ſome hard weight or knobs lying directly behind the ſaddle.

NA'VEL-STRING, *ſ.* The ligament by which an embryo communicates with the mother.—There is a ſuperintending Providence, that ſome animals will hunt for the teat before they are quite gotten out of the ſecundines, and parted from the *navel-ſtring*. *Derham.*

NA'VEL-TIMBERS, *ſ.* The ribs of a ſhip. *Aſh.*

NA'VEL-WORT, *ſ.* A plant. See COTYLEDON and CYNOGLOSSUM.

NA'VEL-WORT, Baſe or Falſe. See CRASSULA.

————————, Venus's. See CYNOGLOSSUM.

————————, Water. See HYDROCOTYLE.

NAU'EN, a town of Brandenburg, in the Middle Mark, anciently called *Fettport*: eighteen miles weſt of Berlin, and fourteen north of Potſdam. Lat. 52. 36. N. lon. 12. 55. E.

NAUENBUR'GIA, *ſ.* in botany, a genus of the claſs ſyngeneſia, order polygamia ſegregata. Generic Eſſential Character—Calyx foliaceous; calycle two-leaved, one-flowered; florets of the margin female and fertile; receptacle briſtly; down one.

Nauenburgia trinervata, the only ſpecies. Stem glabrous, branched; leaves oblong-lanceolate, ſerrate, three-nerved, glabrous; flowers axillary, ſolitary, peduncled, yellow. Inhabits South America; and reſembles the genus Brotera. *Shrad. Journal*, 1800.

NAU'ENHOF, a town of Saxony, in the circle of Leipſic: ſeven miles weſt of Grimma, and eight eaſt of Leipſic. Lat. 51. 15. N. lon. 12. 31. E.

NA'VER, or Navern, a river of Scotland, which riſes from Loch Naver, and runs into the North Sea in lat. 58. 28. N. lon. 4. 2. W.

NA'VES, a town of France, in the department of the Corrèze: three miles north of Tulle.

NA'VESINK HAR'BOUR, a port on the coaſt of New Jerſey: five miles north-weſt of Shrewſbury.

NA'VESTOCK, a village in Eſſex, near Brentwood: four miles from Ongar. Here is the ſeat of earl Waldegrave.

NAV'ETTE, *ſ.* in botany, the name by which moſt of the European nations call the Braſſica napus, the plant from the ſeeds of which the oil which we call *rape-oil*, and the French and others *navette-oil*, is expreſſed. The plant is cultivated in many parts of England, and in other countries, for the ſake of the ſeed; the oil drawn from this is uſed by many artificers, and is of a fine yellow colour; and the ſmell is not offenſive. The cake remaining after the expreſſion of the oil retains, like that of muſtard, the acrimony of the ſeeds.

NA'VEW, *ſ.* [*napus*, Lat. *navet*, Fr. a turnip.] Rape or cole-ſeed. See Brassica napus, vol. iii.

NA'VEZ, a river of France, which joins the Clarence, to form the Robek, about a mile from St. Venant.

NAU'FRAGE, *ſ.* [Fr. from *naufragium*, Lat.] Shipwreck.—Guilty of the ruin and *naufrage* and periſhing of infinite ſubjects. *Bacon's Speech at taking his Place in Chancery.*

NAU'FRAGOUS, *adj.* Cauſing ſhipwreck.—That tempeſtuous and oft *naufragous* ſea, wherein youth and handſomeneſs are commonly toſſed with no leſs hazard to the body than the ſoul. *Bp. Taylor.*

NAUGAMUN'GLUM, a town of Hindooſtan, in Myſore: twenty-eight miles north of Seringapatam.

NAU'GARDTEN, or Neu'garten, a town of Hinder Pomerania: fifty miles weſt of New Stettin, and ſixteen north of Stargard. Lat. 53. 42. N. lon. 15. 5. W.

NAUGATACK', a river of Connecticut, which joins the Houſatonic to form the Stratford.

NAUGHT, *adj.* [nahꞇ, naphıꞇ, Sax. that is, *ne aught*, not any thing.] Bad; corrupt; worthleſs: it is now hardly uſed but in ludicrous language.—With them that are able to put a difference between things *naught* and things indifferent in the church of Rome, we are yet at controverſy about the manner of removing that which is *naught*. *Hooker.*

Thy ſiſter's *naught*: Oh Regan! ſhe hath tied
Sharp-tooth'd unkindneſs like a vulture here. *Shakeſpeare.*

NAUGHT, *ſ.* Nothing. This is commonly, though improperly, written *nought*. See Aught, Nought, and Ought.

Be you contented
To have a ſon ſet your decrees at *nought*,
To pluck down juſtice from your awful bench. *Shakeſp.*

NAU'GHTILY, *adv.* Wickedly; corruptly.

NAU'GHTINESS, *ſ.* Wickedneſs; badneſs. Slight wickedneſs or perverſeneſs, as of children.—No remembrance of *naughtineſs* delights but mine own; and methinks the accuſing his traps might in ſome manner excuſe my fault, which certainly I loth to do. *Sidney.*—Idleneſs, the bane of body and mind, the nurſe of *naughtineſs*. *Burton's Anat. of Mel.*

NAU'GHTLY, *adv.* Badly; corruptly:

Thus did I for want of better wit,
Becauſe my parents *naughtly* brought me up. *Mir. for Mag.*

NAU'GHTON, a town of Scotland, in the county of Fife: ſix miles north of Cupar.

NAU'GHTON, a village in Suffolk, eaſt of Bildeſton.

NAU'GHTY, *adj.* The ſame with Naught. Bad; wicked; corrupt.—A prince of great courage and beauty, but foſtered up in blood by his *naughty* father. *Sidney.*

How far that little candle throws his beams,
So ſhines a good deed in a *naughty* world. *Shakeſpeare.*

It is now ſeldom uſed but in ludicrous cenſure:

If gentle ſlumbers on thy temples creep,
But, *naughty* man, thou doſt not mean to ſleep,
Betake thee to thy bed. *Dryden.*

NAU'HEIM, a town of Germany, in the county of Hanau Munzenberg, with ſalt-works: thirteen miles north of Hanau, and one north of Fridberg.

NA'VIA, a town of Spain, in Aſturia, near the ſea; thirty-ſix miles north-weſt of Oviedo.

NA'VIA de SUAR'NA, a town of Spain, in Galicia: twenty miles ſouth-ſouth-eaſt of Mondonedo.

NAVIC'ULA, *ſ.* in old records, a ſmall diſh to hold frankincenſe before it was put into the cenſer. A ſmall ſhip.

NAVIC'ULAR, *adj.* [*navicularis*, Lat.] In anatomy, the third bone in each foot that lies between the aſtragalus and oſſa cuneiformia.

NAVIDAD', a town of Mechoacan, in Mexico, with a harbour on the North Pacific Ocean: 156 miles weſt of the city of Mexico. Lat. 18. 51. N. lon. 111. 10. W.

NAVI'ER (Pierre-Touſſaint), an enlightened phyſician and chemiſt in the eighteenth century, was born at Saint-Dizier, and practiſed at Chalons-ſur-Marne, where he was very ſerviceable to the country-people, eſpecially in epidemic diſeaſes. He died in 1779. As a chemiſt, this phyſician rendered himſelf celebrated by his diſcovery of nitrous ether, and of the method of uniting mercury with iron. He alſo entered upon ſome curious chemical reſearches into the animal fluids in his "Obſervations ſur l'Amolliſſement des Os," 1755. He further wrote ſome anatomical obſervations, particularly reſpecting epidemic diſeaſes, entitled "Diſſertation ſur pluſieurs Maladies populaires qui ont regné depuis quelque tems à Chalons-ſur-Marne," 1753. *Gen. Biog.*

NAV'IGABLE, *adj.* [Fr. from *navigabilis*, Lat.] Capable of being paſſed by ſhips or boats.—The firſt-peopled cities were all founded upon theſe *navigable* rivers or their branches, by which the one might give ſuccour to the other. *Raleigh's Hiſt. of the World.*

Almighty Jove ſurveys
Earth, air, and ſhores, and *navigable* ſeas. *Dryden.*

NAV'IGABLENESS, *ſ.* Capacity to be paſſed in veſſels.

To NAV'IGATE, *v. n.* [*navigo*, Lat.] To ſail; to paſs by water.—The Phœnicians *navigated* to the extremities of the weſtern ocean. *Arbuthnot on Coins.*

To NAV'IGATE, *v. a.* To paſs by ſhips or boats.—Druſus, the father of the emperor Claudius, was the firſt who *navigated* the northern ocean. *Arbuthnot on Coins.*

NAVIGA'TION, *ſ.* The act or practice of paſſing by water.—When Pliny names the Pœni as inventors of *navigation*, it muſt be underſtood of the Phœnicians, from whom the Carthagenians are deſcended. *Arbuthnot on Coins.*

Rude as their ſhips was *navigation* then,
No uſeful compaſs or meridian known;
Coaſting, they kept the land within their ken,
And knew no north but when the pole-ſtar ſhone. *Dryden.*

Veſſels of navigation:

Though you untie the winds, and let them fight
Againſt the churches; though the yeſty waves
Confound and ſwallow *navigation* up. *Shakeſp. Macbeth.*

PROGRESSIVE HISTORY OF NAVIGATION.

If the arts and ſciences ought to excite an intereſt proportionate to the advantages we derive from them, what art deſerves, more than navigation, to fix our attention? It is that which eſtabliſhes an eaſy communication between the moſt diſtant nations, which introduces civilization among the moſt barbarous people, and enables us to participate in the riches which Nature produces in every part of the earth. No other art calls forth more largely the faculties of man; it teaches him to brave numberleſs dangers, and gives him the means of ſurmounting them; it enlarges his ideas, in ſhowing him nature under all her aſpects, and humanity in all its conditions, from ſavage life to the higheſt degree of civilization.

In every ſtage of ſociety, men have eagerly ſought, by the combination of ſuperior ſkill and ingenuity, to attain thoſe diſtinct advantages which nature has conferred on the different tribes of animals, by endowing them with a peculiar ſtructure and a peculiar force of organs. The rudeſt ſavage learns, from his very infancy, to imitate the ſwimming of a fiſh, and plays on the ſurface of the water with an agility and a perſeverance which ſeem to decline with the advancement of civilization. But an art ſo confined in its exerciſe, and requiring ſuch a degree of bodily exertion, could not be conſidered of much avail. It was ſoon perceived, that the fatigue of impulſion through the water could be greatly diminiſhed by the ſupport and floating of ſome light ſubſtance. The trunk of a tree would bear its rude proprietor along the ſtream; or, hollowed out into a canoe, and furniſhed with paddles, it might enable him even to traverſe a river. From this ſimple fabric, the ſtep was not great to the conſtruction of a boat or barge, impelled by the force of oars. But it was a mighty ſtride to fix maſts and apply ſails to the veſſel, and thus ſubſtitute the power of wind for that of human labour. The adventurous ſailor, inſtead of plying on the narrow ſeas, or creeping timidly along the ſhore, could now launch with confidence into the wide ocean. Navigation, in its moſt cultivated form, may be fairly regarded as the conſummation of art, and the ſublimeſt triumph of human genius, induſtry, courage, and perſeverence.

The poets refer the invention of the art of navigation to Neptune; ſome of the ancients to Bacchus, others to Hercules, others to Jaſon, and others to Janus, who is ſaid to have made the firſt ſhip. Hiſtorians aſcribe it to the Æginetes, the Phœnicians, Tyrians, and the ancient inhabitants of Britain. Some ſuppoſe, that the firſt hint was taken from the flight of the kite; others, as Oppian, from the ſhell-fiſh or worm called *nautilus;* others aſcribe it to accident.

Scripture refers the origin of ſo uſeful an invention to God himſelf, who gave the firſt ſpecimen thereof in the ark built by Noah under his direction. For the raillery which the good man underwent on account of his enterpriſe ſhows evidently enough that the world was then ignorant of any thing like navigation, and that they even thought it impoſſible.

However, profane hiſtory repreſents the Phœnicians, eſpecially thoſe of their capital Tyre, as the firſt navigators; being urged to ſeek a foreign commerce by the narrowneſs and poverty of a ſlip of ground they poſſeſſed along the coaſts; as well as by the conveniency of two or three good ports, and by their natural genius for traffic. Accordingly, Lebanon and the other neighbouring mountains furniſhing them with excellent wood for ſhip-building, in a ſhort time they were maſters of a numerous fleet; and, conſtantly hazarding new navigations, and ſettling new trades, they ſoon arrived at an incredible pitch of opulence and populouſneſs; inſomuch as to be in a condition to ſend out colonies, the principal of which was that of Carthage; which, keeping up their Phœnician ſpirit of commerce, in time not only equalled Tyre itſelf, but vaſtly ſurpaſſed it; ſending its merchant-fleets through Hercules's Pillars, now the ſtraits of Gibraltar, along the weſtern coaſts of Africa and Europe; and even, if we believe ſome authors, to America itſelf.

The progreſs of the Phœnicians and Carthaginians was not owing merely to the deſire of extending their trade from one country to another; voyages were undertaken, the ſole object of which was to diſcover new countries, and to explore unknown ſeas. Such, during the proſperous ages of the Carthaginian republic, were the famous navigations of Hanno and Himilco. Both their fleets were equipped by authority of the ſenate, and at the public expenſe. Hanno was directed to ſteer towards the ſouth, along the coaſt of Africa; and he ſeems to have advanced much nearer the equinoctial line than any former navigator. Himilco had it in charge to proceed towards the north, and to examine the weſtern coaſts of the European continent. Of the ſame nature was the extraordinary navigation of the Phœnicians round Africa. A Phœnician fleet, we are told, (Herodot. lib. iv. cap. 42.) fitted out by Necho king of Egypt, took its departure, about 604 years before the Chriſtian era, from a port in the Red Sea, doubled the ſouthern promontory of Africa, and, after a voyage of three years, returned by the ſtraits of Gades to the mouth of the Nile. Eudoxus of Cyzicus is ſaid (Plin. Nat. Hiſt. lib. ii. cap. 67.) to have held the ſame courſe, and to have accompliſhed the ſame arduous undertaking. However, long after this navigation of the Phœnicians and of Eudoxus round Africa, Polybius, the moſt intelligent and beſt-informed hiſtorian of antiquity, affirms, that it was not known, in his time, whether Africa was a continued continent ſtretching to the ſouth, or whether it was encompaſſed by the ſea. (Polyb. Hiſt. lib. iii.) And it appears from the teſtimony of Pliny, Strabo, and Ptolemy, that the accounts of thoſe voyages were not fully credited. *Robertſon's Hiſt. of America*, vol. i.

Tyre, whoſe immenſe riches and power are repreſented in ſuch lofty terms, both in ſacred and profane authors, being deſtroyed by Alexander the Great, its navigation and commerce were transferred by the conqueror to Alexandria, a new city, admirably ſituated for thoſe purpoſes, propoſed for the capital of the empire of Aſia, which Alexander then meditated. And thus aroſe the navigation of the Egyptians, which was afterwards ſo cultivated by the Ptolemies, that Tyre and Carthage (which laſt, after having a long time diſputed empire with the Romans, was at length ſubdued) were quite forgot.

Egypt being reduced into a Roman province after the battle of Actium, its trade and navigation fell into the hands of Auguſtus; in whoſe time Alexandria was only inferior to Rome; and the magazines of the capital of the world were wholly ſupplied with merchandiſes from the capital of Egypt. At length, Alexandria itſelf underwent the fate of Tyre and Carthage, being ſurpriſed by the Saracens; who, in ſpite of the emperor Heraclius, overſpread the northern coaſts of Africa, &c. whence the merchants being driven, Alexandria has ever ſince been in a languiſhing ſtate, though ſtill it enjoys a conſiderable part of the commerce of the Chriſtian merchants trading to the Levant.

The fall of Rome, and its empire, drew along with it not only that of learning and the polite arts, but that of navigation; the barbarians, into whoſe hands it fell, contented themſelves with the ſpoils of the induſtry of their predeceſſors. However, one circumſtance prevented commercial intercourſe with diſtant nations from ceaſing altogether. Conſtantinople, though often threatened by the fierce invaders, who ſpread deſolation over the reſt of Europe, was ſo fortunate as to eſcape their deſtructive rage. In this city, the knowledge of ancient arts and diſcoveries was preſerved; and commerce continued to flouriſh there, with the taſte for elegance, and the luxuries of foreign countries, when it was almoſt extinct in every other part of Europe. The citizens of Conſtantinople did not confine their trade to the iſlands of the Archipelago, or to the adjacent coaſts of Aſia: they took a wider range, and, following the courſe which the ancients had marked out, imported the commodities of the Eaſt Indies from Alexandria. When Egypt was torn from the Roman empire by the Arabians, the induſtry of the Greeks diſcovered a new channel, by which the productions of India might be conveyed to Conſtantinople. They were carried up the Indus, as far as that great river is navigable; there they were tranſported by land to the banks of the river Oxus, and proceeded down its ſtream to the Caſpian Sea. There they entered the Volga, and, ſailing up it, were carried by land to the Tanais, which conducted them into the Euxine Sea, where veſſels from Conſtantinople waited their arrival.

But, no ſooner were the more brave among thoſe nations well ſettled in their new provinces; ſome in Gaul, as the Franks; others in Spain, as the Goths; and others in Italy, as the Lombards; than they began to learn the advantages of navigation and commerce, and the proper methods of managing them, from the people they ſubdued; and this with ſo much ſucceſs, that in a little time ſome of them became able to give new leſſons, and ſet on foot new inſtitutions for its advantage.

It does not appear which of the European people, after the ſettlement of their new maſters, firſt betook themſelves to navigation and commerce. Some think it began with the French; though the Italians ſeem to have the juſteſt title to it, and are accordingly ordinarily looked on as the reſtorers of this ſcience, as well as of the polite arts, which had been baniſhed together, from the time the empire was torn aſunder. The people of Italy then, and particularly thoſe of Venice and Genoa, have the glory of this reſtoration; and it is to their advantageous ſituation for navigation they in a great meaſure owe their glory.

In the bottom of the Adriatic were a great number of marſhy iſlands, only ſeparated by narrow channels, but thoſe well ſcreened, and almoſt inacceſſible, the reſidence of ſome fiſhermen, who here ſupported themſelves by a little trade of fiſh and ſalt, which they found in ſome of theſe iſlands. Thither, then, the Veneti, a people inhabiting that part of Italy along the coaſts of the gulf, retired, when Alaric king of the Goths, and afterwards Attila king of the Huns, ravaged Italy.

Theſe new iſlanders, little imagining that this was to be their fixed reſidence, did not think of compoſing any body politic; but each of the ſeventy-two iſlands of this little Archipelago continued a long time under its ſeparate diſtinct maſter, and each made a diſtinct commonwealth. When their commerce was become conſiderable enough to give jealouſy to their neighbours, they began to think of uniting into a body; and it was this union, firſt begun in the ſixth century, but not completed till the eighth, that laid the ſure foundation of the future grandeur of the ſtate of Venice. From the time of this union, their fleets of merchantmen were ſent to all the ports of the Mediterranean; and at laſt to thoſe of Egypt, particularly Cairo; a new city built by the Saracen princes on the eaſtern bank of the Nile, where they traded for their ſpices, and other products of the Indies. Thus they flouriſhed, increaſed their commerce, their navigation, and their conqueſts on the terra firma, till the famous league of Cambray in 1508, when a number of jealous princes conſpired their ruin; which was the more eaſily effected, by the diminution of their Eaſt-India commerce, of which the Portugueſe had gained one part, and the French another.

Genoa, which had applied itſelf to navigation at the ſame time with Venice, and that with equal ſucceſs, was a long time its dangerous rival, diſputed with it the empire of the ſea, and ſhared with it the trade of Egypt, and other parts both of the Eaſt and Weſt. Jealouſy ſoon began to break out; and, the two republics engaging in a conteſt, it was three centuries almoſt continual war before the ſuperiority was aſcertained; when, towards the end of the fourteenth century, the fatal battle of Chioza ended the noble ſtrife; the Genoeſe, who till then had uſually the advantage, having now loſt all; and the Venetians, almoſt become deſperate, at one happy blow, beyond all expectation, ſecured to themſelves the empire of the ſea, and ſuperiority in commerce.

The cruſades contributed in a great meaſure to the revival, or at leaſt to the more rapid progreſs, of commerce and navigation; for the Genoeſe, the Piſans, and Venetians, furniſhed the tranſports, which carried thoſe vaſt armies, compoſed of all the nations in Europe, into Aſia upon this wild enterpriſe; and likewiſe ſupplied them with proviſions and military ſtores.

About the ſame time that navigation was retrieved in the ſouthern parts of Europe, a new ſociety of merchants was formed in the north, which not only carried commerce to the greateſt perfection it was capable of till the diſcovery of the Eaſt and Weſt Indies, but alſo formed a new ſcheme of laws for the regulation thereof, which ſtill obtains under the name of "Uſes and Cuſtoms of the Sea." This ſociety is that famous league of the Hanſe Towns, commonly ſuppoſed to have begun about the year 1164.

The art of navigation has been exceedingly improved in modern times, both with regard to the form of the veſſels themſelves, and with regard to the methods of working them. The uſe of rowers is now entirely ſuperſeded by the improvements made in the formation of the ſails, rigging, &c. by which means ſhips can not only ſail much faſter than formerly, but can tack in any direction with the greateſt facility. It is alſo very probable that the ancients were neither ſo well ſkilled in finding the latitudes, nor in ſteering their veſſels in places of difficult navigation, as the moderns. But the greateſt advantage which the moderns have over the ancients is from the *mariner's compaſs*, by which they are enabled to find their way with as great facility in the midſt of an immeaſurable ocean, as the ancients could have done by creeping along the coaſt, and never going out of ſight of land. Some people, indeed, contend, that this is no new invention, but that the ancients were acquainted with it. They ſay, that it was impoſſible for Solomon to have ſent ſhips to Ophir, Tarſhiſh, and Parvaim, which laſt they will have to be *Peru*, without this uſeful inſtrument. They inſiſt, that it was impoſſible for the ancients to be acquainted with the attractive virtue of the magnet, and to be ignorant of its polarity. Nay, they affirm, that this property of the magnet is plainly mentioned in the Book of Job, where the loadſtone is mentioned by the name of *topaz*, or "the ſtone that turns itſelf." But it is certain that the Romans, who conquered Judea, were ignorant of this inſtrument; and it is very improbable that ſuch an uſeful invention, if once it had been commonly known to any nation, would have been forgot, or perfectly concealed from ſuch a prudent people as the Romans, who were ſo much intereſted in the diſcovery of it.

Among thoſe, who admit that the mariner's compaſs is a modern invention, it has been diſputed who was the inventor; as to which, ſee the article COMPASS, vol. iv. p. 887. and reſpecting the variation of the compaſs, ſee p. 889 of the ſame article.

The croſs-ſtaff, or fore-ſtaff, was another very uſeful invention. This ancient inſtrument is deſcribed by John Werner, of Nuremberg, in his Annotations on the Firſt Book of Ptolemy's Geography, printed in 1514. He recommends it for obſerving the diſtance between the moon and ſome ſtar, in order thence to determine the longitude. See FORE-STAFF.

At this time the art of navigation was ſtill very imperfect, on account of the inaccuracies of the plane chart, which was the only one then known, and which, by its groſs errors, muſt have greatly miſled the mariner, eſpecially in voyages far diſtant from the equator. Its precepts were probably at firſt only ſet down on the ſea-charts, as is the cuſtom at this day; but, at length, there were two Spaniſh treatiſes publiſhed in 1545; one by Pedro de Medina; the other by Martin Cortes, which contained a complete ſyſtem of the art, as far as it was then known. Theſe ſeem to have been the oldeſt writers who fully handled the art; for Medina, in his dedication to Philip prince of Spain, laments that multitudes of ſhips daily periſhed at ſea, becauſe there were neither teachers of the art nor books by which it might be learned; and Cortes, in his dedication, boaſts to the emperor, that he was the firſt who had reduced navigation into a compendium, valuing himſelf much on what he had performed. Medina defended the plane chart; but he was oppoſed by Cortes, who ſhowed its errors; and endeavoured to account for the variation of the compaſs, by ſuppoſing the needle to be influenced by a magnetic pole (which he called the *point attractive*) different from that of the world; which notion has been farther proſecuted by others. Medina's book was ſoon tranſlated into Italian, French, and Flemiſh; and ſerved for a long time as a guide to foreign navigators. However, Cortes was the favourite author of the Engliſh nation, and was tranſlated in 1561; while Medina's work was entirely neglected, though tranſlated alſo within a ſhort time of the other. At that time the ſyſtem of navigation conſiſted of the following particulars, and others ſimilar: An account of the Ptolemaic hypotheſis, and the circles of the ſphere; of the roundneſs of the earth, the longitudes, latitudes, climates, &c. and eclipſes of the luminaries; a kalendar; the method of finding the prime, epact, moon's age, and tides; a deſcription of the compaſs, an account of its variation, for the diſcovering of which Cortes ſaid an inſtrument might eaſily be contrived; tables of the ſun's declination for four years, in order to find the latitude from his meridian altitude; directions to find the ſame by certain ſtars; of the courſe of the ſun and moon; the length of the days; of time and its diviſions; the method of finding the hour of the day and night; and laſtly, a deſcription of the ſea-chart, on which to diſcover where the ſhip is, they made uſe of a ſmall table, that ſhowed, upon an alteration of one degree of the latitude, how many leagues were run in each rhumb, together with the departure from the meridian. Beſides, ſome inſtruments were deſcribed, eſpecially by Cortes; ſuch as one to find the place and declination of the ſun, with the days, and place of the moon; certain dials, the aſtrolabe, and croſs-ſtaff; with a complex machine to diſcover the hour and latitude at once.

About the ſame time were made propoſals for finding the longitude by obſervations of the moon. In 1530, Gemma Friſius adviſed the keeping of the time by means of ſmall clocks or watches, then, as he ſays, newly invented. He alſo contrived a new ſort of croſs-ſtaff, and and an inſtrument called the nautical quadrant; which laſt was much praiſed by William Cunningham, in his "Aſtronomical Glaſs," printed in the year 1559.

In 1537 Pedro Nunez, or Nonius, publiſhed a book in the Portugueſe language, to explain a difficulty in navigation propoſed to him by the commander Don Martin Alphonſo de Suſa. In this he expoſes the errors of the plane chart, and likewiſe gives the ſolution of ſeveral curious aſtronomical problems; amongſt which is that of determining the latitude from two obſervations of the ſun's altitude, and the intermediate azimuth. He obſerved, that, though the rhumbs are ſpiral lines, yet the direct courſe of a ſhip will always be in the arch of a great circle, whereby the angle with the meridians will continually change: all that the ſteerſman can here do for the preſerving of the original rhumb is to correct theſe deviations as ſoon as they appear ſenſible. But thus the ſhip will in reality deſcribe a courſe without the rhumb-line intended; and therefore his calculations for aſſigning the latitude, where any rhumb-line croſſes the ſeveral meridians, will be in ſome meaſure erroneous. He invented a method of dividing a quadrant by means of concentric circles, which, after being much improved by Dr. Halley, is uſed at preſent, and is called a *nonius*.

In 1577, Mr. William Bourne publiſhed a treatiſe, in which, by conſidering the irregularities in the moon's motion, he ſhows the errors of the ſailors in finding her age by the epact, and alſo in determining the hour from obſerving on what point of the compaſs the ſun and moon appeared. He adviſes, in ſailing towards the high latitudes, to keep the reckoning by the globe, as there the plane chart is moſt erroneous. He deſpairs of our ever being able to find the longitude, unleſs the variation of the compaſs ſhould be occaſioned by ſome ſuch attractive point as Cortes had imagined; of which, however, he doubts: but, as he had ſhown how to find the variation at all times, he adviſes to keep an account of the obſervations, as uſeful for finding the place of the ſhip; which advice was proſecuted at large by Simon Stevin, in a treatiſe publiſhed at Leyden in 1599; the ſubſtance of which was the ſame year printed at London in Engliſh by Mr. Edward Wright, entitled The Haven-finding Art. In this ancient tract alſo is deſcribed the way by which our ſailors eſtimate the rate of a ſhip in her courſe, by an inſtrument called the *log*. This was ſo named from the piece of wood, or log, that floats in the water while the time is reckoned during which the line that is faſtened to it is veering out. See Log, vol. xii.

In 1581, Michael Coignet, a native of Antwerp, publiſhed a treatiſe, in which he animadverted on Medina. In this he ſhowed, that, as the rhumbs are ſpirals, making endleſs revolutions about the poles, numerous errors muſt ariſe from their being repreſented by ſtraight lines on the ſea charts; but, though he hoped to find a remedy for theſe errors, he was of opinion that the propoſals of Nonius were ſcarcely practicable, and therefore in a great meaſure uſeleſs. In treating of the ſun's declination, he took notice of the gradual decreaſe in the obliquity of the ecliptic; he alſo deſcribed the croſs-ſtaff with three tranſverſe pieces, as it is at preſent made, and which he owned to have been then in common uſe among the ſailors. He likewiſe gave ſome inſtruments of his own invention; but all of them are now laid aſide, excepting perhaps his nocturnal. He conſtructed a ſea-table to be uſed by ſuch as ſailed beyond the ſixtieth degree of latitude; and at the end of the book is delivered a method of ſailing on a parallel of latitude by means of a ring-dial and a twenty-four-hour glaſs. The ſame year the diſcovery of the dipping-needle was made by Mr. Robert Norman. In his publication on that art he maintains, in oppoſition to Cortes, that the variation of the compaſs was cauſed by ſome point on the ſurface of the earth, and not in the heavens: he alſo made conſiderable improvements in the conſtruction of compaſſes themſelves; ſhowing eſpecially the danger of not fixing, on account of the variation, the wire directly under the *fleur-de-luce*; as compaſſes made in different countries have it placed differently. To this performance of Norman's is always prefixed a diſcourſe on the variation of the magnetical needle, by Mr. William Burrough, in which he ſhows how to determine the variation in many different ways. He alſo points out many errors in the practice of navigation at that time, and ſpeaks in very ſevere terms concerning thoſe who had publiſhed upon it.

All this time the Spaniards continued to publiſh treatiſes on the art. In 1585, an excellent compendium was publiſhed by Roderico Zamorano; which contributed greatly towards the improvement of the art, particularly in the ſea-charts. Globes of an improved kind, and of a much larger ſize than thoſe formerly uſed, were now conſtructed, and many improvements were made in other inſtruments; however, the plane-chart continued ſtill to be followed, though its errors were frequently complained of. Methods of removing theſe errors had indeed been ſought after; and Gerard Mercator ſeems to have been the firſt who found the true method of doing this, ſo as to anſwer the purpoſes of ſeamen. His method was to repreſent the parallels both of latitude and longitude by parallel ſtraight lines, but gradually to augment the former as they approached the pole. Thus the rhumbs, which otherwiſe ought to have been curves, were now alſo extended into ſtraight lines; and thus a ſtraight line drawn between any two places marked upon the chart would make an angle with the meridians, expreſſing the rhumb leading from the one to the other. But though, in 1569, Mercator publiſhed an univerſal map conſtructed in this manner, it doth not appear that he was acquainted with the principles on which this proceeded; and it is now generally believed, that the true principles on which the conſtruction of what is called *Mercator's chart* depends, were firſt diſcovered by an Engliſhman, Mr. Edward Wright.

Mr. Wright ſuppoſes, but, according to the general opinion, without ſufficient grounds, that this enlargement of the degrees of latitude was known and mentioned by Ptolemy, and that the ſame thing had alſo been ſpoken of by Cortes. The expreſſions of Ptolemy alluded to, relate indeed to the proportion between the diſtances of the parallels and meridians; but, inſtead of propoſing any gradual enlargement of the parallels of latitude in a general chart, he ſpeaks only of particular maps; and adviſes not to confine a ſyſtem of ſuch maps to one and the ſame ſcale, but to plan them out by a different meaſure, as occaſion might require: only with this precaution, that the degrees of longitude in each ſhould bear ſome proportion to thoſe of latitude; and this proportion is to be deduced from that which the magnitude of the reſpective parallels bears to a great circle of the ſphere. He adds, that in particular maps, if this proportion be obſerved with regard to the middle parallel, the inconvenience will not be great, though the meridians ſhould be ſtraight lines parallel to each other. Here he is ſaid only to mean, that the maps ſhould in ſome meaſure repreſent the figures of the countries for which they are drawn. In this ſenſe Mercator, who drew maps for Ptolemy's tables, underſtood him; thinking it, however, an improvement not to regulate the meridians by one parallel, but by two; one diſtant from the northern, the other from the ſouthern, extremity of the map by a fourth part of the whole depth; by which means, in his maps, though the meridians are ſtraight lines, yet they are generally drawn inclining to each other towards the poles. With regard to Cortes, he ſpeaks only of the number of degrees of latitude, and not of the extent of them; nay, he gives expreſs directions that they ſhould all be laid down by equal meaſurement on a ſcale of leagues adapted to the map.

For ſome time after the appearance of Mercator's map, it was not rightly underſtood; and it was even thought to be entirely uſeleſs, if not detrimental. However, about the year 1592, its utility began to be perceived; and, ſeven years after, Mr. Wright printed his famous treatiſe entitled, The Correction of certain Errors in Navigation; where he fully explained the reaſon of extending the length of the parallels of latitude, and the uſes of it to navigators. In 1610, a ſecond edition of Mr. Wright's book was publiſhed with improvements. An excellent method was propoſed of determining the magnitude of the earth; at the ſame time it was judiciouſly propoſed to make our common meaſures in ſome proportion to a degree on its ſurface, that they might not depend on the uncertain length of a barley-corn. Some of his other improvements were, "The table of latitudes for dividing the meridian computed to minutes;" whereas it had been only divided to every tenth minute. He alſo publiſhed a deſcription of an inſtrument which he calls the *ſea-rings;* and by which the variation of the compaſs, altitude of the ſun, and time of the day, may be determined readily at once in any place, provided the latitude is known. He ſhowed alſo how to correct the errors ariſing from the eccentricity of the eye in obſerving by the croſs-ſtaff. He made a total amendment in the tables of the declinations and places of the ſun and ſtars from his own obſervations made with a ſix-foot quadrant in the years 1594, 5, 6, and 7. A ſea-quadrant to take altitudes by a forward or backward obſervation; and likewiſe with a contrivance for the ready finding the latitude by the height of the pole-ſtar, when not upon the meridian. To this edition was ſubjoined a tranſlation of Zamorano's Compendium above mentioned, in which he corrected ſome miſtakes in the original; adding a large table of the variation of the compaſs, obſerved in very different parts of the world, to ſhow that it was not occaſioned by any magnetical pole.

Theſe improvements ſoon became known abroad. In 1608, a treatiſe, entitled *Hypomnemata Mathematica,* was publiſhed by Simon Stevin, for the uſe of Prince Maurice. In that part relating to navigation, the author, having treated of ſailing on a great circle, and ſhown how to draw the rhumbs on a globe mechanically, ſets down Wright's two tables of latitudes and of rhumbs, in order to deſcribe theſe lines more accurately, pretending even to have diſcovered an error in Wright's table. But all Stevin's objections were fully anſwered by the author himſelf, who ſhowed that they aroſe from the groſs way of calculating made uſe of by the former.

In 1624, the learned Wellebrordus Snellius, profeſſor of mathematics at Leyden, publiſhed a treatiſe of navigation on Wright's plan, but ſomewhat obſcurely; and, as he did not particularly mention all the diſcoveries of Wright, the latter was thought by ſome to have taken the hint of all his diſcoveries from Snellius. But this ſuppoſition is long ago refuted; and Wright enjoys the honour of thoſe diſcoveries which is juſtly his due.

Mr. Wright, having ſhown how to find the place of the ſhip on his chart, obſerved that the ſame might be performed more accurately by calculation; but, conſidering, as he ſays, that the latitudes, and eſpecially the courſes at ſea, could not be determined ſo preciſely, he forbore ſetting down particular examples; as the mariner may be allowed to ſave himſelf this trouble, and only mark out upon his chart the ſhip's way, after the manner then uſually practiſed. However, in 1614, Mr. Raphe Handſon, among his Nautical Queſtions, ſubjoined to a tranſlation of Pitiſcus's Trigonometry, ſolved very diſtinctly every caſe of navigation, by applying arithmetical calculations to Wright's Table of Latitudes, or of Meridional Parts, as it has ſince been called. Though the method diſcovered by Wright for finding the change of longitude by a ſhip ſailing on a rhumb is the proper way of performing it, Handſon alſo propoſes two ways of approximation to it without the aſſiſtance of Wright's diviſion of the meridian line. The firſt was computed by the arithmetical mean between the coſines of both latitudes; the other by the ſame mean between the ſecants, as an alternative when Wright's book was not at hand; though this latter is wider from the truth than the firſt. By the ſame calculations, alſo, he ſhowed how much each of theſe compendiums deviates from the truth, and alſo how widely the computations on the erroneous principles of the plane chart differ from them all. The method, however, moſtly uſed by our ſailors is commonly called the *middle latitude;* which, though it errs more than that by the arithmetical mean between the two coſines, is preferred on account of its being leſs operoſe: yet in high latitudes it is more eligible to uſe that of the arithmetical mean between the logarithmic coſines, equivalent to the geometrical mean between the coſines themſelves; a method ſince propoſed by Mr. John Baſſat. The computation by the middle latitude will always fall ſhort of the true change of longitude; that by the geometrical mean will always exceed; but that by the arithmetical mean falls ſhort in latitudes above 45 degrees, and exceeds in ſmaller latitudes. However, none of theſe methods will differ much from the truth when the change of latitude is ſufficiently ſmall.

About this time logarithms were invented by John Napier, baron of Merchiſton in Scotland, and proved of the utmoſt ſervice to the art of navigation. From which Mr. Edmund Gunter conſtructed a table of logarithmic ſines and tangents to every minute of the quadrant, which he publiſhed in 1620. In this work he applied to navigation, and other branches of mathematics, his admirable ruler known by the name of *Gunter's ſcale;* on which are deſcribed lines of logarithms, of logarithmic ſines and tangents, of meridional parts, &c. He greatly improved the ſector for the ſame purpoſes. He ſhowed alſo how to take a back-obſervation by the croſs-ſtaff, whereby the error ariſing from the eccentricity of the eye is avoided. He deſcribed likewiſe another inſtrument, of his own invention, called the *croſs-bow*, for taking altitudes of the ſun or ſtars, with ſome contrivances for the more ready collecting the latitude from the obſervation. The diſcoveries concerning logarithms were carried to France in 1624 by Mr. Edmund Wingate, who publiſhed two ſmall tracts in that year at Paris. In one of theſe he taught the uſe of Gunter's ſcale; and in the other, of the tables of artificial ſines and tangents, as modelled according to Napier's laſt form, erroneouſly attributed by Wingate to Briggs.

Gunter's rule was projected into a circular arch by the Reverend Mr. William Oughtred in 1633, and its uſes fully ſhown in a pamphlet entitled The Circles of Proportion; where, in an appendix, are well treated ſeveral important points in navigation. It has alſo been made in the form of a ſliding ruler.

The logarithmic tables were firſt applied to the different caſes of ſailing by Mr. Thomas Addiſon, in his treatiſe entitled Arithmetical Navigation, printed in 1625. He alſo gives two traverſe-tables, with their uſes; the one to quarter-points of the compaſs, the other to degrees. Mr. Henry Gellibrand publiſhed his diſcovery of the changes of the variation of the compaſs in a ſmall quarto pamphlet entitled "A Diſcourſe mathematical on the Variation of the Magnetical Needle," printed in 1635. This extraordinary phenomenon he found out by comparing the obſervations made at different times near the ſame place by Mr. Burrough, Mr. Gunter, and himſelf, all perſons of great ſkill and experience in theſe matters. This diſcovery was likewiſe ſoon known abroad; for Athanaſius Kircher, in his treatiſe entitled *Magnes*, firſt printed at Rome in 1641, informs us, that he had been told it by Mr. John Greaves; and then gives a letter of the famous Marinus Merſennus, containing a very diſtinct account of the ſame.

As altitudes of the ſun are taken on ſhipboard by obſerving his elevation above the viſible horizon, to obtain from thence the ſun's true altitude with correctneſs, Wright obſerves it to be neceſſary that the dip of the viſible horizon below the horizontal plane paſſing through the obſerver's eye ſhould be brought into the account, which cannot be calculated without knowing the magnitude of the earth. Hence he was induced to propoſe different methods for finding this; but complains that the moſt effectual was out of his power to execute; and therefore contented himſelf with a rude attempt, in ſome meaſure ſufficient for his purpoſe: and the dimenſions of the earth deduced by him correſponded very well with the uſual diviſions of the log-line; however, as he wrote not an expreſs treatiſe on navigation, but only for the correcting ſuch errors as prevailed in general practice, the log-line did not fall under his notice. Mr. Richard Norwood, however, put in execution the method recommended by Mr. Wright as the moſt perfect for meaſuring the dimenſions of the earth, with the true length of the degrees of a great circle upon it; and, in 1635, he actually meaſured the diſtance between London and York; from whence, and the ſummer ſolſtitial altitudes of the ſun obſerved on the meridian at both places, he found a degree on a great circle of the earth to contain 367,196 Engliſh feet, equal to 57,300 French fathoms or toiſes: which is very exact, as appears from many meaſures that have been made ſince that time. Of all this Mr. Norwood gave a full account in his treatiſe called The Seaman's Practice, publiſhed in 1637. He there ſhows the reaſon why Snellius had failed in his attempt: he points out alſo various uſes of his diſcovery, particularly for correcting the groſs errors hitherto committed in the diviſions of the log-line. But neceſſary amendments have been little attended to by ſailors, whoſe obſtinacy in adhering to the eſtabliſhed errors has been complained of by the beſt writers on navigation. This improvement has at length, however, made its way into practice; and few navigators of reputation now make uſe of the old meaſure of forty-two feet to a knot. In that treatiſe alſo Mr. Norwood deſcribes his own excellent method of ſetting down and perfecting a ſea-reckoning, by uſing a traverſe-table; which method he had followed and taught for many years. He ſhows alſo how to rectify the courſe by the variation of the compaſs being conſidered; as alſo how to diſcover currents, and to make proper allowance on their account. This treatiſe, and another on trigonometry, were continually reprinted, as the principal books for learning ſcientifically the art of navigation. What he had delivered, eſpecially in the latter of them, concerning this ſubject, was contracted as a manual for ſailors, in a very ſmall piece called his *Epitome*; which uſeful performance has gone through a great number of editions. No alterations were ever made in the Seaman's Practice till the twelfth edition, in 1676, when the following paragraph was inſerted in a ſmaller character: "About the year 1672, Monſieur Picar publiſhed an account, in French, concerning the meaſure of the earth, a breviate whereof may be ſeen in the Philoſophical Tranſactions, No. 112, wherein he concludes one degree to contain 365,184 Engliſh feet, nearly agreeing with Mr. Norwood's experiment." And this advertiſement is continued through the ſubſequent editions as late as the year 1732.

About the year 1645, Mr. Bond publiſhed in Norwood's Epitome a very great improvement in Wright's method, by a property in his meridian line, whereby its diviſions are more ſcientifically aſſigned than the author himſelf was able to effect; which was from this theorem: That theſe diviſions are analogous to the exceſſes of the logarithmic tangents of half the reſpective latitudes augmented by 45 degrees above the logarithm of the radius. This he afterwards explained more fully in the third edition of Gunter's works, printed in 1653. His rule for computing the meridional parts belonging to any two latitudes, ſuppoſed on the ſame ſide of the equator, is to the following effect: "Take the logarithmic tangent, rejecting the radius, of half each latitude, augmented by 45 degrees; divide the difference of thoſe numbers by the logarithmic tangent of 45° 30′, the radius being likewiſe rejected; and the quotient will be the meridional parts required, expreſſed in degrees." This rule is the immediate conſequence from the general theorem, That the degrees of latitude bear to one degree (or 60 minutes, which in Wright's table ſtands for the meridional parts of one degree) the ſame proportion as the logarithmic tangent of half any latitude augmented by 45 degrees, and the radius neglected, to the like tangent of half a degree augmented by 45 degrees, with the radius likewiſe rejected. But here was farther wanting the demonſtration of this general theorem, which was at length ſupplied by Mr. James Gregory of Aberdeen in his Exercitationes Geometricæ, printed at London in 1668; and afterwards more conciſely demonſtrated, together with a ſcientific determination of the diviſor, by Dr. Halley in the Philoſophical Tranſactions for 1695, N° 219, from the conſideration of the ſpirals into which the rhumbs are tranſformed in the ſtereographic projection of the ſphere upon the plane of the equinoctial; and which is rendered ſtill more ſimple by Mr. Roger Cotes, in his Logometria, firſt publiſhed in the Philoſophical Tranſactions for 1714, N° 388. It is moreover added in Gunter's book that, if $\frac{1}{20}$th of this diviſion, which does not ſenſibly differ from the logarithmic tangent of 45° 1′ 30″ (with the radius ſubtracted from it), be uſed, the quotient will exhibit the meridional parts expreſſed in leagues; and this is the diviſor ſet down in Norwood's Epitome. After the ſame manner the meridional parts will be found in minutes, if the like logarithmic tangent of 45° 1′ 30″, diminiſhed by the radius, be taken; that is, the number uſed by others being 12,633, when the logarithmic tables confift of eight places of figures befides the index.

In an edition of the Seaman's Kalender, Mr. Bond declared, that he had difcovered the longitude by having found out the true theory of the magnetic variation; and, to gain credit to his affertion, he foretold, that at London in 1657 there would be no variation of the compafs, and from that time it would gradually increafe the other way; which happened accordingly. Again, in the Philofophical Tranfactions for 1668, N° 40, he publifhed a table of the variation for forty-nine years to come. Thus he acquired fuch reputation, that his treatife, entitled *The Longitude Found*, was in 1676 publifhed by the fpecial command of Charles II. and approved by many celebrated mathematicians. It was not long, however, before it met with oppofition; and 1678 another treatife, entitled *The Longitude not Found*, made its appearance; and, as Mr. Bond's hypothefis did not in any manner anfwer its author's fanguine expectations, the affair was undertaken by Dr. Halley. The refult of his fpeculation was, that the magnetic needle is influenced by four poles; but this wonderful phenomenon feems hitherto to have eluded all our refearches. In 1700, however, Dr. Halley publifhed a general map, with curve-lines expreffing the paths where the magnetic needle had the fame variation; which was received with univerfal applaufe. But, as the pofitions of thefe curves vary from time to time, they fhould frequently be corrected by fkilful perfons; as was done in 1644 and 1756, by Mr. William Mountaine, and Mr. James Dodfon, F. R. S. In the Philofophical Tranfactions for 1690, Dr. Halley alfo gave a differtation on the monfoons; containing many very ufeful obfervations for fuch as fail to places fubject to thefe winds.

After the true principles of the art were fettled by Wright, Bond, and Norwood, the authors on navigation became fo numerous, that it would be impoffible to enumerate them. New improvements were daily made, and every thing relative to it was fettled with an accuracy not only unknown to former ages, but which would have been reckoned utterly impoffible. The earth being found to be a fpheroid, and not a perfect fphere, with the fhorteft diameter paffing through the poles, a tract was publifhed in 1741 by the Rev. Doctor Patrick Murdoch, wherein he accommodated Wright's failing to fuch a figure; and Mr. Colin Maclaurin, the fame year, in the Philofophical Tranfactions, N° 461, gave a rule for determining the meridional parts of a fpheroid; which fpeculation is farther treated of in his book of Fluxions, printed at Edinburgh in 1742.

The principal foreign writers on navigation are Bartholomew Crefcenti, of Rome, in 1607; father George Fournier, at Paris, in 1633; John Baptift Riccioli, at Bologna, in 1661; father Millet Dechales, in 1674 and 1677; the fieur Blondel St. Aubin, in 1671 and 1673; M. Daffier, in 1683; M. Sauveur, in 1692; Mr. John Bouguer, in 1698; father Pezenas, in 1733 and 1741; and M. Peter Bouguer, who, in 1753, publifhed a very elaborate treatife on this fubject, entitled "Nouveau Traité de Navigation;" in which he gives a variation-compafs of his own invention, and attempts to reform the log, as he had done in the Memoirs of the Academy of Sciences for 1747. He is alfo very particular in determining the lunations more accurately than by the common methods, and in defcribing the corrections of the dead-reckonings. This book was abridged and improved by M. de la Caille, in 1760. To thefe we may add Don George Juan of Spain, in 1757.

Among the later difcoveries in navigation, that of finding the longitude both by lunar obfervations and by time-keepers is the principal. It is owing chiefly to the rewards offered by the Britifh parliament that this has attained the prefent degree of perfection. We are indebted to the late Dr. Mafkelyne for putting the firft of thefe methods in practice, and for other important improvements in navigation. The time-keepers, conftructed by Harrifon for this exprefs purpofe, were found to anfwer fo well, that he obtained the parliamentary reward. See the article HOROLOGY, vol. x. p. 346-367.

Thofe who are defirous of perufing a fuller account of the hiftory of the progrefs of navigation may confult Dr. James Wilfon's preface to Dr. Robertfon's Elements of Navigation, in two volumes, 8vo. 1772; a work defervedly held in the higheft eftimation. The only works that have appeared of late on the fubject are thofe on Longitude and Navigation by Dr. Andrew Mackay, of Edinburgh, in 1803; works of high reputation, and of which we have availed ourfelves in the following part of this article; and M. de Roffel's Practical Treatife on finding the Latitude and Longitude at Sea; tranflated from the French by Mr. Myers, of the Academy at Woolwich, 1817.

THEORY AND PRACTICE.

It may undoubtedly be faid, that in no country in the world is a correct knowledge of navigation fo highly important as our own, on account of the magnitude of our navy, the extent of our commerce, and the number of our foreign poffeffions.

The foundations of the principles of this art are explained in other parts of our work, under the articles ASTRONOMY, GEOGRAPHY, HOROLOGY, LOG, LOGARITHMS, COMPASS, &c. What we fhall therefore find it neceffary here to do, is to apply what has been already delivered of the theory to the practice under our immediate confideration; digefting the whole in a methodical manner.

The motion of a fhip in the water is well known to depend on the action of the wind upon its fails, regulated by the direction of the helm. As the water is a refifting medium, and the bulk of the fhip very confiderable, it thence follows that there is always a great refiftance on her fore-part; and, when this refiftance becomes fufficient to balance the moving-force of the wind upon the fails, the fhip attains her utmoft degree of velocity, and her motion is no longer accelerated. This velocity is different according to the different ftrength of the wind; but the ftronger the wind, the greater refiftance is made to the fhip's paffage through the water: and hence, though the wind fhould blow ever fo ftrong, there is alfo a limit to the velocity of the fhip: for the fails and ropes can bear but a certain force of air; and, when the refiftance on the fore-part becomes more than equivalent to their ftrength, the velocity can be no longer increafed, and the rigging gives way.

The direction of a fhip's motion depends on the pofition of her fails with regard to the wind, combined with the action of the rudder. The moft natural direction of the fhip is when fhe runs directly before the wind; the fails are then difpofed fo as to be at right angles thereto. But this is not always the cafe, both on account of the variable nature of the winds, and the fituation of the intended port, or of intermediate headlands or iflands. When the wind, therefore, happens not to be favourable, the fails are placed fo as to make an oblique angle both with the direction of the fhip and with the wind; and the fails, together with the rudder, muft be managed in fuch a manner, that the direction of the fhip may make an acute angle with that of the wind; and the fhip, making boards on different tacks, will by this means arrive at the intended port.

The reafon of the fhip's motion in this cafe is, that the water refifts the fide more than the fore-part, and that in the fame proportion as her length exceeds her breadth. This proportion is fo confiderable, that the fhip continually flies off where the refiftance is leaft, and that fometimes with great fwiftnefs. In this way of failing, however, there is a great limitation: for, if the angle made by the keel with the direction of the wind be too acute, the fhip cannot be kept in that pofition; neither is it poffible for a large fhip to make a more acute angle with the wind than about fix points; though fmall floops, it is ſaid, may make an angle of about five points with it. In all theſe caſes, however, the velocity of the ſhip is greatly retarded; and that, not only on account of the obliquity of her motion, but by reaſon of what is called her *lee-way*. This is occaſioned by the yielding of the water on the lee ſide of the ſhip, by which means the veſſel acquires a compound motion, partly in the direction of the wind, and partly in that which is neceſſary for attaining the deſired port.

In many parts of the ocean there are *currents*, or places where the water, inſtead of remaining at reſt, runs with a very conſiderable velocity for a great way in ſome particular direction, and which will certainly carry the ſhip greatly out of her courſe. This occaſions an error of the ſame nature with the lee-way; and therefore, whenever a current is perceived, its direction and velocity ought to be determined, and the proper allowances made.

Another ſource of error in reckoning the courſe of a ſhip proceeds from the variation of the compaſs. There are few parts of the world where the needle points exactly north; and in thoſe where the variation is known, it is ſubject to very conſiderable alterations. By theſe means the courſe of the ſhip is miſtaken; for, as the ſailors have no other ſtandard to direct them than the compaſs, if the needle, inſtead of pointing due north, ſhould point north-eaſt, a prodigious error would be occaſioned during the courſe of the voyage, and the ſhip would not come near the port to which ſhe was bound. To avoid errors of this kind, the only method is, to obſerve the ſun's amplitude and azimuth as frequently as poſſible, by which the variation of the compaſs will be perceived, and the proper allowances can then be made for errors in the courſe which this may have occaſioned.

The art of navigation depends upon aſtronomical and mathematical principles. The places of the ſun and fixed ſtars are deduced from obſervation and calculation, and arranged in tables, the uſe of which is abſolutely neceſſary in reducing obſervations taken at ſea, for the purpoſe of aſcertaining the latitude and longitude of the ſhip, and the variation of the compaſs. The problems in the various ſailings are reſolved either by trigonometrical calculation, or by tables or rules formed by the aſſiſtance of trigonometry. By mathematics the neceſſary tables are conſtructed, and rules inveſtigated for performing the more difficult parts of navigation.

The great end and buſineſs of navigation being to inſtruct the mariner how to conduct a ſhip through the wide and pathleſs ocean to the remoteſt parts of the world, the ſafeſt and ſhorteſt way, in paſſages navigable; to accompliſh this, then, are requiſite—A perfect knowledge of the figure and motion of the earth, and the various real and imaginary lines upon it, ſo as to be able to aſcertain the real diſtance and ſituation of places with reſpect to one another; with the uſe of the ſeveral inſtruments employed in meaſuring the ſhip's way; ſuch as the log, half-minute glaſs, quadrant, or ſextant, to take the altitude of the ſun and ſtars; compaſs, to repreſent the ſenſible horizon; and azimuth-compaſs, to take the azimuth or amplitude of the ſun, in order to know the variation of the magnetic needle; maps and charts of the ſeas and lands, together with the depth of water, the times and ſettings of the tides upon the coaſts he may have occaſion to approach; a competent knowledge of currents; of the mould and trim of the ſhip, and the ſail ſhe bears, that ſo due allowance may be made for lee-way. By help of theſe, and ſkill in the navigator, he may know at all times the place the ſhip is in; as alſo which way he muſt ſteer, and how far, to gain his intended port.

Of the Mariner's Compass.

Ships at ſea are directed from one place to another by means of an inſtrument called the mariner's compaſs, which is an artificial repreſentation of the horizon of every place, by the means of a circular piece of paper, called a card, divided like the horizon into degrees and points, which are called *rhumbs*. Now, the card being properly fixed to a piece of ſteel, called the needle, that has been touched with a loadſtone (whoſe property is ſuch as to cauſe one end of the needle ſo touched to point towards the north, when turning freely on ſomething ſupporting it), all the points of the card will be directed towards the correſponding points of the horizon. Hence it follows, that in every place the north point of the card ſhows the poſition of the meridian of that place, and ſome one rhumb or point of the card will coincide with, or be directed along, the track that makes any given angle with the meridian; conſequently, by the help of the card or compaſs, a ſhip may be kept in any propoſed track or courſe.

A rhumb-line, or point, is a right line drawn from the centre of the compaſs to the horizon, and is named from that point of the horizon it falls in with. The courſe is the angle which any rhumb-line makes with the meridian, and is ſometimes reckoned in degrees, and ſometimes in points of the compaſs; ſo that if a ſhip ſails upon the ſecond rhumb, or N. N. E. the courſe is 22 degrees 30 minutes: and ſo for any other. See the article Compass, vol. iv.

Of the Log-line and Half-minute Glass.

The log is a flat piece of wood like a flounder, or of the figure of a quarter of a circle, having its circular ſide loaded with lead ſufficient to make it ſwim upright in the water. (See Log, vol. xii.) To this log is faſtened a long line of about 150 fathoms, called the log-line, which is divided into certain equal ſpaces, called knots, each of which ought to bear the ſame proportion to a nautical mile (60 of which make a degree) that half a minute does to an hour, that being the time allowed for the experiment. They are called *knots*, becauſe at the end of each of them there is a piece of twine with knots in it, reeved between the ſtrands of the line: theſe pieces of twine ſhow how many knots run out in half a minute, and conſequently the ſhip's rate of ſailing per hour.

Mr. Norwood and ſeveral other able mathematicians have found, that a degree of a great circle upon the earth contains about 367,200 Engliſh feet; therefore, a nautical mile being $\frac{1}{60}$ part of 367,200 feet, that is, 6120 feet, and ſince half a minute is $\frac{1}{120}$ part of an hour, the length of the knot on the log-line ought to be the $\frac{1}{120}$ part of 6120 feet, or 51 feet. (In the *Requiſite Tables*, publiſhed in 1802, the ſea-mile is accounted 6078 feet.) But as, for the moſt part, the ſhip's way is found, by experience, to be really more than that given by the log, and as it is ſafer to have the reckoning before the ſhip than after it, therefore 50 feet may be taken as the proper length of each knot, and theſe knots ſubdivided into ten fathoms, each of five feet, which is certainly the beſt adapted for practice, and will correſpond with all the tables and inſtruments uſed in navigation, as they are decimally divided, and conſequently the ſhip's run determined with greater eaſe and certainty. But ſome experienced commanders find, that the allowing 50 feet to a knot generally makes the ſhip a-head of the reckoning; and, to avoid danger, moſtly divide the log-line into knots of 7 or 7¼ fathoms of 6 feet each, to correſpond with a glaſs that runs 28 ſeconds. Others again divide the ſeconds the glaſs runs by 4, and take the quotient for the diſtance in fathoms between the knots. Certain it is that, whatever length the knots are, the moſt convenient way is to divide them into tenths.

In hot or dry weather the glaſs runs out faſter than in moiſt or rainy weather; therefore care ſhould be taken to try what number of ſeconds the glaſs runs.

The knots commonly begin to be counted at the diſtance of 10, 12, or 15, fathoms from the log, according to the largeneſs of the ſhip, that ſo the log may be out of the ſhip's wake, when it is thrown overboard, before they begin to count, leſt the eddies ſhould ſuck the log after the ſhip; and, for the moſt ready diſcovery of this point of commencement, there is commonly faſtened to it a piece of red rag; that part of the line between the red rag and the log is called the *ſtray-line.*

The log and log-line being duly prepared and hove overboard from the lee-quarter, and the line veered out (by the help of a reel which turns eaſy, and about which it is wound) as faſt as the log will carry it away, or rather as faſt as the ſhip ſails from it, will ſhow how faſt the ſhip has ſailed in the given time, or rate of ſailing per hour.

The experiment for finding the velocity of the ſhip is called *heaving the log.*

Care ſhould be taken to veer out the line as faſt as the log takes it; for, if the log is left to turn the reel of itſelf, the log will come home, and deceive you in the reckoning.

In the king's ſhips, India ſhips, and ſome others, the log is hove every hour; but in coaſters, and thoſe uſing ſhort voyages, every two hours. Here the ſhip is ſuppoſed to move with equal velocity between the times of trying the experiment. But, if the gale has not been the ſame during the whole hour, or time between heaving the log; or if there has been more ſail ſet, or any handed, that ſo the ſhip has run more or leſs in any part of the hour than ſhe did at the time of the experiment; or if it ſhould fall leſs or more wind at that time; there muſt be allowance made for it according to the diſcretion of the officer. Sometimes, too, when the ſhip is before the wind, and a great ſea ſetting after her, it will bring home the log; in ſuch caſes it is cuſtomary to allow one mile in ten, and leſs in proportion, if the ſea be not ſo great.

Care ſhould alſo be taken to meaſure the log-line pretty often, leſt it ſtretch, and deceive you in the diſtance. The like regard muſt be had that the half-minute glaſs be juſt 30 ſeconds, otherwiſe no account of the ſhip's-way can be kept; to prove which, if there be no ſtop-watch at hand, let a plummet, of any form or weight, be faſtened to a ſilk ſtring or thread, with a loop to hang on a ſmall pin or nail faſtened in any place, ſo that the plummet may ſwing freely; let it be 39¾ inches from the end of the loop to the middle of the plummet, and the plummet cauſed to ſwing: each of thoſe ſwings will be a true ſecond of time, always counting every time it paſſes the perpendicular let fall from the pin, and every time it paſſes from the perpendicular to the utmoſt ſwing will be half a ſecond.

How to correct the Diſtance given by the Log-Line and Half-Minute Glaſs.

The diſtance given by the log may be wrong on three accounts; viz. by an error in the glaſs, an error in the log-line, or an error in both; for correcting of which take the following caſes:

Caſe I. When the log-line is truly divided, and the glaſs is faulty.

Rule. Say, As the ſeconds run by the glaſs are to 30 ſeconds, ſo is the diſtance given by the log to the true diſtance.

Ex. 1. Suppoſe a ſhip runs at the rate of 7½ knots in the time the glaſs runs out, but meaſuring the glaſs I find it runs 34 ſeconds; what is the true rate of ſailing?—As 34 : 30 :: 7·5 : 6·6 miles, the true diſtance ſailed in an hour.

Ex. 2. Suppoſe a ſhip runs at the rate of 6½ knots, but meaſuring the glaſs I find it runs only 25 ſeconds; required the true rate of ſailing?—As 25 : 30 :: 6·5 : 7·8 miles, the true diſtance ſailed in an hour.

II. When the glaſs is true, and log-line faulty. Say, As 50 feet is to the diſtance meaſured between knot and knot, ſo is the diſtance run by the log to the true diſtance.

Ex. 1. Suppoſe a ſhip runs at the rate of 6¼ knots in half a minute, but, meaſuring the ſpace between knot and knot, I find it to be 56 feet; required the true rate of ſailing.—As 50 : 56 :: 6·25 : 7 miles, the true diſtance ſailed in an hour.

Ex. 2. Suppoſe a ſhip runs at the rate of 6½ knots in half a minute, but, meaſuring the ſpace between knot and knot, I find it to be only 44 feet; required the true rate of ſailing.—As 50 : 44 :: 6·5 : 5·72 miles, the true diſtance ſailed in an hour.

III. When both the log-line and glaſs are faulty. Multiply thrice the meaſured length of a knot by the diſtance run by the log; the product divided by 5 times the meaſured time of the glaſs will give the true diſtance run.

Ex. Suppoſe a ſhip runs 5 knots of a log-line of 45 feet to a knot, while a glaſs of 25 ſeconds is running out; what is the true rate of ſailing?

The meaſured length of a knot - - -	45
Multiplied by - - - - - - -	3
Gives thrice the meaſured length of a knot	135
Which multiplied by the diſtance run per log	5
Product	675

And, dividing the product by 5 times the time the glaſs runs, that is, 5 × 25 = 125, the quotient is 5·4, the number of miles the ſhip runs per hour.

This rule is only a compound of the two former ſimple ones, which is contracted a little.

When the glaſs is faulty, the log-line may be divided as in the annexed Table, ſhowing the length of the knots of the log-line of different glaſſes.

Second of Glaſs.	Length of Knots in Feet.
24	40·0
25	41·8
26	43·4
27	45·0
28	46·8
29	48·4
30	50·0
31	51·8
32	53·4
33	55·0
34	56·8
35	58·4
36	60·0

Of the VARIATION of the COMPASS.

The variation of the compaſs is an arch of the horizon contained between the meridian of the place and the magnetic meridian, and is either eaſt or weſt; or it is the number of degrees, &c. the needle's point ſtands from the true north or ſouth points of the horizon, reckoned to the eaſtward or weſtward, and is readily found from the ſun's amplitude or azimuth.

To find the true Amplitude.

The ſun's *true amplitude* is an arch of the horizon, comprehended between the true eaſt or weſt points thereof, and the centre of the ſun at its riſing or ſetting; or it is the number of degrees, &c. the ſun riſes or ſets to the northward or ſouthward of the eaſt or weſt point of the horizon.

The ſun's *magnetic amplitude* is the number of degrees, &c. the centre is northward or ſouthward of the eaſt or weſt points of the compaſs at his riſing or ſetting, and is found with an azimuth-compaſs in the following manner; Having placed the azimuth-compaſs in a convenient part of the ſhip, look directly through the ſight-vanes at the ſun's centre; and, when the ſun's lower edge juſt touches the horizon, ſtop the card, by a ſtop which is placed on the compaſs for that purpoſe; then the quantity of degrees and minutes contained between the eaſt or weſt, and the north or ſouth, points of the compaſs, will be the magnetic amplitude.

The *true amplitude* is found either by inſpection in the Tables of the Sun's Amplitude, or by calculation as follows:

Rule. As the ſine compl. of the lat. or ſec. leſs radius
Is to radius,
So is the ſine of the ſun's or ſtar's declination
To the ſine of the true amplitude;
which is always of the ſame name with the declination, whether north or ſouth.

Ex. Suppoſe the ſun's declination to be 10° 43′ S. in lat. 51° 32′ N. I demand the true amplitude.

As ſine com. lat. 51° 32′	-	9·79383
Is to radius	- - - -	10·00000
So is ſi. ſun's dec. 10° 43′ S.	-	9·26940
To ſine of true amp. 17° 24′	-	9·47557

Or thus:

Lat. 51° 32′ N. ſecant	- -	0·20617
Decl. 10° 40′ S. log. ſine	- -	9·26940
True amplitude, 17° 24′ S. =	-	9·47557

To find the true Azimuth.

The *true azimuth* is an arch of the horizon contained between the meridian of the place and the azimuth-circle paſſing through the centre of the ſun or ſtar at the time of obſervation; or it is the true diſtance of the ſun or ſtar from the true north or ſouth points of the compaſs.

The *magnetic azimuth* is an arch of the horizon contained between the magnetic meridian and the azimuth-circle paſſing through the centre of the ſun or ſtar when obſerved; or it is the apparent diſtance of the ſun or ſtar from the north or ſouth points of the compaſs, either in the forenoon or in the afternoon, when they are 5°, 10°, 15°, &c. above the horizon; and, the leſs the altitude is, the more exact you may perform the obſervation. The magnetic azimuth is found by the compaſs in the following manner: Place the compaſs in a convenient part of the ſhip; then move it ſo that the ſights may be directed to the ſun's centre; and the ſhadow of the ſtring will fall directly on the line marked on the plane which joins the ſights; then the degree, &c. in the arch intercepted between the end of the index and north point of the card, will give the magnetic azimuth required. If the ſun does not ſhine enough to give a ſtrong ſhadow, look through one of the ſights, and move the compaſs till one of the ſtrings cuts the ſun's centre; and then the intercepted arch, as before, ſhows the ſun's azimuth, and the like of the ſtar's. When there is a rough ſea, the obſervation is beſt made by two perſons; and, if the card vibrates much, take the middle degree between the limits which the vibration reaches. When the azimuth is obſerved, the altitude of the object muſt be obſerved at the ſame time.

Having the latitude of the place of obſervation, and the ſun or ſtar's declination with the true altitude at the time of obſervation, the *true azimuth* is found as follows:

Rule. From the half ſum of the complement of the latitude, the complement of the altitude, and the ſun or ſtar's polar diſtance, ſubtract the polar diſtance, noting the half ſum and the remainder. Then add together
The log. ſine of the Lat. co ar = co ſec. leſs rad. or
complement of the Alt. co ar = co ſec. indexes,
The log. ſine of the half ſum,
And the log. ſine of the remainder, into one ſum.
Half the ſum of theſe four logarithms will give the log. co-ſine of half the true azimuth, which, being doubled, gives the true azimuth, reckoned from the north in north latitude, and from the ſouth in ſouth latitude.

The polar diſtance of the ſun or ſtar is their diſtance from the neareſt, or elevated, pole; and, if the latitude of the place and the declination of the ſun or ſtar be both north or both ſouth, then the complement of the declination is the polar diſtance; but, if the latitude and declination be one north and the other ſouth, the declination added to 90° gives the polar diſtance.

Ex. In latitude 51° 32′ N. the ſun's altitude was obſerved to be 39° 28′, his declination being then 16° 37′ N. Required the true azimuth.

	90° 00′		90° 00′		90° 00′
Lat.	51 32	Alt.	39 28	Dec.	16 37
		Com. Alt.	50 32	Pol. diſt.	73 23

Co. lat.	38	28	Sine co ar =	Co-ſecant	0·20617
Co. alt.	50	32	Sine co ar =	leſs rad.	0·11239
Pol. diſt.	73	23			
Sum	162	23			
½ Sum	81	11	Sine		9·99484
Pol. diſt.	73	23			
Rem.	7	48	Sine		9·13265
					2)19·44603
Log. co-ſi. of ½ the azimuth =	58°	6			9·72301
		2			
True azimuth -	116	12	from the north.		

Of the TIDES.

The theory of the TIDES will be farther illuſtrated under that article. In this place, therefore, we ſhall only explain the method of calculating the time of high-water at a given place.

As the tides depend upon the joint action of the ſun and moon, and therefore upon the diſtance of theſe objects from the earth and from each other; and as, in the method generally employed to find the time of high water, whether by the mean time of new moon, or by the epacts, or tables deduced therefrom, the moon is ſuppoſed to be the ſole agent, and to have an uniform motion in the periphery of a circle, whoſe centre is that of the earth; it is hence obvious that method cannot be accurate, and by obſervation the error is ſometimes found to exceed two hours. That method is therefore rejected, and another given, in which the error will ſeldom exceed a few minutes, unleſs the tides are greatly influenced by the winds.

Prob. I. To reduce the times of the moon's phaſes, as given in the Nautical Almanac, to the meridian of a known place.

Rule. To the time of the propoſed phaſe, as given in the Nautical Almanac, apply the longitude of the place in time, by addition or ſubtraction, according as it is eaſt or weſt, and it will give the time of the phaſe at the given place.

Ex. 1. Required the time of new moon at Saloniki in May 1793?

Time of new moon per Naut. Alm. -	9d	15h	31′
Longitude of Saloniki in time -	0	1	33 E.
Time of new moon required, in May	9	17	4

Ex. 2. What is the time of the laſt quarter of the moon at Reſolution Bay in October 1793?

Time of laſt quarter per Naut. Alm.	26d	5h	47′
Longitude in time - - - - -	0	9	17 W.
Time at Reſolution Bay - -	25	20	30, or

26th day at 8h 30′ A.M.

Prob. II. To find the time of high-water at a known place.

Rule. In the Nautical Almanac ſeek in the given month, or in that immediately preceding or following it, for the time of that phaſe which happens neareſt to the given day. Reduce the time of this phaſe to the meridian of the given place by Prob. I. and take the difference between the reduced time and the noon of the given day.

Find the equation anſwering to this difference in the following Table; which, applied to the time of high-water on the day of new or full moon at the given place, according as the table directs, will give the approximate time of high-water in the afternoon.

Now, take the interval between the reduced time of the phaſe and the approximate time of high-water; find the correſponding equation, which, applied as before to the ſyzigy-time of high-water, will give the time of the afternoon high-water.

If the time of the morning high-water is required, increaſe the laſt interval by 12 hours if the given day falls before the phaſe, or diminiſh it by 12 hours when after that phaſe; and the equation to this time, applied to the ſyzigy-time, gives the morning-time of high-water.

Ex. Required the morning and afternoon times of high-water at Leith, 11th December, 1793?

Neareſt phaſe to 11th Dec. is 1ſt quarter	9^d	20^h	$29'$
Longitude of Leith in time -	—0	0	13
Time at Leith of 1ſt quarter - -	9	20	16
Given day - - - - -	11	0	0
Difference - - - - - -	1	3	44
Time of H. W. at Leith-pier on ſyzigy	0	2	20
Equat. from Tab. to $1^d\ 3^h\ 44'$ -	+0	6	32
Approximate time of high-water -	11	8	52
Reduced time of 1ſt quarter -	9	20	16
Interval - - - - - -	1	12	36
Time of high-water at Leith on ſyzigy		2	20
Equat. from the Tab. to $1^d\ 12^h\ 36'$ -		7	0
Time of high-water at Leith - -		9	20 P.M.
Time of H. W. at Leith at full & change		2	20
Equat. to $1^d\ 12^h\ 36' - 12^h = 1^d\ 0^h\ 36'$		6	22
High-water at Leith, Dec. 11th, at -		8	42 A.M.

Table of Correction to be applied to the Time of High-water at Full and Change of the Moon, to find the Time of High-water on any other Day.

Interval of Time.	After New or Full Moon.	Before 1ſt or 3d Quarter.	After 1ſt or 3d Quarter.	Before New or Full Moon.
D. H.	H. M.	H. M.	H. M.	H. M.
0 0	+0 0	+5 6	+5 6	—0 0
0 6	0 8	4 51	5 22	0 9
0 12	0 17	4 37	5 40	0 18
0 18	0 26	4 23	6 0	0 27
1 0	0 36	4 9	6 20	0 37
1 6	0 45	3 56	6 39	0 47
1 12	0 54	3 44	6 58	0 57
1 18	1 2	3 32	7 18	1 7
2 0	1 11	3 21	7 37	1 17
2 6	1 19	3 11	7 56	1 28
2 12	1 28	3 1	8 14	1 39
2 18	1 37	2 50	8 31	1 51
3 0	1 46	2 40	8 47	2 4
3 6	1 54	2 30	9 2	2 16
3 12	2 3	2 21	9 17	2 29
3 18	2 12	2 12	9 31	2 44
4 0	2 21	2 3	9 44	2 58

Of Measuring a Ship's Run.

The method commonly uſed at ſea to find the diſtance ſailed in a given time is by means of the log-line and half-minute glaſs. It has been already obſerved, that the interval between each knot on the line ought to be 50 feet, in order to adapt it to a glaſs that runs 30 ſeconds. But, although the line and glaſs be at any time perfectly adjuſted to each other, yet, as the line ſhrinks after being wet, and as the weather has a conſiderable effect upon the glaſs, it will therefore be neceſſary to examine them from time to time; and the diſtance given by them muſt be corrected accordingly. The diſtance ſailed may, therefore, be affected by an error in the glaſs, or in the line, or in both. The true diſtance may, however, be found as follows:

Prob. I. The diſtance ſailed by the log, and the ſeconds run by the glaſs, being given, to find the true diſtance, the line being ſuppoſed right.

Rule. Multiply the diſtance given by the log by 30, and divide the product by the ſeconds run by the glaſs, the quotient will be the true diſtance.

Ex. 1. The hourly rate of ſailing by the log is nine knots, and the glaſs is found to run out in 35 ſeconds. Required the true rate of ſailing?

$9 \times 30 \div 35 = 7{\cdot}7$, true rate of ſailing.

Ex. 2. The diſtance ſailed by the log is 73 miles, and the glaſs runs out in 26 ſeconds. Sought the true diſtance?

$73 \times 30 \div 26 = 84{\cdot}2$, the true diſtance.

Prob. II. Given the diſtance ſailed by the log, and the meaſured interval between two adjacent knots on the line; to find the true diſtance, the glaſs running exactly 30 ſeconds.

Rule. Multiply twice the diſtance ſailed by the meaſured length of a knot, point off two figures to the right, and the remainder will be the true diſtance.

Ex. The hourly rate of ſailing by the log is five knots, and the interval between knot and knot meaſures 53 feet. Required the true rate of ſailing?

Meaſured interval = 53
Twice hourly rate = 10
True rate of ſailing = 5·30

Of PLANE SAILING.

Plane ſailing is the art of navigating a ſhip upon principles deduced from the notion of the earth's being an extended plane. On this ſuppoſition the meridians are eſteemed as parallel right lines. The parallels of latitude are at right angles to the meridians; the lengths of the degrees on the meridians, equator, and parallels of latitude, are every-where equal; and the degrees of longitude are reckoned on the parallels of latitude as well as on the equator.—In this ſailing four things are principally concerned, namely, the courſe, diſtance, difference of latitude, and departure.

The *courſe* is the angle contained between the meridian and the line deſcribed by the ſhip, and is uſually expreſſed in points of the compaſs.

The *diſtance* is the number of miles a ſhip has ſailed on a direct courſe in a given time.

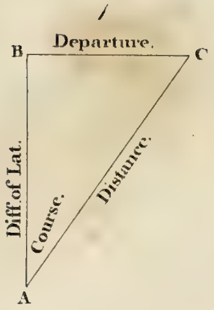
The *difference of latitude* is the portion of a meridian contained between the parallels of latitude ſailed from and come to; and is reckoned either north or ſouth, according as the courſe is in the northern or ſouthern hemiſphere.

The *departure* is the diſtance of the ſhip from the meridian of the place ſhe left, reckoned on a parallel of latitude. In this ſailing, the departure and difference of longitude are eſteemed equal.

In order to illuſtrate the above, let A (fig. 1.) repreſent the poſition of any given place, and AB the meridian paſſing through that place; alſo let AC repreſent the line deſcribed by a ſhip, and C the point arrived at. From C draw CB perpendicular to AB. Now, in the triangle ABC, the angle BAC repreſents the courſe, the ſide AC the

NAVIGATION.

1



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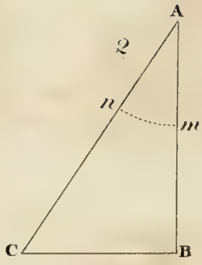

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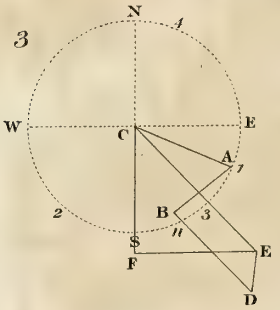

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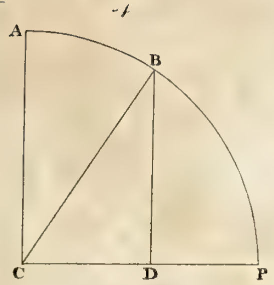

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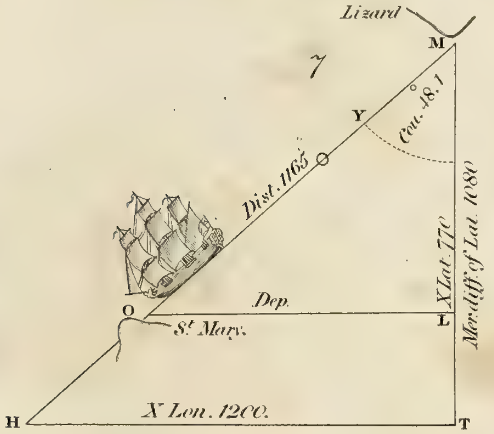

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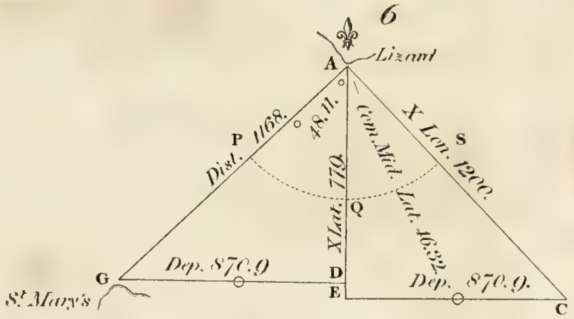

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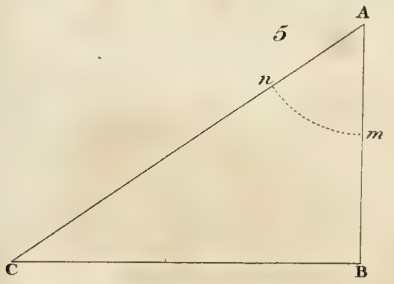

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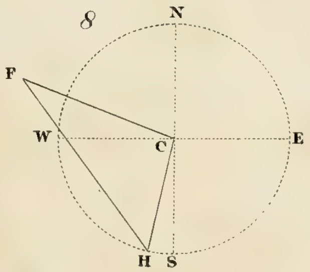

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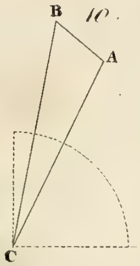

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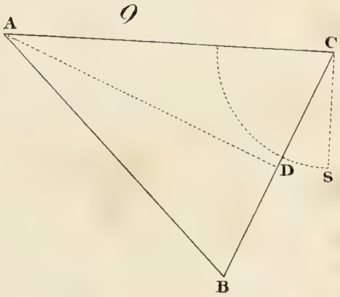

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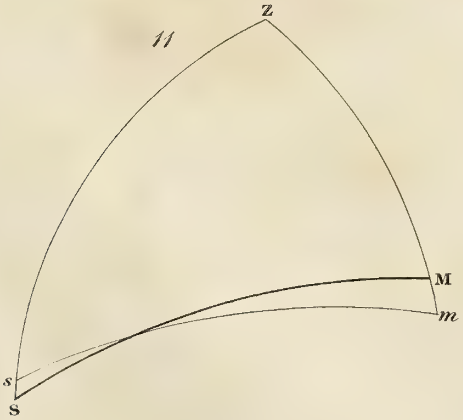

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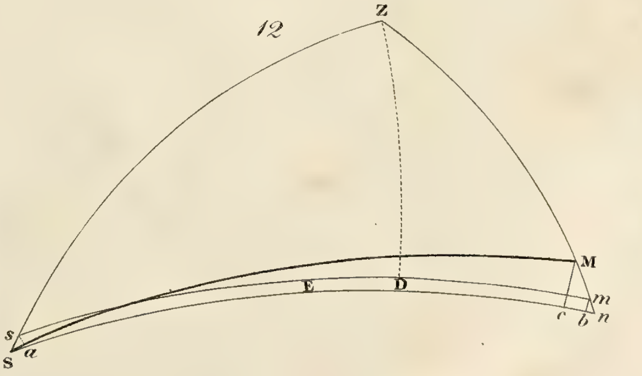


Various Methods of Sailing.

R. & E. Williamson, Sculpt.

Engraved for the Encyclopædia Londinensis, 1818.

the diſtance, AB the difference of latitude, and BC the departure.

In conſtructing a figure relating to a ſhip's courſe, let the upper part of what the figure is to be drawn on repreſent the *north*, then the lower part will be *ſouth*, the right-hand ſide *eaſt*, and the left-hand ſide *weſt*.

A north-and-ſouth line is to be drawn to repreſent the meridian of the place from which the ſhip ſailed; and the upper or lower part of this line, according as the courſe is ſoutherly or northerly, is to be marked as the poſition of that place. From this point as a centre, with the chord of 60°, an arch is to be deſcribed from the meridian towards the right or left, according as the courſe is eaſterly or weſterly; and the courſe, taken from the line of chords if given in degrees, but from the line of rhumbs if expreſſed in points of the compaſs, is to be laid upon this arch, beginning at the meridian. A line drawn through this point and that ſailed from, will repreſent the diſtance, which if given muſt be laid thereon, beginning at the point ſailed from. A line is to be drawn from the extremity of the diſtance perpendicular to the meridian; and hence the difference of latitude and departure will be obtained.

If the *difference of latitude* is given, it is to be laid upon the meridian, beginning at the point repreſenting the place the ſhip left; and a line drawn from the extremity of the difference of latitude perpendicular to the meridian, till it meets the diſtance produced, will limit the figure.

If the *departure* is given, it is to be laid off on a parallel, and a line drawn through its extremity will limit the diſtance. When either the diſtance and difference of latitude, diſtance and departure, or difference of latitude and departure, are given, the meaſure of each is to be taken from a ſcale of equal parts, and laid off on its reſpective line, and the extremities connected. Hence the figure will be formed.

PROB. I. Given the courſe and diſtance, to find the difference of latitude and departure.

Ex. A ſhip from St. Helena, in latitude 15° 55′ S. ſailed S.W. by S. 158 miles. Required the latitude come to, and departure?

By Conſtruction.—Draw the meridian AB (fig. 2.), and with the chord of 60° deſcribe the arch *m n*, and make it equal to the rhumb of 3 points, and through *n* draw AC equal to 158 miles; from C, draw CB perpendicular to AB; then AB applied to the ſcale from which AC was taken will be found to meaſure 131·4, and BC 87·8.

By Calculation.

To find the Difference of Latitude.

As radius - - - - - -		10·00000
is to the co-ſine of the courſe	3 points	9·91985
So is the diſtance - -	158 - -	2·19866
to the difference of latitude	131·4 -	2·11851

To find the Departure.

As radius - - - - - -		10·00000
is to the ſine of the courſe -	3 points -	9·74474
So is the diſtance - -	158 -	2·19866
to the departure - -	87·8 -	1·94340

OF TRAVERSE SAILING.

If a ſhip ſail upon two or more courſes in a given time, the irregular track ſhe deſcribes is called a *traverſe*; and to reſolve a traverſe, is the method of reducing theſe ſeveral courſes, and the diſtances run, into a ſingle courſe and diſtance. The method chiefly uſed for this purpoſe at ſea is by inſpection, which ſhall therefore be principally adhered to; and is as follows:

Make a table of a breadth and depth ſufficient to contain the ſeveral courſes, &c. This table is to be divided into ſix columns: the courſes are to be put in the firſt, and the correſponding diſtances in the ſecond, column; the third and fourth columns are to contain the differences of latitude, and the two laſt the departures.

Now, the ſeveral courſes and their correſponding diſtances being properly arranged in the table, find the difference of latitude and departure anſwering to each in the traverſe-table; (ſee Mackay on the Longitude, vol. ii.) remembering that the difference of latitude is to be put in a north or ſouth column, according as the courſe is in the northern or ſouthern hemiſphere; and that the departure is to be put in an eaſt column if the courſe is eaſterly, but in a weſt column if the courſe is weſterly. Obſerving, alſo, that the departure is leſs than the difference of latitude when the courſe is leſs than 4 points, or 45°; otherwiſe greater.

Add up the columns northing, ſouthing, eaſting, and weſting, and ſet down the ſum of each at its bottom; then the difference between the ſums of the north and ſouth columns will be the difference of latitude made good, of the ſame name with the greater; and the difference between the ſums of the eaſt and weſt columns is the departure made good, of the ſame name with the greater ſum.

Now ſeek in the traverſe-table till a difference of latitude and departure are found to agree as nearly as poſſible with thoſe above; then the diſtances will be found on the ſame line, and the courſe at the top or bottom of the page, according as the difference of latitude is greater or leſs than the departure.

In order to reſolve a traverſe by conſtruction, deſcribe a circle with a chord of 60°, in which draw two diameters at right triangles to each other, at whoſe extremities are to be marked the initials of the cardinal points, north being uppermoſt.

Lay off each courſe on the circumference, reckoned from its proper meridian; and from the centre to each point draw lines, which are to be marked with the proper number of the courſe.

On the firſt radius lay off the firſt diſtance from the centre; and through its extremity, and parallel to the ſecond radius, draw the ſecond diſtance of its proper length; through the extremity of the ſecond diſtance, and parallel to the third radius, drawn the third diſtance of its proper length; and thus proceed until all the diſtances are drawn.

A line drawn from the extremity of the laſt diſtance to the centre of the circle will repreſent the diſtance made good; and a line drawn from the ſame point perpendicular to the meridian, produced, if neceſſary, will repreſent the departure; and the portion of the meridian intercepted between the centre and departure will be the difference of latitude made good.

Ex. A ſhip from Fyal, in lat. 38° 32′ N. ſailed as follows: E.S.E. 163 miles, S.W.$\frac{1}{2}$W. 110 miles, S.E.$\frac{3}{4}$S. 180 miles, and N. by E. 68 miles. Required the latitude come to, the courſe, and diſtance made good?

By Inſpection.

Courſe.	Diſt.	Diff. of Latitude.		Departure.	
		N.	S.	E.	W.
E.S.E.	163	—	62·4	150·6	—
S.W.$\frac{1}{2}$W.	110	—	69·8	—	85·0
S.E.$\frac{3}{4}$S.	180	—	144·5	107·2	—
N.*b*E.	68	66·7	—	13·3	—
		66·7	276·7 66·7	271·1 85·0	85·0
S.41$\frac{1}{2}$E.	281		210·0	186·1	
Latitude left - - -				38° 32′ N.	
Difference of latitude - -				3 21 S.	
Latitude come to - -				35 11 N.	

By Conſtruction.

With the chord of 60° deſcribe the circle N.E. S.W. fig. 3. the centre of which repreſents the place the ſhip ſailed from: draw two diameters N.S. E.W. at right angles to each other; the one repreſenting the meridian, and the other the parallel of latitude of the place ſailed from. Take each courſe from the line of rhumbs, lay it off on the circumference from its proper meridian, and number it in order 1, 2, 3, 4. Upon the firſt rhumb C 1, lay off the firſt diſtance 163 miles from C to A; through it draw the ſecond diſtance A B parallel to C 2, and equal to 110 miles; through B draw B D equal to 180 miles, and parallel to C 3; and draw D E parallel to C 4, and equal to 68 miles. Now C E being joined, will repreſent the diſtance made good; which applied to the ſcale will meaſure 281 miles. The arch S *n*, which repreſents the courſe, being meaſured on the line of chords, will be found equal to 41½°. From E draw E F perpendicular to C S produced; then C F will be the difference of latitude, and F E the departure made good; which, applied to the ſcale, will be found to meaſure 210 and 186 miles reſpectively.

Of PARALLEL SAILING.

The figure of the earth is ſpherical, and the meridians gradually approach each other, and meet at the poles. The difference of longitude between any two places is the angle at the pole contained between the meridians of thoſe places; or it is the arch of the equator intercepted between the meridians of the given places; and the meridian diſtance between two places in the ſame parallel, is the arch thereof contained between their meridians. It hence follows, that the meridian diſtance, anſwering to the ſame difference of longitude, will be variable with the latitude of the parallel upon which it is reckoned; and the ſame difference of longitude will not anſwer to a given meridional diſtance when reckoned upon different parallels.

Parallel ſailing is, therefore, the method of finding the diſtance between two places lying in the ſame parallel whoſe longitudes are known; or, to find the difference of longitude anſwering to a given diſtance, run in an eaſt or weſt direction. This ſailing is particularly uſeful in making low or ſmall iſlands.

In order to illuſtrate the principles of parallel ſailing, let C A B P, fig. 4, repreſent a ſection of one-fourth part of the earth, the arch A B P being part of a meridian; C A the equatorial, and C P the polar ſemi-axis. Alſo, let B be the ſituation of any given place on the earth; and join B C, which will be equal to C A or C P. The arch A B, or angle A C B, is the meaſure of the latitude of the place B; and the arch B P, or angle B C P, is that of its complement. If B D be drawn from B perpendicular to C P, it will repreſent the coſine of latitude to the radius B C or C A.

Now, ſince circles and ſimilar portions of circles are in the direct ratio of their radii, therefore,

As radius
is to the coſine of latitude;
So is any given portion of the equator
to a ſimilar portion of the given parallel.

But the difference of longitude is an arch of the equator: and the diſtance between any two places under the ſame parallel is a ſimilar portion of that parallel.

Hence, R : Coſine latitude :: Diff. longitude : Diſtance.
And by inverſion,
Coſine latitude : R :: Diſtance : Diff. of longitude.
Alſo,
Diff. of longitude : Diſtance :: R : Coſ. latitude.

Prob. Given the latitude of a parallel, and the number of miles contained in a portion of the equator, to find the miles contained in a ſimilar portion of that parallel.

Ex. Required the number of miles contained in a degree of longitude in latitude 55° 58′?

By Conſtruction.

Draw the indefinite right line A B, fig. 5. make the angle B A C equal to the given latitude 55° 58′, and A C equal to the number of miles contained in a degree of longitude at the equator, namely 60; from C draw C B perpendicular to A B; and A B, being meaſured on the line of equal parts, will be found equal to 33·5, the miles required.

By Calculation.

As radius - - - -		10·00000
is to the coſine of latitude, -	55° 58′	9·74794
So is miles in a deg. of lon. at eq.	60	1·77815
to the miles in a deg. in the given par.	33·58	1·52609

Of MIDDLE-LATITUDE SAILING.

In plane ſailing the earth was conſidered as a plane, repreſenting a bowling-green, having the meridians parallel to each other, and conſequently the degrees of longitude equal in all places; but this cannot be true, as the earth is a globe or ſphere; for, as the meridians are circles on the terraqueous globe, meeting in the poles, it is obvious that any two of thoſe circles muſt recede more at greater diſtances from the poles; and at equal diſtances from each pole, or at the equator, the diſtance between the meridians is greateſt.

The true place of a ſhip at ſea depends upon its diſtance from the equator, and ſome noted meridian; and ſince the meridional diſtance, that is, the diſtance between any two meridians, varies in every latitude, it is therefore convenient that this diſtance ſhould be reckoned in a fixed latitude, and where the degrees are of the ſame magnitude with thoſe of the meridian, which can be no-where but on the equator, where 60 geographical miles make a degree.

The circumferences of all circles are in direct proportion to each other, as their radii; and, ſince the earth turns once round its axis in twenty-four hours, every point on its ſurface muſt deſcribe circles parallel to the equator; hence it follows, that the circumference of any parallel of latitude, in miles, is to the circumference of the equator, in miles, as the coſine of that latitude is to radius; and, that the breadth of a degree, in any parallel of latitude, is to the breadth of a degree upon the equator, as the ſine complement of that latitude is to radius.

By the laſt proportion was the following Table calculated, which ſhows the breadth of a degree of longitude in every latitude; and may be made to anſwer for any degrees or minutes by taking proportional parts.

Table of the Miles and Parts of a Mile in a Degree of Longitude at every Degree of Latitude.

D. L.	Miles.	D. L.	Miles.	D. L.	Miles.	D. L.	Miles.	D. L.	Miles.	D. L.	Miles.
1	59·99	16	57·67	31	51·43	46	41·68	61	29·09	76	14·51
2	59·97	17	57·36	32	50·88	47	40·92	62	28·17	77	13·50
3	59·92	18	57·06	33	50·32	48	40·15	63	27·24	78	12·48
4	59·86	19	56·73	34	49·74	49	39·36	64	26·30	79	11·45
5	59·77	20	56·38	35	49·15	50	38·57	65	25·36	80	10·42
6	59·67	21	56·01	36	48·54	51	37·76	66	24·41	81	9·38
7	59·56	22	55·63	37	47·92	52	36·94	67	23·45	82	8·35
8	59·44	23	55·23	38	47·28	53	36·11	68	22·48	83	7·32
9	59·26	24	54·81	39	46·62	54	35·26	69	21·50	84	6·28
10	59·08	25	54·38	40	45·95	55	34·41	70	20·52	85	5·23
11	58·89	26	53·93	41	45·28	56	33·55	71	19·54	86	4·18
12	58·68	27	53·46	42	44·95	57	32·68	72	18·54	87	3·14
13	58·46	28	52·97	43	43·88	58	31·79	73	17·54	88	2·09
14	58·22	29	52·47	44	43·16	59	30·90	74	16·53	89	1·05
15	57·95	30	51·96	45	42·43	60	30·00	75	15·52	90	0·00

Hence it follows, that,

As radius, or ſine 90°
is to the diff. of lon. in miles,
So is coſine of any paral. of lat.
to the diſt. in miles between any two mer. in that paral. of lat.
And,
As coſine of any paral. of lat.
is to the diſtance run in miles in that lat.
So is the radius, or ſine of 90°
to the diff. of lon. in miles.

Prob. The difference of longitude between two places, both in one parallel of latitude, being given, to find the diſtance between them.

Ex. Suppoſe a ſhip in the lat. 49° 30′ N. or S. ſails directly E. or W. until her diff. of lon. be 3° 30′, and the diſtance ſailed be required.

As rad. 90° - - -	10·00000
is to the diff. of lon. 210 -	2.32222
So is coſine lat. 49° 30′ -	9·81254
to the diſt. or dep. 136·4	2·13476

By the reverſe of the laſt Problem, Having the diſt. run in any parallel to find the diff. of lon.

Ex. Suppoſe a ſhip in lat. 49° 30′ N. or S. ſails directly E. or W. 136·4 miles, and her diff. of lon. be required.

As coſine of lat. 49° 30′ co. ar.	0·18746
is to the diſt. 136·4 - -	2·13481
So is rad. - - - -	10·00000
to the diff. of lon. 210 -	2·32227

In the laſt Problem, the ſhip is ſuppoſed to have ſailed due eaſt or weſt, in the ſame parallel of lat. but in her courſe ſhe generally croſſes ſeveral meridians and parallels, and then arrives at a different lat. from that ſhe left; and, as it is plain, by the foregoing Table, that the miles which make a degree in one parallel will not be the ſame as thoſe that make a degree in any other parallel, lying on the ſame ſide of the equator, therefore add both lats. together, and take half their ſum for a mean or mid. lat. which may be conceived as if the ſhip had ſailed in one lat. with which the diff. of lon. may be turned into dep. and dep. into diff. of lon. in the ſame manner as has been already ſhown; for it will be,

As radius
is to the difference of longitude,
So is the coſine of the mid. lat.
to the departure.
And,
As the coſine of the mid. lat.
is to the departure,
So is radius
to the difference of longitude.

Ex. Required the bearing and diſt. between the Lizard, in lat. 49° 57′ N. lon. 5° 12′ W. and the Iſland of St. Mary, one of the Weſtern Iſlands, in lat. 36° 51′ N. and lon. 25° 12′ W.

Lizard's lat.	49° 57′ N.		49° 57′	lon. 5° 12′ W.
St. Mary's lat.	36 58 N.		36 58	lon. 25 12 W.
	12 59	Sum 2)	86 55	20 0
	60			60
		Mid. lat.	43 28	
Diff. in miles	779		90 00	1200 diff. lon.
		Co-mid. lat.	46 32	

By Projection.

In fig. 6. draw the mer. A E, with the chord of 60 deſcribe the arch P S; upon which ſet off 46° 32′, the comp. of mid. lat. from Q to S; through S draw the line AC=1200, the diff. of lon. let fall the perpendicular C E, which will be the dep. 870·9; upon A E ſet off A D 779, the diff. of lat. and upon D erect the perp. D G, and upon it ſet off the dep. 870·9. Then join G and A, and it is done; for G A will be the diſt. 1168 miles, and the angle G A D the cou. S. 48° 4′ W.

By Calculation.

To find the Departure.

As radius - - -	10·00000
is to diff. of lon. 1200 - -	3·07918
So is coſine mid. lat. 43° 28′ -	9·86080
to the dep. 870·9 - - -	2·93998

To find the Courſe.

As diff. of lat. 779 co. ar. -	7·10846
is to the radius tan. 45° -	10·00000
So is dep. 870·9 - - -	2·93998
to tang. of cou. 48° 11′ -	10·04844

Note. The courſe may be found without the departure, by middle-latitude ſailing, thus:

As the diff. of lat. 779 co. ar.	7·10846
is to the diff. lon. 1200 -	3·07918
So is coſine mid. lat. 43° 28′ -	9·86080
to tang. cou. 43° 11′ - -	10·04844

To find the Diſtance.

As ſine cou. 48° 11′ co. ar. -	0·12768
is to dep. 870·9 - -	2·93998
So is radius 90° - -	10·00000
to the diſt. 1168 - -	3·06766

OF MERCATOR's SAILING.

Plane ſailing, as has been before obſerved, ſuppoſes the earth and ſea to be in the form of a bowling-green, on which the meridians are parallel, and the degrees of latitude and longitude equal in all places; but the earth and ſea compoſe a round body, or globe, on which the degrees of latitude are equal in all places, and the degrees of longitude decreaſe from the equator in proportion to the ſine-complements of the latitude.

Though the meridians all meet at the poles, and the parallels to the equator continually decreaſe, and that in proportion to the coſines of their latitudes, yet in old ſea-charts the meridians were drawn parallel to each other, and, conſequently, the parallels of the latitude made equal to the equator, and ſo a degree of longitude on any parallel as large as a degree on the equator; alſo, in theſe charts, the degrees of latitude were ſtill repreſented (as they are in themſelves) equal to each other, and to thoſe of the equator; by theſe means the degrees of longitude being increaſed beyond their juſt proportion, and the more ſo the nearer they approached the poles, the degrees of latitude at the ſame time remaining the ſame; it is evident places muſt be very erroneouſly marked down upon thoſe charts, with reſpect to their latitude and longitude, and conſequently their bearings from one another muſt be very falſe.

To remedy this inconvenience, ſo as ſtill to keep the meridians parallel, it is plain we muſt lengthen the degrees of latitude in the ſame proportion as thoſe of longitude are, that ſo the proportion in eaſting or weſting may be the ſame with that of northing or ſouthing; and, conſequently, the bearing of places from each other to be the ſame upon the chart as upon the globe itſelf.

The difficulty in conſtructing a true ſea-chart conſiſts in finding a proper manner of applying the ſurface of a globe to a plane; which Mr. Wright, an Engliſhman, by an ingenious improvement and application of what was called *Mercator's Chart*, happily accompliſhed. He conceived the ſurface of this globe to ſwell like a bladder while it is blowing up from the equator towards the poles, proportionally in latitude as it does in longitude, until every part of its ſurface meets that of a concave cylinder impreſſed on it, whoſe diameter was equal to the globe's diameter. The equator being thus confined, the parts towards the poles muſt be extended, both in latitude and longitude, to fill up the cylinder, or figure in the form of a rolling-ſtone, and impreſs on its concave ſurface the lines drawn on the ſurface of the globe. This cylinder, being cut on one of the meridians, from north to ſouth, and laid open, would repreſent a true ſea-chart, the parts of which bear the ſame proportion to one another as the correſponding parts of the globe do; and on which all the lines will be right lines; having every parallel of latitude on the globe increaſed till it is equal to the equator; and ſo the diſtance of the meridians in theſe parallels will become equal to their diſtance at the equator; conſequently, the meridians on the chart are expreſſed by parallel right lines. Alſo the meridians being lengthened as the parallels are increaſed, every degree of latitude is lengthened in the ſame proportion as the degrees of longitude are increaſed; therefore, the diſtance of the parallels of latitude grows wider and wider as they approach the poles. See the article Geography, Plate IV.

In 1599, Wright publiſhed the Principles of the True Sea-Chart, and how to conſtruct it on the following principles: viz. That the diſtance between any two meridians at the equator is in proportion to their diſtance in any parallel of latitude, as the radius is to the coſine of that latitude; that any part of a parallel of latitude is to a like part of the meridian as the radius is to the ſecant of that parallel; and, that the diſtance of any parallel of latitude from the equator is equal to the ſum of the ſecants of all the arches between the equator and that parallel.

From theſe principles, Mr. Wright ſet about forming a Table, by the continual additions of ſecants, of all the parallels of latitude, beginning with one minute, which he made radius, and thereto adding the ſecond parallel of 2 minutes, and to the ſum of theſe two the ſecant of 3 minutes, &c. The Table thus formed is that which is commonly called the Table of Meridional Parts, by means of which a true nautical chart may be conſtructed, called Mercator's Chart, and all the caſes in Wright's, commonly called Mercator's Sailing, conſtructed and calculated.

As this Table (ſee Moore's Pract. Nav. Tab. VI.) contains the meridional parts for every degree and minute of the quadrant, from the equator to the poles, it will be eaſy to find the meridional parts correſponding to any parallel of latitude.

Ex. Required the meridional parts correſponding to the latitude 33° 45′?—Look in the top of the Table for 33°, and in the right or left hand columns, under the degree 33, and oppoſite the minute 45, ſtands 2153, the meridional parts belonging to 33° 45′.

When the given latitudes are both north or both ſouth, the meridional difference of latitude is found by ſubtracting the meridional parts of the leſs latitude from thoſe of the greater.

Ex. 2. Required the meridional difference of latitude between the Lizard, in latitude 49° 57′ N. and the Iſland of St. Mary's, in latitude 36° 58′ N.?

The Lizard's latitude	49° 57′ N.	Meridional parts	3470
St. Mary's latitude	36 58 N.	Meridional parts	2390
		Meridional difference of latitude	1080

When the latitudes are one north and the other ſouth, the meridional difference of latitude is found by adding the meridional parts correſponding to both the latitudes together.

Ex. 3. Required the meridional difference of latitude between Cape Verd, in latitude 14° 46′ N. and the Cape of Good Hope, in latitude 34° 29′ S.

Cape Verd's latitude	14° 46′ N.	Meridional parts	896
Cape of Good Hope's	34 29 S.	Meridional parts	2207
		Meridional difference of latitude	3103

The ſeveral caſes in Mercator's ſailing are worked by geometry, trigonometry, Gunter's ſcale, and the Tables of Difference of Latitude and Departure, exactly in the ſame manner as thoſe in plane ſailing, by only conſidering the meridional difference of latitude as if it were the proper difference of latitude, and the difference of longitude as the departure; for it is no more than enlarging the proper difference of latitude, ſo as to be equal to the meridional difference of latitude; then will the difference of longitude bear the ſame proportion to the departure, that the meridional difference of latitude does to the proper difference of latitude; for, in figure 7, (which is the firſt caſe in Mercator's ſailing,) let MT repreſent the meridional, and ML the proper difference of latitude, TH the difference of longitude, LO the departure, MO the diſtance, and the angle TMH, or LMO, the courſe; then will ML be in proportion to LO, as MT is to TH; and the contrary.

Wherefore, as the proper difference of latitude is to the departure, ſo is the meridional difference of latitude to the difference of longitude; and as the meridional difference of latitude is to the difference of longitude, ſo is the proper difference of latitude to the departure.

Since lengthening or ſhortening the ſides of a triangle does not alter the angles, the departure may be reduced into difference of longitude, and the difference of longitude into departure.

In all the caſes (ſave the firſt) in Mercator's ſailing, the courſe, diſtance, difference of latitude, and departure, are found in the ſame manner as thoſe in plane ſailing; and then the difference of longitude may be found by either of the following proportions, viz.

By making the enlarged Diſtance MH radius, it will be
As the coſine of the courſe
is to the merid. diff. of latitude,
So is the ſine of the courſe
to the difference of longitude;
Or,
By making meridional Difference of Lat. MT radius, it will be
As radius
is to the merid. diff. of latitude,
So is the tangent of the courſe
to the difference of longitude.
But in the firſt Caſe, it will be
As the merid. diff. of lat. MT
is to radius
So is the diff. of longitude TH
to the tangent of the courſe;
And
As radius
is to the proper diff. of lat. ML,
So is the ſecant of the courſe
to the diſtance MO.

Or, when the courſe is found, you may ſay, As the coſine of courſe is to the proper difference of latitude, ſo is radius to the diſtance.

Prob. The latitudes and longitudes of two places given, to find the direct courſe and diſtance between them.

Ex. Required the bearing and diſtance between the Lizard, in latitude 49° 57′ N. longitude 5° 12′ W. and the Iſland of St. Mary, one of the Weſtern Iſlands, in latitude 36° 58′ N. and lon. 25° 12′ W.

Liz. lat. 49° 57′ N. Meridional parts 3470 lon. 5° 12′ W.
St. Mary's 36 58 N. Meridional parts 2390 lon. 25 12 W.

Dif. of lat. 12 59=779 Mer. dif. lat. 1080 dif. 20·00=1200
60 60

779 miles Diff. lon. 1200 miles.

By Projection.—In the ſame fig. 7. draw the meridional MT=1080, the mer. difference of lat. and ML=779, the proper difference of lat. perp. to MT, draw TH and LO;

make T H 1200 miles, the diff. of lon. join H and M; then will the angle T M H be the cou. S. 41° 01′ W. and O M the diſt. 1165 miles.

By Calculation.

To find the Courſe, it will be,

As mer. diff. of lat. 1080, co. ar.	6·96658
is to rad. 90°	10·00000
So is the diff. of lon. 1200	3·07918
to tang. of cou. 48° 1′	10·04576

To find the Diſtance, it will be,

As coſine cou. 48·1 co. ar.	0·17463
is to p. diff. lat. 779	2·89154
So is rad.	0·00000
to the diſt. 1165	3·06617

Of OBLIQUE SAILING.

Oblique Sailing is the application of oblique-angled plane triangles to the ſolution of problems at ſea. This ſailing will be found particularly uſeful in going along ſhore, and in ſurveying coaſts and harbours, &c.

Ex. At 11h. A. M. the Girdle Neſs bore W.N.W, and at 2h. P. M. it bore N.W.*b*N. the courſe during the interval S.*b*W. five knots an hour. Required the diſtance of the ſhip from the Neſs at each ſtation?

By Conſtruction.—Deſcribe the circle N E S W, fig. 8. and draw the diameters N S, E W, at right angles to each other: from the centre C, which repreſents the firſt ſtation, draw the W.N.W. line C F; and from the ſame point draw C H, S.*b*W. and equal to 15 miles the diſtance ſailed. From H draw H F in a N.W.*b*N. direction, and the point F will repreſent the Girdle Neſs. Now the diſtances C F, H N, will meaſure 19·1, and 26·5 miles reſpectively.

By Calculation.—In the triangle F C H are given the diſtance C H 15 miles, the angle F C H equal to 9 points, the interval between the S.*b*W. and W.N.W points, and the angle C H F equal to 4 points, being the ſupplement of the angle contained between the S.*b*W. and N.W.*b*N. points; hence C F H is 3 points. To find the diſtances C F, H F.

To find the Diſtance C F.

As the ſine of C F H	3 points	9·74474
is to the ſine of C H F	4 points	9·84948
So is the diſtance C H 15 miles		1·17609
to the diſtance C F	19·07	1·28083

To find the Diſtance F H.

As the ſine of C F H	3 points	9·74474
is to the ſine of F C H	points	9·99157
So is the diſtance C H	15 miles	1·17609
to the diſtance F H	26·48	1·42292

Of WINDWARD SAILING.

Windward Sailing is when a ſhip, by reaſon of a contrary wind, is obliged to ſail on different tacks in order to gain her intended port; and the object of this ſailing is to find the proper courſe and diſtance to be run on each tack.

Ex. A ſhip is bound to a port 48 miles directly to windward, the wind being S.S.W. which it is intended to reach on two boards; and the ſhip can lie within ſix points of the wind. Required the courſe and diſtance on each tack?

By Conſtruction.—Draw the S.S.W. line C B, fig. 9. equal to 48 miles. Make the angles A C B, A B C, each equal to 6 points. Hence the firſt courſe will be W. and the ſecond S.E. alſo the diſtance C A, or A B, applied to the ſcale, will meaſure 62⅞ miles, the diſtance to be ſailed on each board.

By Calculation.—From A draw A D perpendicular to B C; then in the triangle A D C are given C D, equal to 24 miles; and the angle A C D, equal to 6 points: to find the diſtance A C:

As radius		10·00000
is to the ſecant of C	6 points	10·41716
So is C D	24 miles	1·38021
to C A	62·7	1·79737

Of CURRENT-SAILING.

The computations in the preceding ſections have been performed upon the aſſumption that the water has no motion. This may no doubt anſwer tolerably well in thoſe places where the ebbings and flowings are regular, as then the effect of the tide will be nearly counter-balanced. But, in places where there is a conſtant current or ſetting of the ſea towards the ſame point, an allowance for the change of the ſhip's place ariſing therefrom muſt be made; and the method of reſolving theſe problems, in which the effect of a current, or heave of the ſea, is taken into conſideration, is called *current-ſailing*.

In a calm, it is evident a ſhip will be carried in the direction and with the velocity of the current. Hence, if a ſhip ſails in the direction of the current, her rate will be augmented by the rate of the current; but, if ſailing directly againſt it, the diſtance made good will be equal to the difference between the ſhip's rate as given by the log and that of the current. And the abſolute motion of the ſhip will be a-head, if her rate exceeds that of the current; but, if leſs, the ſhip will make ſtern-way. If the ſhip's courſe be oblique to the current, the diſtance made good in a given time will be repreſented by the third ſide of a triangle, whereof the diſtance given by the log, and the drift of the current in the ſame time, are the other ſides; and the true courſe will be the angle contained between the meridian and the line actually deſcribed by the ſhip.

Ex. A ſhip ſailed N.N.E. at the rate of 8 knots an hour, during 18 hours, in a current ſetting N.W.*b*W. 2½ miles an hour. Required the courſe and diſtance made good?

By Conſtruction.—Draw the N.N.E. line C A, fig. 10. equal to 18×8=144 miles; and from A draw A B parallel to the N.W.*b*W. rhumb, and equal to 18×2½=45 miles; now B C being joined will be the diſtance, and N C B the courſe. The firſt of theſe will meaſure 159 miles, and the ſecond 6° 23′.

By Calculation.—In the triangle A C B are given AC=144 miles, AB=45 miles, and the angle CAB=9 points; to find B A C and B C.

To find the Courſe made good.

Diſt. A C	144	Ang. BAC=9 pts.=	101° 15′
Diſt. A B	45	B+C	78 45
Sum	189	$\frac{B+C}{2}$	39 22½
Diff.	99		

As the ſum of the ſides	189	2·27646
is to the difference of the ſides	99	1·99563
So is the tan. of half ſum angles	39 22½	9·91417
to the tan. of half diff. angles	23 15½	9·63334
Angle A C B	16 7	
Angle A C N	22 30	
Courſe made good	N 6 23	

To find the Diſtance.

As the ſine of A C B	16° 7′	9·44341
is to the ſine of C A B	101 15	9·99157
So is the diſtance A B	45	1·65321
to the diſtance C B	159	2·20137

Of

OF TAKING OBSERVATIONS AT SEA.

It is well known, that, although the courſe and diſtance between any two places, whoſe latitude and longitude are accurately ſettled, may be aſcertained with the greateſt preciſion, yet a ſhip at ſea is ſo liable to be put out of the proper courſe, by ſtorms, contrary winds, currents, &c. that, after all reaſonable allowance is made for the errors ariſing from theſe cauſes, the place of the ſhip by account is very ſeldom found to agree with its real place, or that deduced from obſervation, the difference frequently amounting to ſeveral degrees. It is therefore obvious that the ſhip may be expoſed to the greateſt hazard when the ſeamen think themſelves moſt ſecure; and from this it appears that there is an abſolute neceſſity of *taking obſervations*, whenever an opportunity offers, for obtaining, with accuracy, the true place of the ſhip.

At ſea, the latitude of a ſhip is eaſily deduced either from the meridian altitude of the ſun, or from that of a ſtar or planet, or from double, treble, &c. altitudes of any of theſe objects; but, with regard to the longitude, a more difficult operation becomes neceſſary. At land, indeed, the longitude of any place may be found with very little trouble by ſeveral methods, particularly by the eclipſes of Jupiter's ſatellites; and the longitude at ſea might be found by this method with the ſame facility, provided a teleſcope poſſeſſed of a ſufficient magnifying power could be employed for that purpoſe. But this is found to be extremely difficult, by reaſon of the perpetual agitation of the ſea. However, attempts to render a teleſcope manageable at ſea have been made by Dr. Irwin and others; and an inſtrument for this purpoſe is deſcribed in Rutledge's Théorie Aſtronomique. But a teleſcope with a ſmall magnifying power may be uſed at ſea in moderate weather; and, ſince, even with ſuch an inſtrument, ſolar eclipſes and occultations may often be obſerved with tolerable accuracy, and conſequently the longitude may be aſcertained from ſuch obſervations, the opportunities of making them ought never to be neglected when the ſhip is either out of ſight of land, or near an unknown coaſt. The calculations, indeed, which neceſſarily attend theſe methods, ſeem to be conſidered as too laborious and difficult for the generality of ſeamen; and, therefore, the method by obſerving the diſtance between the moon and the ſun, or a fixed ſtar, is now commonly preferred, both on account of its ſuperior facility, and becauſe it can be practiſed at ſea almoſt as often as neceſſary. Yet, as even this method is attended with a calculation that is, by many navigators, thought troubleſome, various ways have been propoſed to ſhorten, as much as poſſible, the operations for reducing the apparent to the true diſtance; and it is now accordingly reduced to a tolerably ſimple computation. By this method the longitude may, in moſt caſes, be determined within half a degree, which at ſea is eſteemed no very great error; and, if the calculations are accurately performed, from the mean of ſeveral ſets of good obſervations, taken at ſhort intervals of time, the error will probably be greatly diminiſhed.

If a chronometer or time-keeper could be conſtructed, ſo as to go uniformly when placed in every different poſition, and under different degrees of heat, then would this method of finding the longitude at ſea be a moſt valuable acquiſition to the navigator. Indeed ſome of our ingenious countrymen have brought this art to a degree of perfection formerly unknown; and every perſon acquainted with the principles of watch-making muſt highly admire the accuracy of Harriſon's time-keeper. Thoſe made by Meſſrs. Arnold, Kendal, Earnſhaw, Barraud, &c. are alſo excellent; but it is to be hoped that inſtruments of this kind may be ſtill farther improved, and may be afforded much cheaper than at preſent; for the high price alone is a very great objection to them, and very much prevents their being more generally uſed. It is well known that every chronometer hitherto contrived is ſubject to irregularities; the ſmalleſt ſhock is found to affect them, and the rate of going is found to be altered by changes in the atmoſphere, even though provided with thermometer-pieces. Upon this and other accounts, therefore, their accuracy is very much to be ſuſpected; ſo that at preſent they are chiefly uſed for experiments, or to connect obſervations, for which purpoſe they certainly make a valuable appendage to a ſet of nautical inſtruments. See a deſcription of the moſt approved longitude time-pieces under the article HOROLOGY, vol. x. p. 287–364. and directions for the uſe of them, p. 364–367.

To find the APPARENT TIME, and thereby regulate the going of the Watch.

It is neceſſary here to premiſe, that there are three diviſions of time in uſe; the civil, the aſtronomical, and the nautical.

The *civil day* begins at midnight, and ends at the midnight following, being divided into two equal parts of twelve hours each; the firſt twelve being marked A. M. that is, *ante meridiem*, or before noon; the latter twelve P. M. that is, *poſt meridiem*, or afternoon. This diviſion of time is moſt generally uſed.

The *aſtronomical day*, ſo called from its being uſed by aſtronomers, begins at the noon of the civil day, and continues to the noon of the civil day following (the hours being counted in regular ſucceſſion from one to twenty-four), ſo that the firſt part of the aſtronomical day is the laſt part of the civil day: and the laſt part of the aſtronomical day includes the firſt part of the civil day following.

The *nautical day*, in uſe amongſt ſeamen, is, in one reſpect, the direct reverſe of the aſtronomical day, as it ends when the aſtronomical day begins. This it has in common with the civil day, that it is divided into two equal parts of twelve hours each, but the firſt twelve hours are marked P. M. and the latter twelve A. M. An example will beſt illuſtrate this. By the ſea-reckoning, Tueſday begins immediately after meridian on Monday; all occurrences happening from Monday noon to midnight, though the firſt part of Tueſday by the nautical reckoning, are marked as happening at ſuch an hour P. M. and all occurrences happening from midnight to Tueſday noon are marked as happening at ſuch an hour A. M. Thus it appears that the hours in the nautical day are regulated by the civil day, but the nautical day itſelf begins twelve hours before the civil day. From what has been ſaid, it will appear that the noon of the civil day, the beginning of the aſtronomical day, and the end of the nautical day, take place at the ſame time.

The different kinds of time are two, mean and apparent. *Mean time* is that ſhown by a clock or watch regulated to mean ſolar time. *Apparent time* is reckoned from the paſſage of the ſun over the meridian of any place. Mean and apparent time will ſometimes differ from each other near a quarter of an hour, owing to the irregularity of the earth in her orbit, or the variation in the inclination of her axis. This difference is called the *equation of time*, and is contained in page 2 in the Nautical Almanac. It is only requiſite to take notice of it in determining the longitude by a time-keeper, but not in any other nautical obſervation, as the calculations in the Nautical Almanac are adapted to apparent time.

To find the Apparent Time by equal Altitudes of the Sun.

Take the ſun's altitude at any convenient time in the forenoon, two, three, four, or five, hours diſtant from the meridian; ſet down the altitude with correſponding time by watch exactly; ſet the index to the ſame altitude, and wait till the ſun comes to that altitude in the afternoon; note the time by watch; half the ſum of theſe two times is the apparent time ſhown by the clock or watch, when the ſun was on the meridian of that place. But it muſt here be obſerved, that, if the change of declination be conſiderable during the elapſed time, it muſt be allowed for by adding the difference to, or ſubtracting it from, the ſecond altitude, according as it is increaſing or decreaſing. Leſt that an altitude, taken in the forenoon, cannot, by the interpoſition of the clouds, have a correſponding one in the afternoon, it is adviſeable to take ſeveral in the forenoon, in order to ſecure a correſponding one in the afternoon. And, if ſeveral altitudes can be taken on both ſides of the meridian, it will be beſt to find the noons for each pair, and the mean of all the noons thus found, for the true noon.

Ex. 1. June 20, 1818, ſuppoſe that at 8h. 40m. in the forenoon, and 3h. 16m. afternoon, by watch, the ſun had equal altitudes, and the going of the watch be required.

Add together	12 0
	8 40
	3 16
	2)23 56
½ gives noon per watch -	11 58
True noon - -	12 0
Watch ſlow - -	0 2

Ex. 2. March 17, 1818, ſuppoſe at 8h. 11m. forenoon, and at 3h. 58m. 32ſ. afternoon, you have equal altitudes of the ſun. Required the going of the watch.

The diſtance of the time from noon when the firſt alt. was taken, is 3h. 49m. and the daily decreaſe of decl. at this time is 23′ 41″=1421″, which multiplied by 1590, (half the number correſponding to 3h. 49m. in Moore, Tab. XVIII.) cut off four figures to the right hand, leaves 226″=3′ 46″. Hence the index of the quadrant muſt be ſet 3′ 46″ forward on the arch, to correſpond with the morn. alt. whence the watch will be found 4′ 46″ too faſt.

Here it is ſuppoſed that the ſhip is lying-to, or makes no way through the water; but, if ſhe is ſailing to or from the ſun, proper allowance muſt be made for her running during the elapſed time.

To find the Apparent Time by the Sun's Altitude.

Find the ſhip's latitude and longitude by account, at the time of obſervation, by carrying the reckoning forward to that time.

With a quadrant well adjuſted, take the altitude of the ſun's lower limb.

Take the difference between the ſemi-diameter and dip of the horizon, and add it to the obſerved altitude; the ſum will be the ſun's apparent altitude.

Take the difference between the ſun's refraction and parallax in altitude, and ſubtract it from the apparent altitude; the remainder will be the true altitude of the ſun's centre; hence the true zenith-diſtance.

Turn the ſhip's longitude into time, and either ſubtract it from, or add it to, the time per watch, according as it is eaſt or weſt; the ſum or difference will be the reduced or ſuppoſed time at the place of obſervation.

Look in the Nautical Almanac, page 2 of the month, for the ſun's declination on the noon immediately preceding and the noon immediately following the reduced time, and find their difference.

With half the reduced time take out (from Tab. XVIII. Moore) the number correſponding to the hours at top and minutes in the left-hand column, with which multiply the diff. of decl. cut off four figures from the right-hand of the product, the remainder is the correction to be added or ſubtracted according as the decl. is increaſing or decreaſing, the reſult is the decl. or reduced time at the ſhip; with this decl. find the polar diſtance; then add together the zen. diſt. co-lat. and polar diſt. into one ſum.

From half this ſum ſubtract the zenith-diſtance, noting the half-ſum and remainder; then add together

The log. co-ſecant of the comp. of the lat. } Rejecting
The log. co-ſecant of the polar diſtance, } their indices.
The log. ſine of the half-ſum, and
The log. ſine of the difference, into one ſum.

Find the log. ſine of half the ſum of the four logarithms, which being doubled, and brought into time, as before, will give the time from the midnight before the altitude was taken.

Ex. Suppoſe on the 7th May, 1818, at 5h. 30m. 32ſ. P.M. per watch, in lat. 39° 54′ N. and lon. 35° 30′ W. of Greenwich, by account, the altitude of the ſun's lower limb ſhould be found to be 15° 45′, the eye being 18 feet above the ſurface of the ſea, and the true apparent time when the obſervation was made were required?

Obſ. alt. ſun's l. l.	15° 45′ 0″	Lat. -	39° 54′ 0″
Sem. 15′ 52″ } Dif. Dip 4 4 }	+0 11 48	- -	90 0 0
		Co. lat. -	50 6 0
Ap. alt. ſun's l. l.	15 56 48		
Refr. 4′ 17″ } Dif. Par. 0 8 }	−0 3 9	Sun's decl. May 7th Ditto - 8th	16 46 53N 17 3 22N
Sun's true alt.	15 53 39 90 0 0	Diff. in 24 hours	0 16 28
Zenith diſt.	74 6 21	16′ 26″ × 3281 gives 324 =	0 5 24
		Sun's decl. 7th May	16 46 54
	H. M. S.		
Time at ſhip	5 30 32	True dec. for lon. and time	16 52 18
Lon. W. in time	+2 22 0		90 0 0
Reduced time	7 52 32	Polar diſt. -	73 7 42
Co. lat. -	50 6 0	Co. ſec. } - leſs rad. -	0·11511
Polar diſt. -	73 7 42	Co. ſec. } - -	0 01911
Zen. diſt.	74 6 21		
Sum -	2)197 20 3		
½ Sum -	98 40 1	Log. ſine - -	9·99501
Zen. diſt. -	74 6 21		
Remainder	24 33 40	Log. ſine - - -	9·61874
		Sum 4 log. -	2)19·74797
	41 34 10 2	log. co. ſi. ½ Horary angle	9·87398
			H. M. S.
Hour-angle	83 8 20	in time	5 32 33
		Time at ſhip per watch	5 30 32
		Watch ſlow -	0 2 1

Of finding the LONGITUDE *by the Moon's Diſtance from the Sun or a fixed Star, commonly called the* LUNAR OBSERVATIONS.

A variety of methods for diſcovering the longitude have at different times been brought forward, the moſt celebrated and practicable of which is that by means of meaſuring the angular diſtance of the moon from the ſun or a fixed ſtar. This method was originally propoſed by John Werner; but, owing to the imperfection of inſtruments for meaſuring the angular diſtance, and the inſufficient knowledge of the moon's true place, it could not, in his time, be brought to the degree of accuracy to which it is at preſent arrived.

Finding the difference of longitude between any two places may be reduced to the problem of finding the difference of time between two places. For, as it is evident that the ſun paſſes over a whole circle of the earth, or 360°, in 24 hours, it follows that the difference of the time between the noon of one place and another will always be the ſame proportional part of 24 hours as the difference of their longitude is of 360°: *and the difference between* *any two given inſtants of time will be in like proportion.* For, if an obſerver knew that, at the ſame inſtant that it was two o'clock in the afternoon under the meridian where he was, it was only mid-day at another place, it would be clear he was 30° to the eaſtward of the given place: ſince 24h : 2h :: 360° : 30°, and the longitude is eaſt, ſince the time at the place of obſervation is lateſt.

To aſcertain the difference of longitude between the firſt meridian and a given place, the angular diſtance of the moon from the ſun or a fixed ſtar is to be obſerved. For, as the diſtance of the moon from the ſun and ſeveral fixed ſtars eaſt and weſt of her is given in the Nautical Almanac for every three hours, calculated for the meridian of the Royal Obſervatory at Greenwich, it is clear that the diſtance between the ſame objects being obſerved at any other place, the time at Greenwich may be deduced therefrom, which, compared with the apparent time, points out the difference of time, and, conſequently, the difference of longitude between the two places.

Of the Methods of clearing the Apparent Diſtance between the Moon and the Sun, or a fixed Star, from the Effects of Refraction and Parallax.

Since the obſerved altitude of a celeſtial object is affected by two phyſical cauſes, the refraction and parallax, whoſe effects are produced in a vertical direction, it is therefore obvious that the obſerved diſtance between any two objects will be alſo affected by theſe cauſes. Indeed, with regard to the fixed ſtars, the parallax vaniſhes; and, therefore, theſe objects are affected by refraction only. But, in obſervations of the moon particularly, the effect of parallax is very ſenſible, upon account of its proximity to the earth. Therefore, by reaſon of the above cauſes, the true diſtance between the moon and any celeſtial object is, for the moſt part, conſiderably different from that obſerved.

Let Z, fig. 11, repreſent the zenith, *s* the apparent place of the ſun, and *m* that of the moon; the arch *sm* will, therefore, be the apparent diſtance between theſe objects. Alſo, ZS, ZM, being vertical circles, paſſing through the centres of the ſun and moon, the true and apparent places of theſe objects will be found therein.

Now, ſince the refraction is ever greater than the parallax of the ſun at the ſame altitude, the true place of the ſun will therefore be lower than the apparent place, which let be S; and, becauſe the moon's parallax, at any given altitude, is greater than the refraction at that altitude, its true place will, therefore, be higher than the apparent place, which let be M; hence SM will be the true diſtance.

The method of reducing the apparent to the true diſtance, or, in other words, that of clearing the apparent diſtance from the effects of refraction and parallax, being the moſt tedious part of the calculus for aſcertaining the longitude, when the calculation is performed by the common ſpherical analogies, many eminent aſtronomers and mathematicians have, therefore, given compendiums to facilitate the ſolution of this problem; among which are thoſe by the chevalier de Borda, the abbé de la Caille, Meſſrs. Delambre, Dunthorne, Elliot, Emerſon, Jeaurat, Krafft, De la Lande, Legendre, Lyons, Maſkelyne, Robertſon, Romme, Witchel, Vince, &c. but the largeſt and moſt elaborate work that has hitherto appeared for the purpoſe of correcting the apparent diſtance is the Cambridge Tables. Theſe tables were calculated by Meſſrs. Lyons, Parkinſon, and Williams, under the inſpection of Dr. Shepherd, Plumian Profeſſor of Aſtronomy at Cambridge, by the rule formerly given by Mr. Lyons in the firſt edition of the Requiſite Tables.

All the methods that have hitherto been given, for the purpoſe of reducing the apparent to the true diſtance, depend on one or other of the two following principles; of which the firſt (by Dr. Mackay) appears to be the moſt ſimple and accurate.

1. With the apparent zenith diſtances Z*m*, Z*s*, fig. 11. and the apparent diſtance between the objects *ms*, compute the vertical angle *m*Z*s*: with which, and the true zenith-diſtances, ZS, ZM, the true diſtance Z*m* may be found.

2. Let Z, fig. 12, be the zenith; Z*m*, Z*s*, the apparent zenith-diſtances of the moon and ſtar, and *sm* the apparent diſtance. Let S*s*, *mn*, be the refractions in altitude of theſe objects reſpectively. Join S*n*, and draw *sa*, *mb*, perpendicular thereto; and S*a*, *nb*, will be the effects of refraction; which, therefore, being applied to the apparent diſtance *sm*, will give S*n*, the diſtance corrected by refraction.

Again, let *n*M be the parallax of the moon in altitude; then SM, being joined, will be the true diſtance. From M draw M*c* perpendicular to S*n*, and *cn* will be the principal effect of parallax in diſtance; which, being applied to the diſtance corrected by refraction, will give the arch S*c*. Now, in the right-angled ſpherical triangle S*c*M, S*c* and M*c* being given, SM may be found, or rather the difference between SM and S*c* may be computed, which, being applied to S*c*, will give the true diſtance SM.

If the object with which the moon is compared be the ſun, another correction depending on the parallax of that object is neceſſary. This correction may be computed on the ſame principles as the effect of the moon's parallax.

The firſt of the following methods is, perhaps, as eaſy a ſolution of this problem as has hitherto appeared, eſpecially when the table of natural verſed ſines is uſed. The ſecond is another ſolution, which will be found extremely eaſy, by uſing the table of log. ſines; and the third and fourth methods are given, merely becauſe they may be performed entirely by natural verſed ſines. Theſe methods depend on the firſt general principle. The other methods are deduced from the ſecond general principle.

PROB. I. The Apparent Diſtance between the Moon and the Sun, or a fixed Star, together with the Altitude of each being given, to find the True Diſtance.

Method 1. Take the correction of the moon's altitude from Mackay, Tab. IX. to which add the correction of the ſun's altitude, or the refraction of the ſtar, from Mackay, Tabs. VI. VII. Now, this ſum added to, or ſubtracted from, the difference of the apparent altitudes, according as the moon is higher or lower than the ſun or ſtar, will give the difference of the true altitudes.

From the natural verſed ſine of the obſerved diſtance, ſubtract the natural verſed ſine of the difference of the apparent altitudes, and to the log. of the remainder add the log. from Tab. XLII. anſwering to the moon's apparent altitude and horizontal parallax, corrected by the number from Tab. XLIII. or XLIV. according as the diſtance between the moon and the ſun, or a fixed ſtar, is obſerved. Now, the natural number anſwering to the ſum of theſe two logs, being added to the natural verſed ſine of the difference of the two altitudes, will give the natural verſed ſine of the true diſtance.

Mr. Keith, in his Trigonometry, page 297, ſays, "Dr. Mackay's firſt method, page 112 of his Treatiſe, (firſt edition,) is the ſimpleſt I ever met with, where his Tables are uſed."

Ex. 1. Let the apparent diſtance between the centres of the ſun and moon be 81° 23′ 38″, the apparent altitude of the ſun 27° 43′, the apparent altitude of the moon 48° 22′, and the moon's horizontal parallax 58′ 45″. Required the true diſtance?

App. diſt.	=81° 23′ 38″	N.V.S.=850359	
Dif. app. alt.	=20 39 0	N.V.S.= 64248	
			Log. dif. 9.994623
Cor. ☽'s alt.	=+ 38 12	Dif.=786111	- log. 5.895484
☉'s alt.	=+ 1 40	N. No.=776438	- 5·890107
Dif. true alt.	=21 18 52	N.V.S.= 68401	
True diſtance,	81 4 26	N.V.S.=844839	

Ex. 2. Let the apparent diſtance between the centres of the ſun and moon be 72° 21′ 40″, the apparent altitude of the moon 19° 19′, that of the ſun 25° 16′, and the moon's horizontal parallax 56′ 32″. Required the true central diſtance?

App. diſt.	=72°21′40″	N.V.S.=696983	
Dif. app. alt. =	5 57 0	N.V.S.= 5387	
			Log. dif. 9·997814
Cor. ☽'s alt. =	— 50 39	Dif.=691596	- log. 5·839152
☉'s alt. =	— 1 52	N.No.=688123	- 5·837666
Dif. true alt. =	5 4 29	N.V.S.= 3920	
True diſt.	=72 3 50	N.V.S.=692043	

Method 2. To the ſum of the apparent altitudes of the objects add the correction of the moon's altitude, and ſubtract that of the ſun or ſtar, and half the aggregate will be half the ſum of the true altitudes.

To the apparent diſtance add the apparent altitudes of the centres of the ſun and moon; find the difference between half the ſum and the apparent diſtance.

Take the log. anſwering to the moon's apparent altitude and horizontal parallax, to which add the log. coſines of the above half-ſum and difference, reject 10 from the ſum of the index; theſe three logarithms and half the remainder will be the log. ſine of an arch.

Now add together the log. co-ſines of the ſum and difference of this arch, and half the ſum of the true altitudes; then will half the ſum of theſe two logarithms be the log. ſine of half the true diſtance.

Ex. Let the apparent diſtance of the ſun and moon's centres be 38° 45′ 40″, the apparent altitude of the moon's centre 29° 31′, that of the ſun's centre 35° 43′, and the moon's horizontal parallax 57′ 43″. Required the true diſtance.

		Sum of app. alts.		65°14′ 0″
		Correction ☽'s alt.		+ 48 33
		Correction ☉'s alt.		— 1 12
App. diſtance	=38°45′40″			
App. alt. ☽	=29 31 0	Sum of true alt.		66 1 21
App. alt. ☉	=35 43 0	Half ſum true alt.		33 0 40½
Sum -	103 59 40	Log. dif. -		9·996578
Half -	51 59 50	-	co-ſine	9·789369
Difference -	13 14 10	-	co-ſine	9·988307
Half ſum true alt.	33 0 40½	-	-	19·774254
Arch -	50 27 19½	-	ſine	9·887127
Sum -	83 28 0	-	co-ſine	9·056071
Difference	17 26 39	-	co-ſine	9·979553
				19·035624
	19 14 11	-	ſine	9·517812
True diſtance	38 28 22			

Prob. II. To find the Apparent Time at Greenwich, anſwering to a given Diſtance between the Moon and the Sun, or one of the Stars uſed in the Nautical Almanac.

Rule. If the given diſtance is found in the Nautical Almanac in either of pages viii. ix. x. or xi. of the month, oppoſite to the given day, or to that which immediately precedes or follows it, the time is found at the top of the page. But, if this diſtance is not found exactly in the ephemeris, then ſubtract the prop. log. of the difference between the two contiguous diſtances, one of which, being greater and the other leſs than the given diſtance, from the prop. log. of the difference between the given and preceding diſtances, the remainder will be the prop. log. of the exceſs of the time above that anſwering to the preceding diſtance; hence the apparent time is known. But, in ſtrictneſs, this proportional part ought to be corrected by the equation of ſecond difference.

Ex. ♀ December 7, 1804, the true diſtance between the centres of the ſun and moon was 59° 43′ 8″. Required the apparent time at Greenwich.

Given diſtance	=59°43′ 8″		
		Dif.=0°28′22″	P.Log.=8024
Diſt. at iii. hours	=59 14 46		
		Dif.=1 25 27	P.Log.=3236
Diſt. at vi. hours	=60 40 13		
Exceſs - -		0 59 46	P.Log. 4788
Preceding time -		3 0 0	
Apparent time at Greenwich		3 59 46	

Prob. III. The Latitude of a Place, and its Longitude by Account, being given, together with the Diſtance between, and the Altitudes of the Moon and the Sun, or one of the Stars in the Nautical Almanac; to find the correct Longitude of the Place of Obſervation.

Rule. Reduce the eſtimate time of obſervation to the meridian of Greenwich by the Nautical Almanac. To this time take from the Nautical Almanac, page vii. of the month, the moon's horizontal parallax and ſemi-diameter. Increaſe the ſemi-diameter by the augmentation anſwering to the moon's altitude.

Find the apparent and true altitudes of each object's centre, and the apparent central diſtance, with which let the true diſtance be found by any of the methods given for that purpoſe; and find the apparent time at Greenwich anſwering thereto by the laſt Problem.

If the ſun or ſtar be at a proper diſtance from the meridian, when the diſtance was obſerved, compute the apparent time at the ſhip. If not, the error of the watch may be found from obſervations of the altitudes of the ſun or ſtars, taken either before or after that of the diſtance. Or, the apparent time may be inferred from the moon's altitude, taken at the ſame time with the diſtance.

The difference between the apparent times of obſervation at the ſhip and Greenwich will be the longitude of the ſhip in time, which is eaſt or weſt, according as the time at the ſhip is later or earlier than the Greenwich time.

The only purpoſe to which the longitude by account is applied is to reduce the time at the ſhip to the meridian of Greenwich, in order to take the moon's ſemi-diameter and horizontal parallax from the Nautical Almanac, agreeable to this time; and it is evident that, in moſt caſes, an error of a few degrees in the intimated longitude will not produce any ſenſible error in theſe quantities. But, in order to aſcertain the apparent time at the ſhip from the ſun's altitude, the declination of that object ought to be taken from the Nautical Almanac, anſwering to the apparent time at Greenwich deduced from the diſtance.

Ex. ♃ November 8, 1804, in latitude 34° 53′ N. and longitude 24° W. by account, about 3h. 50m. P. M. the obſerved diſtance between the neareſt limbs of the ſun and moon was 67° 48′ 29″; the obſerved altitude of the moon's lower limb 31° 10′; and that of the ſun's 14° 46′; height of the eye 12 feet. Required the true longitude.

Time at ſhip	3^{h} 50′ P.M.
Lon. in time	1 36
Reduced time	5 26 P.M.
Alt. ☽'s l. limb	31 10
Semi-diam.	+ 15
Dip	— 3
Ap. alt. ☽'s cen.	31 22
Ap. alt. ☉'s cen.	14 59
Diff. app. alt.	16 23

Ob. diſt. ☉ & ☽'s neareſt l.	67°48′29″
Sun's ſemi-diameter	+ 16 13
Moon's ſemi-diameter	+ 15 1
Augmentation -	+ 7
Apparent central diſtance	68 19 50
Alt. Sun's lower limb	14 46
Semi-diameter -	+ 16
Dip -	— 3
Apparent alt. ☉'s centre	14 59
Moon's horizontal parallax	55′ 6″

App. diſtance	68° 19′ 50″	N. V. S.	630749		
Diff. app. alt.	16 23 0	N. V. S.	040604		
				Log. diff.	9·996556
Cor. ☽'s alt.	+ 45 29	Diff.	590145	Log.	5·770959
Cor. ☉'s alt.	+ 3 22	Nat. No.	585484	-	5·767515
Diff. true alt.	17 11 51	N. V. S.	044708		
True diſtance	68 17 46	N. V. S.	630192		
Diſt. at iii. hours	67 9 17	Differ.	1° 8′ 29″	P. Log.	4197
at vi. hours	68 32 30	Differ.	1 23 13	P. Log.	3351
Exceſs - -			2 28 8	P. Log.	0846
Preceding time -			3		
Apparent time at Greenwich			5 28 8		

Sun's obſ altitude	14 16·0	Sun's dec. Nov. 8, at noon	16° 37′·2S.
Semi-diameter	+ 16 2	Equation to 5h. 28′	+ 3·9
Dip -	− 3·3		
Correction	− 3 4	Reduced declination	16 41·1S.
Sun's true altitude	14 55·5		
—- polar diſtance	106 41·1	- co-ſecant	0·01868
Ship's latitude	34 53·0	- ſecant -	0·08602
Sum -	156 29·6		
Half -	78 14·8	- co-ſine -	9·30899
Difference	63 19·3	- ſine -	9·95112
			19·36481
	28 46·2 8	- ſine -	9·68240
App. time at ſhip	3 50 10		
App. t. at Green.	5 28 8		
Lon. in time	1 37 58=24° 29½′ W.		

To find the Longitude by the Eclipſes of Jupiter's Satellites.

On the day preceding the evening on which it is propoſed to obſerve an eclipſe, look for the time when it will happen at Greenwich, in page 3d of the month in the Ephemeris. Find the diff. of longitude either by a good map, ſea-chart, or dead-reckoning.

Let the watch be regulated by the ſun with all poſſible exactneſs to the apparent time. Turn the difference of longitude into time, and add it to, or ſubtract it from, the apparent time, according as it is eaſt or weſt of Greenwich; the ſum or difference will be nearly the time when the eclipſe is to be looked for in that place. But, as the longitude is uncertain, it will be proper to begin 20 or 30 minutes before.

Obſerve the hours, minutes, and ſeconds, of the beginning of the eclipſe, called *immerſion*, that is, the very inſtant that the ſatellite appears to enter into the ſhadow of Jupiter; or the *emerſion*, that is, when it appears to come out of the ſame. The difference of time between the obſerved immerſion or emerſion, and that ſet down in the Nautical Almanac, being turned into degrees, will give the difference of longitude between Greenwich and the place of obſervation.

Theſe obſervations made on the firſt ſatellite, or that which moves neareſt to the body of Jupiter, are the moſt proper for determining the longitude: and here it may be obſerved, that its emerſions are not viſible from the time of Jupiter's conjunction with the ſun to the time of his oppoſition to the ſun, and that its immerſions are not viſible from the time of the planet's oppoſition to the ſun to the time of its conjunction.

The configurations, or the poſitions in which Jupiter's ſatellites appear at Greenwich, are laid down every night, when viſible, in page the 12th of the month in the Ephemeris.

Ex. Suppoſe on July 12, 1813, in lon. 16° 34′ 4″ E. by account, an emerſion of Jupiter's firſt ſatellite was obſerved at 11h. 3m. apparent time. Required the longitude.

At Greenwich that day the emerſion began at	9 57 7
Obſerved emerſion at ſhip - -	11 3 0
Diff. in time	1 5 53

Which, turned into longitude, gives 16° 28′ 15″ E. becauſe the time at Greenwich is leſs than at the place of obſervation.

As theſe eclipſes happen almoſt daily, they afford the moſt ready means of determining the longitude of places on land, and then the longitude of ſea-coaſts might be better aſcertained than they are at preſent; they might alſo be applied at ſea, could they be obſerved with ſufficient accuracy in a ſhip under ſail, which can hardly be done, ſince the leaſt motion of a teleſcope that magnifies ſufficiently to make theſe obſervations would throw the objects out of the field of view. The eclipſes of Jupiter's ſatellites may be well obſerved by one of Dollond's new achromatic teleſcopes of three feet in length, or by a reflecting teleſcope of 18 or 20 inches focal length.

To find the Longitude by the Eclipſes of the Moon.

This is performed by comparing the times of the beginning or ending, as alſo the times when any number of digits are eclipſed, or when the earth's ſhadow begins to touch or leave any remarkable ſpot on the moon's face. Then will the difference of time between the like obſervations made at different places, turned into degrees, be their difference of longitude. But theſe eclipſes happen too ſeldom to be of any general uſe at ſea.

To find the Longitude by a Chronometer, or Time-keeper.

When it is intended to make uſe of a time-keeper, it is requiſite to examine its rate of going before you leave the land, and adjuſt it to the meridian of the place from which you reckon your longitude. To do this, you muſt aſcertain the apparent time by the ſun's altitude (or by ſome other method) and apply to it the equation of time, taken from page 2 of the Nautical Almanac, according to its title of *add* or *ſubtract;* the ſum or difference will give the mean time of obſervation: this, compared with the watch, will ſhow how much it is too faſt or too ſlow; and, by obſerving this difference for ſeveral days ſucceſſively, you will aſcertain its rate of going. If you find it gain or loſe a few ſeconds per day, you muſt make that allowance on all future obſervations at ſea. Inſtead of comparing the time ſhown by the chronometer to the mean time at the place of obſervation found as above, you may compare it with that mean time reduced to Greenwich time, by adding to that mean time the difference of longitude between Greenwich and the place of obſervation, when it is to the weſtward of Greenwich, but ſubtracting it when to the eaſtward; and by this means you will find how much your chronometer differs from Greenwich time. Having thus regulated your time-keeper, the longitude at ſea is readily found by it, as will evidently appear by the following examples:

Ex. 1. Suppoſe that on Jan. 7, 1818, the apparent time was found by an altitude of the ſun to be 1h. 5m. 9ſ. P. M. when, by a time-keeper well regulated to mean Greenwich time, it was 4h. 3m. 0ſ. P. M. Required the longitude.

Apparent time -	1 5 9
Equation of time -	+0 6 40
Mean time	1 11 49
Time per watch -	4 3 0
	2 51 11 equal to

42° 47′ 45″ of weſt longitude, becauſe the time at Greenwich is greater than the time at ſhip.

Ex. 2. Suppoſe that on May 12, 1818, the apparent time was found by an altitude of the ſun to be 4h. 3m. 6ſ. P.M. when the time per chronometer is 2h. P. M. the watch being too ſlow for mean Greenwich time 11m. 9ſ. Required the longitude.

	H.	M.	S.		H.	M.	S.
Apparent time	4	3	6P.M.	Time per watch	2	0	0
Equat. of time—	0	3	56	Watch error +	0	11	9
Mean time	3	59	10P.M.	Ti. at Greenw.	2	11	9P.M.
Ti. at Greenw.	2	11	9				
Diff. of time	1	48	1				

Diff. of time 1 48 1 equal to 27° 0′ 15″ eaſt longitude.

To find the LATITUDE *by one Altitude of the Sun, when the Time is not more diſtant than one Hour from Noon.*

I. To find the true Time.

When the ſun's declination and complement of the latitude are both north or both ſouth, their ſum, but, if one be north and the other ſouth, their difference, is the meridian altitude.

From the natural ſine of the ſun's meridian altitude, ſubtract the natural ſine of the obſerved altitude. Then add together,

The log. co-ſecant of the comp. of the lat. } reject their
The log. ſecant of the ſun's declination, } indices,

And the common logarithm of the difference of natural ſines, into one ſum. The ſum of theſe three logarithms being found in the column of riſing, the hours, minutes, and ſeconds, correſponding to it, will be the true time from noon when the altitude was taken.

Ex. 1. Being at ſea in latitude 50° 4′ N. by account, when the ſun's declination was 20° ſouth, at 11h. 17m. A. M. per watch, ſun's alt. was 19° 40′. Required the true time.

Comp. lat. 39 56 N. Co-ſec. 0·19254
Declina. 20 00 S. Sec. 0·02701
Sup. m. alt. 19 56 N. ſine 34093
L. ra. 0·21955
Obſer. alt. 19 40 N. ſine 33655
438 Com. L. 2·64147 H. M. S.
12 00 00
Log. in col. of riſing 2·86102 is = 00 27 38
True time at ſea 11 32 22

II. Having the true time previous to the obſervation, to find the change of altitude.

Add together the logarithm found in the col. of riſing, anſwering to the minutes and ſeconds the ſun had to riſe when the altitude was taken, and the ſecant of the ſuppoſed meridian altitude: from this ſum (the index being increaſed by 5) ſubtract the log. ratio, the remainder is the log. ſine of the change of altitude from the time of obſervation to noon; which, being added to the obſerved altitude, gives the ſun's meridian altitude.

Log. in col. of riſing of 27m. 38ſ. 2·86102 Obſer. alt. 19·40
Log. ſec. m. alt. 19° 56′ + 5 Index 5·02683 Cha. of alt. + 16
7·88785 Tr. m. alt. 19·56
Subtract log. ratio - 0·21955
Log. ſine chan. of alt. 16 min. 7·66830

Ex. 2. Being at ſea in lat. 60° N. by account, when the ſun was on the equator, at 1h. 0m. P. M. per watch, the ſun's alt. was 28° 53′. Required the true time, and latitude.

Com. lat. } 30° 00′ N. Nat. ſine 50000 C. ſec. 0.30103 Log. ratio.
Mer. alt. }
Ob. alt. 28 53 Nat. ſine 48303
Ch. of alt. 1 08 1697 Co. log. 3·22968

H. M.
T. m. alt. 30 01 Log. in col. of riſing is = 3·53071 = 1 00 Tr. T.
Zen. diſt. 59 59 N. Log ſec. mer. alt + 5 In. 5·06247
The S. being on the equator
8·59318
Subtract log. ratio 0·30103
Log. ſine chan. of alt. 1° 08′ 8·29215

Ex. 3. Being at ſea in lat. 39° 28′ N. by account, ſun's declination 20° 41′ N. at 26m. 28ſ. P. M. ſun's alt. was 71° 10′. Required the true time, and latitude at the ſhip.

Comp. lat. 50·32 N.
Declination 20·41 N.
Co. ſec. 0·11239
Sup. m. alt. 71·13 Nat. ſine 94674 Secant 0·02893
Obſer. alt. 71·10 Nat. ſine 94646 L. ratio 0·14132
Chan. alt. 3
28 Com. log. 1·44716
T. mer. alt. 71·13 M. S.
Log. in col. of riſing is = 1·58848 = 6 30 T. T.
Zen. diſt. 18·47 S. Log. ſec. ſup. mer. alt. + 5·49216 [at ſh.
Declination 20·41 N.
7·08064
Lat. in 39·28 Subtract log. ratio 0·14132
L. ſine chan. of alt. 3 m. 6·93932

The altitudes for determining how much the watch differs from apparent time had better be taken in the morning, or evening, when the ſun's altitude does not exceed 18 degrees.

An error in the ſuppoſed latitude can make very ſmall difference in the change of altitude; and the nearer the altitude is taken to noon, the better to find the change of altitude.

This method is not to be depended on ſhould the apparent time exceed an hour from noon, and, in ſome inſtances, not then; ſuch as, altitudes taken near the equator, or when the meridian altitude exceeds 60 degrees; nor is there much occaſion for this method, or that of the double altitudes, there, ſince there is generally a clear horizon, and, conſequently, a meridian altitude is eaſily obtained.

To find the Latitude by the Meridian Altitude of the Moon.

To the longitude of the given place in time add the number from Tab. XVI. Moore, correſponding to that longitude, and the daily variation of the moon's paſſage over the meridian on the given day (Nautical Almanac, p. vi.), if the longitude be weſt; but ſubtract the ſum if the longitude be eaſt: the ſum or difference will be the time at Greenwich when the moon was on the meridian of the given place.

In page 7th of the month in the Nautical Almanac, find the moon's ſemi-diameter, and horizontal parallax, at the neareſt noon, or midnight, to the reduced time, which will be ſufficiently accurate for the purpoſe of finding the latitude.

Take the difference between the moon's ſemi-diameter and dip, and add it to the obſerved altitude, if the lower limb was obſerved, but ſubtract their ſum if the upper limb was obſerved; the ſum or difference will be the apparent altitude of her centre.

From the proportional logarithm of the moon's horizontal parallax, increaſing its index by 10, ſubtract the log. co-ſine of the moon's apparent alt. the remainder will be the prop. log. of the moon's parallax in altitude, from which take her refraction. The difference will be a correction, which, being added to the apparent altitude, will give the true altitude of her centre: hence the zenith-diſtance, to which apply her declination, and you will have the latitude.

The moon's declination is ſet down in page the 6th of the month for every noon and midnight in the Nautical Almanac.

Therefore find the declination for the neareſt noon and midnight, both before and after the reduced time, and take the difference. Then, from Moore, Tab. XVIII. take out the number correſponding to the hours at top, and the minutes in the left-hand column, with the time at Greenwich, with which multiply the difference; from the product cut off four figures from the right hand; the remainder is a correction to be added to the declination if increaſing, but ſubtracted if decreaſing; the reſult will be the declination at the given time.

Ex. 1. Suppoſe, on Oct. 16, 1813, in longitude 45° *weſt*, the altitude of the moon's *lower* limb, when on the meridian, ſouth of the obſerver, ſhould be 60° 43′ 0″, the eye being 23 feet above the ſea. Required the latitude.

The longitude 45° weſt turned into time equal to 3 hours, and the correction 7m. added to 18h. 7m. the time the moon paſſes over the meridian on the given day, gives 18h. 54m. time at Greenwich.

Hor. par.	58′ 17″	P. L.	10·4897	Moon's obſ. alt.		60° 43′ 0″
App. alt.	60° 54	L.co-ſi.	9·6869	M.ſem.di.	15 51	+ 11 15
				Dip -	4 36	
Par. in alt. =	28 21	P. L.	·8028			60 54 15
Refraction	32					
	27 49	Cor. of the Moon's alt.		+		27 49
Moon's dec. midnight	19° 49′ N.	True alt.		-		61 22 4
Do. at noon -	18 55 N.					90
Diff. in 12 hours	54	19° 49′		Zen. diſt.		28 37 56
Then 54 × by ·5750 gives -		− 31				
Moon's dec. at reduced time		19 18				19 18 0N
				Latitude		47 55 56

Ex. 2. Suppoſe, on Dec. 6, 1813, in longitude 60° *eaſt*, the altitude of the moon's *upper* limb ſhould be obſerved, when on the meridian, being then ſouth, 54° 30′, the eye 20 feet above the ſea. Required the latitude.

The longitude 60° eaſt in time equal to 4 hours, leſs the correction 10m. ſubtracted from 11h. 10m. the time the moon paſſes over the meridian on the given day, leaves 11h. 0m. time at Greenwich.

Hor.par.	61′ 21″	P. L.	10·4675	Moon's obſ. alt.		54° 30′ 0″
App.alt.	54° 18 0	co-ſi.	9·7661	M.ſem.di.	16′ 44″	− 12 27
				Dip -	4 17	
Par. in alt.	35 48	P. L.	·7014			
Refraction	41					54 17 33
	35 7	Moon's correction to be added		-		35 7
Moon's dec. at noon	14° 22′ N.					54 52 40
Do. at midnight -	16 18 N.					90
	1 56		14 22	Zen.diſt.		35 7 20S.
1 56=116× by ·9167 gives 106= +			1 46			16 8 0N.
Moon's dec. at reduced time			16 8	Lat.		51 15 20

Prob. Given the apparent time of the tranſit of the moon's limb over the meridian, to find the longitude of the place of obſervation.

Rule. Reduce the apparent ſemidiameter of the moon to time, by Mackay's Tables XXXIX. and XL. which being applied to the apparent time of tranſit of the moon's limb, by addition or ſubtraction, according as the weſtern or eaſtern limb was obſerved; the ſum or difference will be the apparent time of the tranſit of the moon's centre.

From the right aſcenſion of the moon in time ſubtract that of the ſun; the remainder will be the approximate time of the moon's paſſage over the meridian of Greenwich. Now, to the log. of the difference between the change of the moon's right aſcenſion in 12 hours, and that of the ſun's in the ſame time, reduced to ſeconds, add the ar-co. log. of the difference between the above quantity and 43200″, and the log. of the approximate time in ſeconds; the natural number anſwering to the ſum of theſe three logs. will be the correction in ſeconds of the approximate time; which, being added thereto, will give the apparent time of the moon's paſſage over the meridian of Greenwich.

From the p. log. of the difference between the apparent times of tranſit at Greenwich and at the place of obſervation, ſubtract the p. log. of the difference between the variations of the right aſcenſions of the ſun and moon in 12 hours; the remainder will be the p. log. of the longitude of the place of obſervation in minutes and ſeconds, which are to be eſteemed degrees and minutes. If the time of tranſit at the place of obſervation is earlier than that at Greenwich, the longitude is eaſt, otherwiſe it is weſt.

Ex. July 2, 1792, the apparent time of the tranſit of the moon's weſtern limb was 10h. 43′ 58″. Sought the longitude of the place of obſervation.

☽'s R. A. at noon,	16h 58′ 20″	☽'s R. A. at noon,	16° 58′ 20″	Ap. time of tran. ☽'s weſtern limb,	10h 43′ 58″
☉'s R. A. at noon,	6 48 30·4	☽'s R. A. at midnight,	17 30 0	☽'s equal ſemidia.	+ 1 9·7
				Incr. ſemidia.	+ 3·36
Approx. time	10 9 49·6	Vr. ☽'s R. A. in 12h	31 40		
		Vr. ☉'s R. A. in 12h	2 3·7	Ap. t. of tr. ☽'s cen.	10 45 11·3

Difference - - - - -	29 36·5 =	1776″·3	- log. -	3·249516
Conſtant quantity - - - - - - -		43200		
Difference - - - - - - - - -		41423·7	ar-co-log.	5·382751
Approximate time of tranſit -	10h 9′ 49″·6 =	36589·6	- log. -	4·563358
Correction - - - - - -	+ 26 9·0	- 1569·0	- - -	3·195625
Appar. time of tranſit at Greenwich.	10 35 58·6			
Appar. time of tranſit at place of obſerv.	10 45 11·3			
Difference - - - - - -	9 12·7	-	P. L. -	1·2909
Difference of varia. R. A. ☉ and ☽ in 12h	29 36·3	-	P. L. -	0·7839
Longitude - - - - - -	56° 0′	-	P. L. -	0.5070

Which is weſt, becauſe the time of tranſit by obſervation is later than the time at Greenwich.

For any thing further on the theory and practice of navigation, and for various uſeful tables, we recommend the reader to conſult Moore's Practical Navigator, and Mackay's Treatiſes on Navigation and on the Longitude.

Navigation Laws. In examining the reaſon of commerce's paſſing ſucceſſively from the Venetians, Genoeſe, and Hans-towns, to the Portugueſe and Spaniards, and from theſe again to the Engliſh and Dutch, it may be eſtabliſhed as a maxim, that the relation between commerce and navigation, or, if we may be allowed to ſay it, their union, is ſo intimate, that the fall of the one inevitably draws after it the other: and that they will always either flouriſh or decline together. Hence ſo many laws, ordinances, ſtatutes, &c. for its regulation; and hence, particularly, that celebrated *act of navigation*, which an eminent foreign author calls the "Palladium, or tutelar deity, of the commerce of England;" which is too important not to be here mentioned: as it is the ſtanding rule, not only of the Engliſh among themſelves, but alſo of other nations with whom they traffic.

Navigation-Acts are thoſe ſtatutes which have been paſſed at different times by the legiſlature of this country, for the protection and extenſion of navigation.

But, by *the* Navigation-Act, particularly and emphatically ſo called, is meant the ſtatute 12 Charles II. c. 18. entitled "An Act for the Encouraging and Increaſing of Shipping and Navigation." All ſubſequent laws on this ſubject are but comments on this, modifying or explaining its different regulations, but leaving untouched its general and fundamental principles.

Before we proceed to examine the ſoundneſs of the principles on which the navigation-acts are grounded; the neceſſity or expediency of their firſt enactment; the immediate conſequences which reſulted from them; the permanent benefits which they are ſaid to have beſtowed on this country; and the policy of their continuance on the ſtatute-book; it may be proper to give a brief and rapid ſketch of their hiſtory.

The firſt act, which had avowedly and excluſively for its object the augmentation of the navy of England, was paſſed in the reign of Richard II. By the ſtat. 5 Rd. II. c. 3. it was enacted that none but the king's liege people ſhould ſhip any merchandiſe out of, or into, the realm, and only in ſhips of the king's liegeance, on pain of forfeiture. This ſtatute was paſſed at a time when the navy was greatly diminiſhed; but its effects do not appear to have anſwered the expectations of the legiſlature; for by the 6 Rd. II. c. 8. the former ſtatute was greatly modified, the merchants being obliged to give Engliſh ſhips the preference only in caſe they were able and ſufficient. In 1440, the decline of the Engliſh navy was again complained of; and the commons propoſed the enactment of a law of ſimilar import and force with that of 5 Rd. II. c. 3. but it was rejected by Henry VI. In the reign of Henry VII. however, two acts were paſſed for the encouragement and protection of Engliſh ſhipping, viz. 1 Hen. VII. c. 8. (1485.) and 4 Hen. VII. c. 10. (1489.) Henry VIII. alſo paſſed a law for the ſame purpoſe in 1541. 32 Hen. VIII. c. 14. In Elizabeth's reign (1562), the carriage by ſea of corn, wine, and other articles, and the taking, curing, and carrying by ſea, of fiſh, were regulated with a view "to the maintenance and increaſe of the navy." And, in 1593, the ſame ſovereign granted particular privileges in caſes where goods were carried in Engliſh veſſels. It appears from Rymer's Fœdera, (xvii. 414.) that James I. in the commiſſion of enquiry which he iſſued, expreſsly directed the attention of the commiſſioners to the ſame ſubject. Theſe laws, however, were either evaded or relaxed, for Charles I. found it neceſſary to reviſe and confirm them.

We are now arrived at that ſtatute, which is juſtly regarded as the foundation of the navigation-act of Cha. II. This ſtatute was paſſed by the commonwealth-parliament on the 9th of October, 1651. In the year preceding, indeed, the ſame parliament had ſketched a faint and rude outline of the navigation-act; the ſugar-iſlands ſtill adhering to Cha. II. the ſtatute of 1650 prohibited all ſhips of foreign nations from trading with any Engliſh plantations without licenſe from the council of ſtate. The ſtatute of 1651 aroſe partly from the ſame cauſe, and partly from the circumſtance that the Engliſh merchants uſed to freight Dutch ſhips to bring home merchandiſe from America and the Weſt Indies, as they could be had at a lower rate of freight than native ſhips. Till this act paſſed, it appears, that, notwithſtanding the exiſtence of former unrepealed acts for the protection and increaſe of Engliſh ſhipping, all nations in amity with England actually did import into England what commodities they pleaſed, and in what ſhips they pleaſed; and, as the Dutch, at that period, were the principal carriers of Europe, moſt of the merchandiſe imported into this country was imported by them. The law of 1651 enacted, that no commodities (colonial or of any other deſcription) ſhould be imported into England, unleſs in veſſels ſolely owned, and commanded, and principally manned, by Engliſh ſubjects; and, where the commodities were foreign, unleſs they were entirely conveyed in ſuch veſſels from the place where the commodities grew, or to which they were uſually, in the firſt inſtance, tranſported by ſea. There were ſome peculiar exceptions, and one grand and general one; viz. goods originally produced in, or firſt tranſported by ſea from, an European ſtate, might be imported thence into England, in veſſels owned by the ſubjects of that ſtate. The title of this act was ſuited to the deſign which it had in view; it was, "Goods from foreign parts, by whom to be imported:" (Scobell's Acts, 1651. c. 22. p. 132.) and the conſequence was, that the Dutch were cut off from the carrying-trade with our colonies, and their importation of fiſh into this country was laid under great reſtrictions and heavy burdens.

Before the paſſing of this law, great jealouſy exiſted, and frequent diſputes had taken place, between this country and Holland; theſe were greatly increaſed and embittered by it. Acting in conformity with it, our ſhips of war inſiſted on their right to ſearch Dutch veſſels; and in ſeveral inſtances made prizes of them, where they found that they contravened the act. The war which broke out in the ſubſequent year, and which was carried on with great rancour and obſtinacy, aroſe, partly at leaſt, from the navigation-act of 1651.

The reſtoration-parliament were ſo clearly and ſtrongly convinced of the neceſſity and benefit of the navigation-act, that they ſanctioned it, firſt in 1660, and afterwards in 1662; the firſt of theſe ſtatutes, 12 Charles II. c. 18. (as has been already obſerved,) is that which is emphatically called *the navigation-act;* and its principal diſpoſitions are thus ſummed up by Adam Smith, Wealth of Nations, ii. 192.

Firſt. All ſhips, of which the owners, maſters, and three-fourths of the mariners, are not Britiſh ſubjects, are prohibited, under pain of forfeiting ſhip and cargo, from trading to the Britiſh ſettlements and plantations, or from being employed in the coaſting-trade of Great Britain.

Secondly. A great variety of the moſt bulky articles of importation can be brought into Great Britain only, either in ſuch ſhips as are above deſcribed, or in ſhips of the country where thoſe goods are produced, and of which the owners, maſters, and three-fourths of the mariners, are of that particular country; and, when imported even in ſhips of this latter kind, they are ſubject to double alien's duty. If imported in ſhips of any other country, the penalty is forfeiture of ſhips and goods.

Thirdly. A great variety of the moſt bulky articles of importation are prohibited from being imported, even in Britiſh ſhips, from any country but that in which they are produced, under pain of forfeiting ſhip and cargo.

Fourthly. Salt fiſh of all kinds, whale-fins, whalebone, oil and blubber, not caught by and cured on-board Britiſh veſſels, when imported into Great Britain, are ſubject to double alien's duty.

This act differed from that of 1651 in its ſecond enacting clauſe, which did not permit any but Engliſh ſubjects to be factors or agents in Engliſh colonies. Before this time the Dutch were the principal factors or agents in our colonies; and the third enacting clauſe ſecured the Eaſt-India, Guinea, and Levant, companies, from foreign ſhipping.

The act 14 Charles II. c. 11. alſo differed in ſome reſpects from the act 12 Charles II. c. 18. By the latter it was ſufficient, with reſpect to the veſſel, if ſhe was either owned or built at home; while, by the former of theſe acts, both theſe circumſtances were declared indiſpenſable.

In commercial writers, the phraſes "enumerated and non-enumerated commodities" frequently occur; theſe expreſſions took their riſe from the navigation-act. Thoſe are "enumerated commodities," which, by this act, cannot be carried from the colonies to any foreign parts, without being firſt unladen in Great Britain. Subſequent acts of parliament have enlarged or contracted the number of enumerated commodities, according to circumſtances; and one general exception has been introduced in this branch of the navigation-act; as ſome of the enumerated articles are permitted to be carried, by a direct courſe, in ſhips of the empire, to places ſouth of Cape Finiſterre.

The principal objects which the navigation-act, 12 Charles II. c. 18. had in view, will be beſt explained by its preamble, which declares it to be paſſed, "not only for the ſake of employing and increaſing Engliſh ſhipping and ſeamen, and ſecuring a vent for woollen and other manufactures; but alſo to make this kingdom a ſtaple of the commodities of thoſe plantations, as well as of the commodities of other countries, for the ſupplying them, (it being the uſage of other nations to keep their plantation-trade to themſelves;) and farther, if colonial commodities ſhould be taken from any part but the plantations, that the trade of them would thereby in a great meaſure be deſerted from hence, and carried elſewhere; his majeſty's cuſtoms and other revenues much leſſened; the fair trader prejudiced; and this kingdom not continue a ſtaple of plantation-commodities, nor that vent, for the future, of the victual and other native commodities of this kingdom."

Britiſh-built ſhips are declared to be ſuch as have been built in Great Britain, Ireland, Jerſey, Guernſey, or the Iſle of Man, or in ſome colony at the time belonging to Great Britain; any ſhip whatever, taken and condemned as lawful prize, is to be regarded as a Britiſh-built ſhip. Ever ſince the navigation-act paſſed, ſurveyors of the act of navigation have been appointed at the cuſtom-houſe, whoſe duty it is to keep a regiſter of all Britiſh-built ſhips.

Britiſh ſeamen are declared to be ſuch as are natural-born ſubjects of the empire; or naturalized by act of parliament; or made denizens; or become ſubjects by conqueſt. And, by 33 Geo. III. c. 68. foreign ſeamen, who ſhall ſerve three years in the Britiſh navy, during the time of war, if they have not taken the oath of allegiance to a foreign ſtate, may be employed, and ſhall be conſidered, as Britiſh ſeamen. The ſame ſtatute alſo introduced the principal modification which has taken place in the navigation-act, by enacting that, from the concluſion of the war, no goods ſhall be *exported* in Britiſh veſſels, unleſs the maſters and three-fourths of the crew were Britiſh; the navigation-act not interfering with the exportation of goods from Britiſh ports.

With reſpect to the conſequences which immediately reſulted from the navigation-act, there are different ſtatements. At firſt there were loud complaints that we had not ſhipping enough to import from all parts, and yet were prohibited from getting goods and ſhipping from foreigners; while, immediately before the paſſing of the navigation-act, the complaint had been that our ſhipping was rotting, and our mariners had gone into the Dutch ſervice. Sir Joſhua Child, who publiſhed his treatiſe on trade in 1668, is ſo decidedly and warmly of opinion that the navigation-act was highly beneficial to the nation, that he thinks it ought to be called *Charta Maritima;* and in another place he obſerves, "that without this act we had not now been owners of one-half of the ſhipping or trade, nor ſhould have employed one-half of the ſeamen we do at preſent;" while ſir Roger Coke, in his Diſcourſe of Trade, publiſhed 1670, aſſerts, "that in two years after the navigation-act of the rump-parliament in 1651, the building of ſhips in England became one-third dearer than before, and that ſeamen's wages became ſo exceſſively dear, that we have wholly loſt the Muſcovy and Greenland trade, whereby we gave the Dutch and other nations the power of driving the trade of the world."

Theſe opinions and ſtatements, however, may be reconciled; there can be no doubt that the firſt reſult of the navigation-act would be to increaſe the demand for Britiſh ſeamen and ſhipping, and of courſe to raiſe the price of ſhip-building, ſeamen's wages, and the rate of freight. This increaſed demand would, in time, create an increaſed ſupply; and, though the rate of freight probably did not come down ſo low as it had been when the Dutch were allowed to be our carriers, yet the immediate very great riſe would neceſſarily be temporary. It may be remarked, however, that one of the evils complained of by ſir Roger Coke, and which ſtill exiſts, would not have been produced had the reſtoration-parliament followed exactly the navigation-act of the long-parliament. By the latter, liberty was allowed to purchaſe ſhips where they could be procured cheapeſt; ſhip-building of courſe would not have been ſo much raiſed as ſir Roger Coke complains; while the great object of the act, the increaſe of ſeamen, would have been more completely and effectually ſecured; ſince, if ſhips had been bought where they could be procured cheapeſt, freights would have become more reaſonable, and ſailors increaſed in conſequence.

There can be as little doubt that the navigation-act has been beneficial to Great Britain, conſidered as a nation dependent for her ſafety and well-being on her maritime power, as that it has been prejudicial to her, conſidered as a nation purely commercial. The manner in which it operates then, in two ſuch different ways, has already been pointed out. "That nation (as Adam Smith well obſerves) will be moſt likely to buy cheap, when, by the moſt perfect freedom of trade, it encourages all nations to bring to it the goods which it has occaſion to purchaſe; and for the ſame reaſon it will be moſt likely to ſell dear, when its markets are thus filled with the greateſt number of buyers." Now, the navigation-act directly and expreſsly diſcourages or prevents foreign nations from bringing goods into Great Britain; and, as the ſame author remarks, "if foreigners are hindered from coming to ſell, they cannot always afford to come to buy, becauſe, coming without a cargo, they muſt loſe the freight from their own country to Great Britain. By diminiſhing the number of ſellers, therefore, we neceſſarily diminiſh that of buyers, and are thus likely not only to buy foreign goods dearer, but to ſell our own cheaper, than if there was a more perfect freedom of trade."

Laſtly, there can be as little doubt that, under the circumſtances in which Great Britain is at preſent placed, it would be highly impolitic and unſafe to alter eſſentially the navigation-laws. She ſtands now more in need of maritime defence than ſhe ever did; and the means of that maritime defence require more than ever to be preſerved untouched by the encroachments of foreign nations; ſince, if the navigation-act were abrogated, the operation of our taxes is ſuch, that foreign ſhips, in almoſt every caſe, would be able to carry goods at a much lower rate of freight than our own ſhip-owners could do. But, on the other hand, it may well be queſtioned, whether, at preſent, the regulation of the long-parliament ſhould not be adopted, and full liberty given to purchaſe ſhips wherever they could be found cheapeſt: as has been already remarked, freight would thus become more reaſonable, and conſequently the great object of the

the navigation-laws would be more completely anſwered, while our merchants would have leſs reaſon to complain. If this alteration were made, the loſs of the merchants would be entirely for the benefit of the nation; now it is only partly for the benefit of the nation, while, by benefiting at the ſame time the ſhip-builders, that benefit is eſſentially leſſened.

Such is a brief hiſtory, and general view, of thoſe acts which have been paſſed for encouraging and increaſing ſhipping and navigation. But it may be proper to mention, that they are commonly very much relaxed, and in ſome particular caſes entirely done away, in time of war; and only rigidly and uniformly enforced in time of peace.

NAV'IGATOR, *ſ.* Sailor; ſeaman; traveller by water.—This terreſtrial globe, which before was only a globe in ſpeculation, has ſince been ſurrounded by the boldneſs of many *navigators. Temple.*

NAVIGATORS is an appellation uſed for the labourers who work at canal-digging.

NAV'IGATORS' I'SLANDS, a cluſter of iſlands in the South Pacific Ocean; they are ten in number, viz. Opoun, Leoné, Fanfoué, Maouna, Oyolava, Calinaſſé, Pola, Shika, Oſſamo, and Ouera. The ſeven firſt were ſeen by La Pérouſe, but of the ſituation of the other three he could obtain no ſatisfactory account; and he ſeems to think, that Cocoa and Traitor's iſlands might be two of them, though ſmall; and the iſland of Handſome People the other. The name of Navigators' Iſlands was given them by Bougainville. La Pérouſe is decidedly of opinion, that they are not the ſame with thoſe diſcovered by Roggewein, and by him called Beaumont's Iſlands.

"Theſe iſlands," ſays La Pérouſe, "form one of the fineſt archipelagoes in the South Sea; and are as intereſting, in point of arts, productions, and population, as the Society and Friendly Iſlands, of which the Engliſh navigators have given a deſcription highly ſatisfactory. As to the moral qualities of the natives, although our intercourſe was but of a moment's duration, we had but too much reaſon to be acquainted with their diſpoſition; and we have no heſitation in aſſerting, that it would be vain to endeavour to excite the ſentiment of gratitude in their ferocious minds, which are only to be reſtrained by fear. They are the talleſt and beſt made people we have yet met with. Their uſual height is five feet nine, ten, or eleven, inches; but their ſtature is leſs aſtoniſhing than the coloſſal proportions of the different parts of their bodies. Our curioſity, which often led us to meaſure them, gave them an opportunity of making frequent compariſons of their bodily ſtrength with ours. Theſe compariſons were not to our advantage; and we perhaps owe our misfortunes at Maouna to the idea of individual ſuperiority, reſulting from repeated trials. Their countenances often appeared to expreſs a ſentiment of diſdain, which I hoped to deſtroy by ordering our arms to be uſed in their preſence; but my end could only have been gained by directing them againſt human victims; for otherwiſe, they took the noiſe for ſport, and the trial for a diverſion. Among theſe Indians a very ſmall number are below the height indicated above. I have, however, meaſured ſeveral who were only five feet four inches, but theſe are the dwarfs of the country; and, although their ſtature reſembles ours, their ſtrong and nervous arms, their broad cheſts, and their legs and thighs, are of a very different proportion.

"The men have the body painted or tattooed, ſo that any one would ſuppoſe them clad, although they go almoſt naked. They have only a girdle of ſea-weeds encircling the loins, which comes down to their knees, and gives them the appearance of the river-gods of fabulous hiſtory, whom it is cuſtomary to depict with ruſhes round their waiſt. Their hair is very long: they often twiſt it round their heads, and thus add to their native ferocity of countenance, which always expreſſes ſurpriſe or anger. The leaſt diſpute between them is followed by blows of ſticks, clubs, or paddles; and often, without doubt, coſts the combatants their lives. They are almoſt all covered with ſcars, which can only be the conſequence of their individual quarrels. The ſtature of the women is proportioned to that of the men: they are tall, ſlender, and not without grace; but they loſe, while yet in their prime, their elegant forms. Among a great number of women that I had the opportunity of ſeeing, I obſerved three really pretty. The groſs effrontery and indecency of the reſt rendered them fit mothers and wives for the ferocious beings that ſurrounded us.

"Theſe iſlanders manufacture very fine mats, and ſome paper ſtuffs. I remarked two or three of them, whom I took for chiefs, with a piece of cloth tied round their waiſt like a petticoat, inſtead of a girdle of weeds: it is compoſed of real thread, prepared no doubt from ſome filamentous plant like the nettle or flax; and is manufactured without a ſhuttle, the threads being abſolutely laid over one another like thoſe of their mats. This cloth, which has all the ſuppleneſs and ſolidity of ours, is very fit for the ſails of their canoes, and appeared to us far ſuperior to the paper ſtuffs of the Society and Friendly Iſlands, which they manufacture alſo. We did not at firſt diſcover any identity between their language and that of the natives of the Society and Friendly Iſlands of which we had vocabularies; but maturer examination convinced us, that they ſpeak a dialect of the ſame language. It appears to me evident, that all theſe different nations are the progeny of Malay colonies, which, in ſome age extremely remote, conquered the iſlands they inhabit. The feudal government is alſo preſerved here, which is the moſt proper to keep up a ferocity of manners, becauſe the ſmalleſt diſputes occaſion wars of village againſt village; and becauſe wars of this nature are conducted without magnanimity and without courage. Surpriſes and treachery are employed by turns; and in theſe unfortunate countries, inſtead of generous warriors, nothing is to be found but baſe aſſaſſins. The Malays are ſtill the moſt perfidious nation of Aſia; and their children have not degenerated, becauſe the ſame cauſes have led to and produced the ſame effects.

"It is not without reaſon that M. de Bougainville has named them the *Navigators.* They do not go ſo much as from one village to another on foot, but perform all their journeys in canoes. Their villages are all ſituated in creeks by the ſea-ſide, and have no paths except to penetrate into the interior of the country. The iſlands we viſited were covered to the very ſummit with fruit-trees, on which wood-pigeons, turtle-doves of green, red, and of various other colours, were ſitting. We ſaw alſo beautiful parroquets, a ſpecies of blackbird, and even partridges. It is by taming birds, that the natives charm away the tedium that reſults from their idle mode of life. All their houſes were full of wood-pigeons, which they bartered with us by hundreds: they alſo ſold us more than 300 gallinules, of the moſt beautiful plumage. Theſe iſlands are exceedingly fertile, and moſt probably their population is in proportion. The eaſtern ones, Opoun, Leoné, and Fanfoué, are ſmall, eſpecially the laſt two, which are about five miles in circumference; but Maouna, Oyolava, and Pola, may be numbered among the largeſt and moſt beautiful of the South Sea." Lat. 14. 20. S. lon. 169. W. See MAOUNA, vol. xiv.

NAVIG'EROUS, *adj.* [from the Lat. *navis*, a ſhip, and *fero*, to carry.] Capable of bearing a ſhip or veſſel. *Scott.*

NA'VIS, *ſ.* [Latin.] A ſhip, or bark.

NA'VIS, *ſ.* [in old records.] The nave of a church; a diſh to hold frankincenſe before it was put into the cenſer.

NAV'ITY, *ſ.* [*navitas*, Latin.] Diligence. *Not uſed. Bailey.*

NAUL, a ſmall town of the county of Dublin, on the confines of the county of Meath, near which is a romantic glen, overhung with rocks, through which the little ſtream runs which is the boundary of the two counties; and over this glen the old caſtle of Naul is boldly ſituated: fourteen miles north of Dublin.

NAU'LAGE, ſ. [*naulage*, Fr. from *naulum*, Lat.] The freight of paſſengers in a ſhip.

NAU'LUM, ſ. among the Romans, properly ſignified *freight*, whence it is uſed to denote a piece of money put into the mouth of a perſon deceaſed, to pay Charon the ferryman for his paſſage: this piece was to be of the current coin of the emperor then reigning; ſo that from it the time of the perſon's death may be known.

NAUMA'CHIA, or NAU'MACHY, ſ. [*naumachia*, Lat.] A mock ſea-fight:

And now the *naumachie* begins,
Cloſe to the ſurface. *Lovelace's Luc. Poſth.* 1659.

The *naumachia* was a ſhow or ſpectacle very frequent among the ancient Romans, repreſenting a ſea-fight. Theſe mock ſea-fights are ſuppoſed to have originated at the time of the firſt Punic war, when the Romans firſt inſtructed their men in the knowledge of naval affairs. Afterwards they were intended to entertain the populace, as well as to improve the ſeamen. They were often, like other ſhows, exhibited at the expenſe of individuals, to increaſe their popularity.

In theſe ſpectacles they ſometimes ſtrove to excel each other in ſwiftneſs; and ſometimes engaged in a warlike manner. The naumachiæ of Claudius, indeed, was a moſt ſavage diverſion. The combatants uſed to deſtroy each other to amuſe a tyrant and a cruel mob. As they paſſed before him, they uſed this melancholy greeting, *Ave Imperator, morituri te ſalutant.* The emperor replied, *Avete vos.* This they underſtood as an anſwer of kindneſs, and a grant of their lives; but they ſoon diſcovered that it proceeded from wanton cruelty, and barbarous inſenſibility. In the time of Domitian, ſuch a vaſt number of veſſels engaged as would have nearly formed two regular fleets for a real fight, and the channel of water was equal in magnitude to a natural river. Heliogabulus is reported to have filled the channel where the veſſels were to ride with wine inſtead of water. Tritons and ſea-monſters were frequently exhibited during the engagement. Suetonius and Dio Caſſius informs us, that at one of theſe ſea-fights of Domitian a violent ſhower fell; the emperor, however continued to the end of the engagement, often changing his clothes, nor would he ſuffer any one to depart; and, as the rain continued for ſeveral hours, many were ſeized with diſtempers, and ſome even died. *Suet.* cap. 4. *Dio.* lib. lxvii.

Naumachiæ were alſo places fitted up for theſe ſhows; a ſort of circi, or amphitheatres, with ſeats and porticoes, &c. There were ſeveral of them at Rome; three built by Auguſtus, one by Claudius, another by Domitian, and another by Nero; which ſerved for the reverſe of his medals. Claudius uſed the Lake Fucinus as a naumachia.

NAU'MBERG, a town of Germany, in the circle of the Lower Rhine, on the Eider: fourteen miles weſt-ſouth-weſt of Caſſel, and thirty-ſix ſouth-weſt of Göttingen. Lat. 51. 15. N. lon. 9. 7. E.

NAU'MBURG, a city of Saxony, and capital of a biſhopric. The foundation or biſhopric is ſituated partly on the Saale and partly on the Elſter, the former part of it being wholly ſurrounded by the circle of Thuringia, and the latter by Thuringia and the circle of Leipſic, the principality of Altenburg, and county of Reuſs. The emperor Otho I. founded this biſhopric in the year 968, at Zeitz; and though, in 1029, the ſee was removed to Naumburg, yet all the canons did not quit Zeitz, but there ſtill remained a collegiate church. Naumburg, the head town of the biſhopric, lies in a fertile and pleaſant tract, not far from the Saale, which in theſe parts receives into it the Unſtrutt. Naumburg conſiſts of the town itſelf, which ſtands under the juriſdiction of its council, and contains a ſmall citadel, with three churches, and a town-ſchool. This place has many times ſuſtained great damage by fire. It is twenty miles ſouth of Halle, and eighty weſt of Dreſden. Lat. 51. 8. N. lon. 11. 54. E.

NAU'MBERG AM BO'BER, a town of Sileſia, in the principality of Sagan, on the Bober: twelve miles north of Sagan, and thirty-five weſt-north-weſt of Gros Glogau. Lat. 51. 11. N. lon. 15. 27. E.

NAU'MBURG AM QUEI'SS, a town of Sileſia, in the principality of Jauer, at the conflux of the Ivenitz and Queiſs: thirty-four miles weſt of Jauer, and ſeventy eaſt of Dreſden. Lat. 51. 12. N. lon. 15. 26. E.

NAU'MS, a lake of Norway, in the province of Drontheim: 114 miles north-north-eaſt of Drontheim.

NAU'NA, a town of the iſland of Cuba: fifteen miles ſouth-weſt of Spiritu Santa.

NAU'NHOF. See NAUENHOF, p. 612.

NAU'NTON, a village of Worceſterſhire, north of Penſhore; with a very ancient church.—Sherriff's Naunton is a hamlet in the ſame pariſh.

NAU'NTON, a village of Glouceſterſhire, in the pariſh of Cheltenham.—Another, in the pariſh of Winchcombe.

NAU'NTON (Sir Robert), a ſtateſman and hiſtorian in the ſeventeenth century, was educated at Cambridge, and became proctor and public orator of that univerſity. He attracted the notice of king James I. in a ſpeech to him at Hinchinbroke; and was brought into public employment. He roſe to the offices of ſecretary of ſtate and maſter of the court of guardians, which he filled with great reputation for prudence and integrity. He loſt his place as ſecretary in 1620, through the diſpleaſure of the duke of Buckingham; and nothing further is recorded of his life. He wrote a work intitled "*Fragmenta Regalia*, or the true Character of Queen Elizabeth and her Favourites," 1641, 4to. and re-publiſhed with Walſingham's Arcana Aulica. It is regarded as a faithful and judicious performance.

NAV'OLOK, a cape on the north-weſt coaſt of Nova Zembla. Lat. 76. 20. N. lon. 54. 14. E.

NAVOO'K, a town of Perſia, in the province of Mecran: ſeventy miles weſt-north-weſt of Kelveh.

NAUPAC'TUS, or NAUPACTUM, in ancient geography, a city of Ætolia, at the mouth of the Evenus. The word is derived from ναυς and πηγνυμι, becauſe it was there that the Heraclidæ *built* the firſt *ſhip* which carried them to Peloponneſus. It firſt belonged to the Locri Ozolæ; and afterwards fell into the hands of the Athenians, who gave it to the Meſſenians, who had been driven from Peloponneſus by the Lacedæmonians. It became the property of the Lacedæmonians after the battle of Ægoſpotamos, and it was reſtored to the Locri. Philip of Macedon afterwards took it, and gave it to the Ætolians; from which circumſtance it has generally been called one of the chief cities of their country. Lat. 38. 0. N. lon. 22. 20. E.

There was on the ſhore a temple of Neptune, and near it a cave filled with offerings, and dedicated to Venus, where widows reſorted to requeſt new huſbands of the goddeſs. *Pauſan.* lib. x.

NAU'PENT, a town of Hindooſtan, in the circar of Guntoor: eight miles ſouth of Innaconda.

NAUPHA'RAH, a town of Hindooſtan, in the circar of Cicacole: five miles north-eaſt of Tickely.

NAU'PLIA, in ancient geography, a town of the Argolides on the Argolic Gulf, ſouth-eaſt of Temenicum. This, according to Strabo, was the port of the Argians; and, in the time of Pauſanias, the docks, into which veſſels retired, were viſible. It had a temple of Neptune, and a fountain called Canathe, in which Juno is ſaid to have bathed every year, alluſion being made to one of the myſteries of this goddeſs. Here was conſecrated the head of an aſs, which was ſculptured on a ſtone, in honour of this animal, who, by breaking off the under branches of a vine, which thus became more fruitful, taught the neceſſity of trimming the vine.

NAU'PLIUS, in fabulous hiſtory, a ſon of Neptune and Amymone, king of Eubœa. He was the father of the famous Palamedes, who was ſo unjuſtly ſacrificed to the artifice and reſentment of Ulyſſes by the Greeks at the

Trojan war. The death of Palamedes highly enraged Nauplius; and, to requite the injuſtice of the Grecian princes, he endeavoured to debauch their wives, and ruin their characters. When the Greeks returned from the Trojan war, Nauplius was pleaſed to ſee them diſtreſſed in a ſtorm on the coaſts of Eubœa; and, to make their diſaſter ſtill more univerſal, he lighted fires on ſuch places as were ſurrounded with the moſt dangerous rocks, that the fleet might be wrecked upon the coaſt. This had the deſired effect; but Nauplius was ſo diſappointed when he ſaw Ulyſſes and Diomedes eſcape from the general diſtreſs, that he threw himſelf into the ſea. According to ſome mythologiſts, there were two perſons of this name; one a native of Argos, who went to Colchis with Jaſon; he was ſon of Neptune and Amymone. The other was king of Eubœa, and lived about the time of the Trojan war.

NAUPOR'TUS, or NAUPORTUM, in ancient geography, a town on a cognominal river, towards its ſource, in Pannonia Superior. The reaſon of the name, according to Pliny, is, that the ſhip Argo, after coming up the Danube, the Save, and the Laubach, was thence carried on men's ſhoulders over the Alps into the Adriatic. The river Nauportus riſes in the Alps, near Longaticum, at the diſtance of ſix miles from the town Nauportum; which was a colony of the Tauriſci, a people on the confines of Noricum. Now *Upper Laubach* in Carinthia, on the river Laubach. Lat. 46. 28. N. lon. 14. 40. E.

NAUR, a fort of Ruſſia, in the government of Caucaſus, on the Malka: thirty-two miles eaſt of Ekaterinograd.

NAUR'ZIM, a lake of Ruſſia, about forty-eight miles in circumference. Lat. 51. 50. N. lon. 64. 44. E.

NAUS, a town of the county of Tyrol: ſixteen miles weſt of Bolzano.

NAU'SA, a town of South-America, in the audience of Quito: thirty miles north-north-eaſt of Guayaquil.

NAUSA'RY, a town of Hindooſtan, about ten leagues from Surat, of ſmall extent, but containing a very conſiderable cotton-manufactory. It has a fort which belongs to the Mahrattas; and is ſurrounded with pagodas, gardens, and beautiful flower-plats. In the neighbourhood of this town, the only animal uſed for the ſaddle is the ox.

NAU'SCOPY, *ſ.* [Greek.] The art of diſcovering ſhips, &c. at a great diſtance from land. M. Bottineau, a native of the Iſland of Bourbon, in 1782, laid the above diſcovery before the French miniſter, M. Caſtries, who deſired him to return, and continue his obſervations there under the ſuperintendance of the government. He had engaged that not a ſingle ſhip ſhould arrive at the iſland, without his having ſent information of it ſeveral days before. An exact regiſter of his communications was kept in the ſecretary's office, and it appears that he was wonderfully accurate; for within eight months, and in 62 reports, he announced the arrival of 150 ſhips. The following is one of his reports: "On the 20th of Auguſt, 1785, I diſcovered, by examining the horizon, ſome veſſels at the diſtance of four days ſail from the iſland. On the following day the number multiplied conſiderably to my ſight; this induced me to ſend information of many veſſels; but, though they were only four days' diſtance, I nevertheleſs ſtated that no ſettled time could be fixed on for their arrival, as they were detained by a calm. From the 20th of Auguſt, to the 10th of September, I did not ceaſe to announce in my reports the continuation of the calm. On the 13th, I ſent word that the fleet was no longer becalmed, and that it would arrive at the iſland within forty-eight hours. Accordingly, to the ſurpriſe of the whole iſland, M. de Regnier's fleet arrived at Port Louis on the 15th. The general aſtoniſhment was greatly increaſed, when it was known that this fleet had been becalmed ſince the 20th of Auguſt (twenty-three days) near Rodriguez Iſlands, which was preciſely the diſtance that I had pointed out in my reports." In juſtice to M. Bottineau's extraordinary talent, it ought to be obſerved, that it was neither by the undulation of the waves, ſubtilty of ſight, nor the uſe of glaſſes, that he made ſuch accurate reports; and, at the time that he announced the proximity of the ſhip to be within a day's ſail, a perſon placed on a commanding height could not diſcern it. The information conveyed by M. Bottineau diſconcerted all the attempts of the Engliſh cruiſers to intercept the ſhipping in thoſe ſeas, and deſtined for that iſland, during the time he continued his obſervations, which was until the return of peace rendered them of leſs importance.

All the explanation this gentleman has choſen to give is as follows: "This knowledge is not derived either from the undulation of the waves, or from the ſubtilty of ſight, or from any particular ſenſation; but merely from obſervation of the *horizon*, which diſcovers ſigns indicating the proximity of ſhips or of land. On the *approximation* of a ſhip toward the land, or towards another ſhip, there appears in the atmoſphere a *meteor* of a particular nature, viſible to every one without any painful attention. It is not by any kind of accident that this meteor appears under theſe circumſtances; on the contrary, it is the neceſſary reſult of the approximation of one veſſel towards another, or towards the land. The exiſtence of the meteor, and the knowledge of its different modifications, are what conſtitute the certainty and the preciſion of my information. If I am aſked, how it is poſſible that the approach of a ſhip towards land ſhould give birth to any meteor whatſoever in the atmoſphere, and what connexion there can be between two objects at ſuch a diſtance from each other? I reply, that I am not obliged to give an account of the *hows* and the *wherefores*; that it is ſufficient for me to have diſcovered the fact, without being obliged to account for its principle." The writer concludes, by deſiring to be called on for experimental proofs, and by promiſing in future a complete treatiſe of Nauſcopy, with maps, plates, &c. This *complete treatiſe*, as far as we know, has not yet been publiſhed, nor do we expect ever to ſee ſuch a treatiſe on the ſubject as will ſatisfy the minds of thoſe who are perſuaded that every effect muſt have an adequate cauſe. The whole ſeems to be the work of fancy.

NAU'SEA, *ſ.* [Lat. *ναυτια*, Gr. from *ναυς*, a ſhip.] Sea-ſickneſs; any ſickneſs.—The ſickneſs and *nauſea*, uſual in other caſes of the like nature, being marvellouſly in this transferred to the by-ſtanders. *Dodſley.*

NAU'SEA (Frederic), a learned German prelate in the ſixteenth century, who took the ſurname of *Blancicampianus.* No mention is made of the time or place of his birth or education; but the firſt account which we have of him ſtates, that he applied to the ſtudy of the law and divinity with great ſucceſs, and acquired a high character for erudition, as well as by his zealous defences of the catholic doctrine and diſcipline againſt the proteſtants. He preached at Mentz for ſome time with great reputation; and, the fame of his eloquence having reached the court of the emperor Charles V. at Vienna, he was called to officiate there before that monarch. So acceptable were his ſervices to the emperor, that in the year 1541, on a vacancy taking place in the ſee of Vienna, he promoted our author to that dignity. In 1552, he was deputed to attend the council of Trent, and died in that city in the ſame year. He was the author of, 1. An Expoſition of the Books of Tobit and Judith. 2. A Paraphraſe on the Goſpel of St. Matthew. 3. An Expoſition of the Twelve Articles of the Creed. 4. Poſtils and Homilies on all the Goſpels of the Year. 5. An Explication of the Decalogue. 6. Paraphraſes on the ſeventh, eighth, and nineteenth, Pſalms. 7. A Diſcourſe on the Lord's Prayer. 8. Four Books concerning the End of the World. 9. Three Books concerning the Final Advent of Jeſus Chriſt. 10. Four Centuries of Homilies, printed at Mentz in 1534. 11. Five Books on Councils, Leipſic, 1538; and a multitude of controverſial works.

A collection of the whole was publiſhed at Cologne in 1616. In the year 1550, a very curious collection of "Letters," written to him by different perſons, was publiſhed at Baſil, in folio, which ſerve to throw light on the hiſtory of the times, and furniſh us with numerous intereſting anecdotes. Dupin's judgment of this prelate's works is, that "they are well adapted to the inſtruction of the people, with reſpect both to morality and doctrine."

To NAU'SEATE, *v. n.* [from *nauſeo*, Lat.] To grow ſqueamiſh; to turn away with diſguſt.—We are apt to *nauſeate* at very good meat, when we know that an ill cook did dreſs it. *Bp. Reynolds on the Paſſions.*

To NAU'SEATE, *v. a.* To loath; to reject with diſguſt.—While we ſingle out ſeveral diſhes, and reject others, the ſelection ſeems arbitrary; for many are cry'd up in one age, which are decryed and *nauſeated* in another. *Brown.*

Old age, with ſilent pace, comes creeping on,
Nauſeates the praiſe which in her youth ſhe won,
And hates the muſe by which ſhe was undone. *Dryden.*

To ſtrike with diſguſt.—He let go his hold and turned from her, as if he were *nauſeated,* then gave her a laſh with his tail. *Swift.*

NAU'SEATIVE, *adj.* Nauſeous. *Bailey.*

NAU'SEOUS, *adj.* Loathſome; diſguſtful; regarded with abhorrence.—Food of a wholeſome juice is pleaſant to the taſte and agreeable to the ſtomach, till hunger and thirſt be well appeaſed, and then it begins to be leſs pleaſant, and at laſt even *nauſeous* and loathſome. *Ray.*

Thoſe trifles, wherein children take delight,
Grow *nauſeous* to the young man's appetite:
And from thoſe gaieties our youth requires
To exerciſe their minds, our age retires. *Denham.*

NAU'SEOUSLY, *adv.* Loathſomely; diſguſtfully.—This, though cunningly concealed, as well knowing how *nauſeouſly* that drug would go down in a lawful monarchy, which was preſcribed for a rebellious commonwealth, yet they always kept in reſerve. *Dryden.*

Their ſatire's praiſe;
So *nauſeouſly* and ſo unlike they paint. *Garth's Diſp.*

NAU'SEOUSNESS, *ſ.* Loathſomeneſs; quality of raiſing diſguſt.—The *nauſeouſneſs* of ſuch company diſguſts a reaſonable man, when he ſees he can hardly approach greatneſs but as a moated caſtle; he muſt firſt paſs through the mud and filth with which it is encompaſſed. *Dryden's Aurengzebe.*

NAUSIC'AA, a daughter of Alcinous king of the Phæaceans. She met Ulyſſes ſhip-wrecked on her father's coaſts, and it was to her humanity that he owed the kind reception he experienced from the king. *Homer.* Od. vi. *Hygin.* fab. 126.

NAUSIM'ENES, an Athenian, whoſe wife loſt her voice from the alarm ſhe received in ſeeing her ſon guilty of inceſt.

NAUSITH'OUS, a king of the Phæaceans, father to Alcinous. He was ſon of Neptune and Peribœa. Heſiod makes him ſon of Ulyſſes and Calypſo.

NAUS'SA, a ſeaport-town ſituated in a bay on the north-eaſt coaſt of the iſland of Paros, which was fortified by the Ruſſians when they were in poſſeſſion of the Archipelago.

NAUSTATH'MUS, in ancient geography, a port of Sicily. *Plin.* l. iii. c. 8.—Alſo, a port of Africa, in the Pentapolis, according to Ptolemy, placed by Mela in the Cyrenaica.—Alſo, a port at the mouth of the river Indus.—Alſo, a port of Aſia, in the environs of the Troade, according to Strabo.

NAU'STEDAL, a town of Norway, in the province of Bergen: ſeventy miles north of Bergen.

NAUTA'CA, in ancient geography, a town of Aſia, in Sogdiana. *Arrian.* l. iii.

NAU'TAN, a town of Hindooſtan, in Oude: thirty miles ſouth-eaſt of Gooracpour.

NAUTAPOO'L, a town of Bengal: ſeven miles ſouth of Burwah.

NAU'TIC, or NAUTICAL, *adj.* [*nauticus,* Lat.] Pertaining to ſailors.—He elegantly ſhewed by whom he was drawn, which depainted the *nautical* compaſs with *aut magnes, aut magna.* *Camden.*

How did thy ſenſes quail,
Seeing the ſhores ſo ſwarm'd, and round about
Hearing confuſed ſhoutings of the *nautick* rout!
Fanſhaw's Poems 1676.

NAU'TILUS, *ſ.* [Latin.] A ſhell-fiſh furniſhed with ſomething analogous to oars and a ſail. It is the Argonauta argo, or paper nautilus; ſee CONCHOLOGY, vol. v. p. 24.

Learn of the little *nautilus* to ſail,
Spread the thin oar and catch the driving gale. *Pope.*

NAU'TILUS, *ſ.* in helminthology, a genus of teſtaceous worms. Generic characters—Animal a kind of ſepia: ſhell univalve, divided into ſeveral compartments, communicating with each other by an aperture. This genus, which is ſometimes confounded with the Argonauta, or paper nautilus, on account of the ſimilarity of their names, contains the moſt beautiful of all ſhells. It conſiſts of thirty-two ſpecies, ſeveral of which are found foſſil, particularly the ſpecies called *belemnita;* which in England received anciently the name of *thunderſtone,* from a notion that they are thunderbolts, and generally to be found after a ſtorm. Modern improvements in natural hiſtory and mineralogy have completely removed theſe vulgar errors. Many ſmall ſpecies of nautilus are found on the ſhores of Great Britain.

I. Spiral, rounded, with contiguous Whorls.

1. Nautilus pompilius: aperture of the ſhell heart-ſhaped, with obtuſe and ſmooth whorls. This ſpecies is found in the Indian and African Oceans; it is ſometimes very large, and finely variegated with brown flexuous ſtreaks, ſpots, and marks under the outer covering, which is white. Within it is of a moſt beautiful pearly gloſs. Of this ſhell the inhabitants of the Eaſt make drinking-cups. See the article CONCHOLOGY, vol. v. p. 23. and Plate II. III.

2. Nautilus ſcrobiculatus: about the ſame ſize, and marked nearly in the ſame manner, as N. pompilius; but the ſpire is not enveloped by the outer whorl, and, more in the manner of Helix cornea, forms an umbilicated concavity on each ſide of the ſhell. Kæmmerer and Dr. Solander place it as a ſeparate ſpecies; and the depreſſed ſpire at the centre ſo much increaſes its reſemblance to a Cornu Ammonis, that Knorr calls it the only one of the tribe which has been diſcovered in a recent ſtate. It is a very ſcarce and valuable ſhell. *Dillwyn's Catalogue of Recent Shells,* 1817.

3. Nautilus calcar: aperture of the ſhell linear; the whorls have elevated joints. It is found on Sheppy-iſland; is minute, white, and opaque.

4. Nautilus criſpus: aperture of the ſhell ſemicordate; joints of the whorls crenate. This is an inhabitant of the Mediterranean and of Sheppey-iſland, and is very minute. Independently of the ſpecific character juſt given, the ſhell is opaque, white, umbilicate on each ſide, granulate and marked with flexuous ſtriæ; the back is carinate; the ſyphon central, and the chambers a little inflected in the middle.

5. Nautilus beccarii: aperture of the ſhell obovate, the whorls twiſted with deep joints. There is a variety, of which the ſhell is compreſſed, with a linear aperture and contiguous whorls marked with the elevated ſtriæ; many-rayed. This is found on the ſhores of many countries. The ſhell is depreſſed, minute; of a fine pellucid crimſon while the fiſh is alive, but of a dull white when dead.

6. Nautilus lævigatulus: ſhell ſpiral, with ſmooth joints. This ſpecies is found at Sandwich, and is very minute. The ſhell is ſemi-pellucid, white, and gloſſy.

7. Nautilus depreſſulus: ſhell ſpiral, ſlightly umbilicated on each ſide, with many depreſſed joints. Found at Reculver; is minute and very rare. The ſhell is opaque and white.

8. Nautilus umbilicatulus: ſhell ſpiral, umbilicate, with ſpiral joints. It is found at Sandwich; is white, opaque, and minute.

9. Nautilus craſſulus: ſhell ſpiral, thick, umbilicate on each ſide, with fine joints. It is found at Reculver; is very rare, white, opaque, and minute.

10. Nautilus lobatulus: ſhell ſpiral, lobate, the ſpires rounded on one ſide and depreſſed on the other. It is found at Whitſtable; is minute, white, and opaque.

11. Nautilus carinatulus: ſhell oblong, carinate, with a narrow oval aperture. It is found at Sandwich; and is rare, minute, white, and opaque.

12. Nautilus ſubarcuatulus: ſhell a little bending, with raiſed joints. It is found at Sheppey; minute, opaque, and brown.

13. Nautilus Balticus: ſhell white, convex, with a linear aperture; firſt whorl far exceeding the others in ſize. It inhabits the Baltic, adhering to the roots of fuci; it reſembles the M. beccarii; the ſhell is ſometimes poliſhed and opaque; frequently pellucid.

14. Nautilus helicites: whorls of the ſhells concealed. This is found, in a foſſil ſtate, on St. Peter's Mountain at Maeſtricht, and is very ſmall; the ſhell is ſometimes convex, ſometimes depreſſed, ſmooth, or ſtriate.

15. Nautilus rugoſus: apertures of the ſhell linear; whorls compreſſed, with thickened margins. It inhabits the Southern Ocean; is very ſmall, white, ſomewhat depreſſed; the internal diviſions a little prominent outwardly, and appearing like tranſverſe wrinkles.

16. Nautilus umbilicatus: aperture of the ſhell compreſſed and linear; the whorls are compreſſed; the umbilicus concave. It is found in Croatia; is minute, obliquely-jointed, with tranſverſe grooves, anſwering to the diviſions within, particularly at the keel.

II. Spiral, rounded, with ſeparated whorls.

17. Nautilus ſpicula: aperture of the ſhell orbicular, whorl cylindrical. It inhabits the American and Indian Oceans; and is about an inch in diameter. It is whitiſh and ſhining within, like mother-of-pearl; it is orbicular, the whorls gradually decreaſing inwards, the firſt a little ſtraight; the ſiphon is contiguous to the walls of the ſhells.

18. Nautilus Spengleri: ſhell ſmooth, with four conic tubercles. It inhabits India; and is very ſmall.

19. Nautilus unguiculatus: ſhell diaphanous, the middle partitions protuberant outwards; the ſurface has ſix conical tubercles. It inhabits India; and is very minute, thin, white, poliſhed, and ſlightly ribbed.

III. Elongated and ſtraightiſh.

20. Nautilus ſemilituus: ſhell incurved, ſpiral at the tip; the whorls contiguous. It inhabits Croatia; is minute and convex; the partitions appearing outwardly, ſometimes umbilicate.

21. Nautilus lituus: ſhell ſub-conic, with globular diviſions growing gradually leſs; the tip is incurved and ſpiral. It is found in the Red Sea; frequently in a foſſil ſtate.

22. Nautilus obliquus: ſhell ſtraight, with a ſlight curvature; the diviſions are obliquely ſtriate. It inhabits the Mediterranean and Adriatic.

23. Nautilus raphaniſtrum: ſhell ſub-cylindrical, with thick diviſions marked with twelve elevated ſtriæ; the ſiphon is central and regular.

24. Nautilus raphanus: ſhell jointed, the diviſions thick, with ſeventeen elevated ſtriæ; ſiphon ſub-lateral and oblique. It is found in the Mediterranean and Adriatic, and is very minute.

25. Nautilus granum: ſhell ovate-oblong, with thick diviſions marked with eight interrupted elevated ſtriæ; ſiphon oblique. It is found in the Mediterranean, and diſtinguiſhed from the laſt in having ſtriæ at the point of the diviſions a little contracted.

26. Nautilus radicula: ſhell oblong-ovate, with thick glabrous diviſions. Inhabits the Adriatic.

27. Nautilus faſcia: ſhell with ſtriate diviſions and ſmooth elevated joints. Found in the Adriatic.

28. Nautilus inequalis: ſhell cylindrical, with eight diviſions; the ſecond and third very ſhort; the aperture margined.

29. Nautilus ſiphunculus: ſhell ſmooth, with cylindrical remote diviſions; the joints tapering and cylindrical. Inhabits the ſeas about Sicily, and is found adhering to coral rocks.

30. Nautilus legumen: ſhell compreſſed, jointed, and margined at one end; the ſiphon is lateral. It inhabits the Adriatic.

31. Nautilus orthocera: whorls of the ſhell with carinate ſtriæ. It inhabits the Ocean, and is frequently found foſſile.

32. Nautilus belemnita, the thunder-ſtone: ſhell equal, ſmooth, conic, and acute. It is found in a foſſil ſtate in moſt parts of Europe, and has derived its Engliſh name from a notion that it is a thunder-bolt, and never found but after a ſtorm. The ſhell varies in ſize from half an inch to eight inches; it is conical, a little tranſparent, and, when burnt or rubbed, ſmells like raſped horn.

NAUTPOU'R, a town of Bengal, on the Cooſah: thirty-ſix miles north-north-weſt of Purneah. Lat. 26. 18. N. lon. 87. 14. E.

NA'VUK, a town of Perſia, in the province of Mecran: eighty miles ſouth of Arokhage, and 250 north-north-eaſt of Kidge.

NA'VY, *ſ.* [*navis*, Lat. a ſhip.] An aſſemblage of ſhips, commonly ſhips of war; a fleet.—Levy money, and return the ſame to the treaſurer of the *navy* for his majeſty's uſe. *Clarendon.*

The narrow ſeas can ſcarce their *navy* bear,
Or crowded veſſels can their ſoldiers hold. *Dryden.*

Upon the riſe and progreſs, and vaſt importance, of the navy of GREAT BRITAIN, we have ſpoken under that article, vol. viii. p. 816–18. and ſeveral other particulars, with a ſtatement of our naval ſtrength previous to the battle of Trafalgar, will be found under the article ENGLAND, vol. vi. p. 801, 2.

About the year 1793, a practice got footing in the navy of rating ſhips at a certain number of guns, while their real complement exceeded that nominal amount. This ſyſtem, though introduced without any deſign of deception, gave occaſion to foreign nations to accuſe us of miſrepreſentation; as when we ſtated that a Britiſh frigate of 38 guns had taken a foreign frigate of 44, when, in fact, the Britiſh frigate was of equal, if not ſuperior, force. Whence this practice aroſe we cannot tell; but it was not confined to us. The American ſhip Preſident had 55 guns mounted on the day of her capture, though ſhe was rated at only 44. In the Britiſh navy this practice will no longer continue; for it was ordered in the year 1817, that the rule which prevailed prior to 1793 ſhall be revived, and in future all his majeſty's ſhips will be rated at the number of guns and carronades which they actually carry on their decks, quarter-decks, and forecaſtles. We ſincerely rejoice in this regulation; for the navy of England ſtands upon a baſis too broad and unaſſailable to require the aid of any little evaſive tricks; ſhe can never want them as palliations for defeat, and ſhe ſhould diſdain them as blots which tarniſh her conqueſts.

Peace being now conſidered as firmly eſtabliſhed, a new ſcale of pay and half-pay was made out for the army and navy, as well to ſhow the ſenſe entertained by the government of the exertions of both ſervices during the war, as permanently to meet the advance which progreſſively takes place in the price of all the neceſſaries of life. By an order in council of the 25th of November, 1816, the following is the net ſea-pay of the officers and men in his majeſty's navy, to commence from the 1ſt of January, 1817.

I. FLAG-PAY.

	L.	s.	d.	
Admiral of the Fleet	6	0	0	Sea-pay per day, beſides which every Commander-in-Chief ſhall receive a further ſum of 3l. per day, while his flag ſhall be flying within the limits of his ſtation.
Admiral	5	0	0	
Vice Admiral	4	0	0	
Rear Admiral or Commodore with Captain under him Captain of the Fleet	3	0	0	

In Flag Ships all the Lieutenants (including one extra as Flag Lieutenant) are allowed 6d. per day in addition to their pay.

	Per Day.
Phyſician of the Fleet of leſs than 3 years' ſervice as ſuch	£1 1 0
Phyſician to the Fleet of more than 3, and leſs than 10, years' ſervice	1 11 6
Phyſician to the Fleet of more than 10 years' ſervice	2 2 9
	Per Month.
Maſter of the Fleet	15 7 0
Secretary to the Admiral of the Fleet	38 7 0
Secretary to an Admiral, Commander-in-Chief	30 13 8
Secretary to a Vice or Rear Admiral, Commander-in-Chief	23 0 4
Secretary to a Junior Flag-Officer, or Commodore	11 19 9
Two Clerks to Secretaries of Commanders-in-Chief, each	4 12 0
One Clerk to Secretaries of Junior Flag-Officers, or Commodores	3 16 8
Admiral's Coxſwain	2 9 0
Steward, Cook, and Domeſtics	1 12 0

II. MONTHLY PAY OF OFFICERS AND SEAMEN, according to the Rate of the Ship.

RANK.	1ſt Rate.	2d Rate.	3d Rate.	4th Rate.	5th Rate.	6th Rate.	Sloops & Bombs.	Gun-Brigs, Schooners, and Cutters.
	L. s. d.	L. s. d.	L. s. d.	L. s. d.	L. s. d.	L. s. d.	L. s. d.	L. s. d.
Captain	61 7 4	53 14 0	46 0 8	38 7 0	30 13 8	26 17 0	23 0 4	
1ſt Lieut. if of ſeven years' ſtanding	11 10 0	11 10 0	11 10 0					
All others	9 4 0	9 4 0	9 4 0	9 4 0	9 4 0	9 4 0	9 4 0	11 10 0
Maſter	13 0 8	12 5 4	11 10 0	10 14 8	9 4 0	8 8 8	7 13 4	7 13 4
2d Maſter	5 7 4	5 7 4	5 7 4	5 7 4	4 12 0	4 12 0		
Chaplain	12 5 4	12 5 4	12 5 4	12 5 4	12 5 4	12 5 4		
Purſer	5 7 4	4 12 0	4 12 0	4 4 4	4 4 4	3 16 8	3 16 8	
Surgeon. See ſeparate Regulations.								
Gunner Boatſwain Carpenter, with 7s. per month additional for Tools in every rate	7 13 4	6 18 0	6 2 8	5 7 4	4 19 8	4 12 0	4 12 0	
Maſter's Mate, if paſſed	4 12 0	4 4 4	4 4 4	3 16 8	3 9 0	3 9 0	3 9 0	3 9 0
Do. if not paſſed	3 16 8	3 9 0	3 1 4	2 13 8	2 13 8	2 13 8	2 13 8	2 13 8
Midſhipman, if paſſed	3 16 8	3 9 0	3 9 0	3 1 4	3 1 4	3 1 4	3 1 4	3 1 4
Midſhipman, not paſſed	2 13 8	2 6 0	2 6 0	1 18 4	1 18 4	1 18 4	1 18 4	1 18 4
Aſſiſtant Surgeon. For Pay, ſee ſeparate Regulations, p. 644.								
Clerk Schoolmaſter	4 12 0	4 4 0	4 4 4	3 16 8	3 9 0	3 9 0	3 9 0	3 9 0
Maſter-at-Arms Armourer Caulker Rope-Maker Sail-maker Carpenter's Mate, with 7s. per month additional for Tools in every rate	2 10 0	2 8 0	2 6 0	2 4 0	2 2 0	2 0 0	1 19 0	1 19 0
Gunner's Mate Boatſwain's Mate Ship's Corporal Quarter Maſter Captain's Coxſwain Coxſwain of the Launch Coxſwain of the Pinnace Yeoman of the Signals Captain of the Hold Captain of the Forecaſtle	2 4 0	2 3 0	2 1 0	1 19 0	1 17 0	1 15 0	1 15 0	1 15 0
Cooper Armourer's Mate Caulker's Mate	2 4 0	2 3 0	2 1 0	1 19 0	1 17 0	1 15 0	1 15 0	1 15 0

Sailmaker's

Table II. continued.	1ſt Rate.	2d Rate.	3d Rate.	4th Rate.	5th Rate.	6th Rate.	Sloops & Bombs.	Gun-Brigs, Schooners, and Cutters.
	L. s. d.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
Sailmaker's Mate Captain of the Foretop Captain of the Maintop Captain of the Afterguard Captain of the Maſt	1 19 0	1 18 0	1 17 0	1 16 0	1 15 0	1 14 0	1 14 0	
Ship's Cook	2 11 6	2 11 6	2 11 6	2 11 6	2 11 6	2 10 6	2 10 6	2 10 6
Volunteer 1ſt Claſs	1 0 0	1 0 0	1 0 0	1 0 0	1 0 0	1 0 0	1 0 0	
Gunner's Crew Carpenter's Crew, with 7s. per month additional for Tools in every rate Sailmaker's Crew Cooper's Crew	1 14 0	1 14 0	1 14 0	1 14 0	1 14 0	1 14 0	1 14 0	1 14 0
Able Seaman Gunner's Yeoman Boatſwain's Yeoman Carpenter's Yeoman	1*l.* 12*s.* in all Rates.							
Ordinary Seaman Cook's Mate Barber	1*l.* 4*s.* in all Rates.							
Purſer's Steward in Veſſels in which a Purſer is allowed Captain's Steward Captain's Cook Ward or Gun-room Steward Ward or Gun-room Cook	1*l.* 12*s.* in all Rates.							
Steward's Mate Landman	1*l.* 1*s.* in all Rates.							
Boy, 2d Claſs	0 12 3	0 12 3	0 12 3	0 12 3	0 12 3	0 12 3	0 12 3	0 12 3
Do. 3d Claſs	0 10 9	0 10 9	0 10 9	0 10 9	0 10 9	0 10 9	0 10 9	0 10 9
Widows' Men	1 12 0	1 12 0	1 12 0	1 12 0	1 12 0	1 12 0	1 12 0	

The numbers included in theſe ratings are, in

			Making the total War Complement of
1ſt Rates	1ſt Claſs	533	900
	2d Claſs	583	850
	3d Claſs	433	800
2d Rates	1ſt Claſs	362	700
	2d Claſs	312	650
3d Rates	1ſt Claſs	359	650
	2d Claſs	309	600
4th Rates	1ſt Claſs	264	450
	2d Claſs	164	350
5th Rates	1ſt Claſs	144	300
	2d Claſs	124	280
6th Rates	1ſt Claſs	63	175
	2d Claſs	33	145
	3d Claſs	13	125
Sloops, Brigs, &c.	1ſt Claſs	50	135
	2d Claſs	40	125
	3d Claſs	36	95
	4th Claſs	16	75
	5th Claſs	30	60
		20	50

III. ROYAL MARINES.

Rank.	Marines in all Rates.	Marine Artillery.
	L. s. d.	*L. s. d.*
Captain	14 14 10	15 8 6
—— if Brevet Major	17 10 10	18 4 0
1ſt Lieutenant after 7 years	10 10 7	10 19 4
—— under 7 years	9 2 4	9 11 4
2d Lieutenant	7 7 5	7 16 4
Serjeant	1 18 1	2 16 9
—— if Colour Serjeant	2 12 1	3 10 9
Corporal after 14 years	1 10 1	2 14 0
—— from 7 to 14 years	1 7 9	2 11 8
—— under 7 years	1 5 5	2 9 4
Drummer	1 1 4	1 4 5
Bombardier after 14 years	———	2 9 6
—— from 7 to 14 years	———	2 7 2
—— under 7 years	———	2 4 10
Private or Gunner after 14 years	1 1 6	1 9 0
—— from 7 to 14 years	0 19 2	1 6 9
—— under 7 years	0 17 5	1 4 5

The *ſea-pay* of all officers and men of his majeſty's navy and royal marines, as ſtated in the Table, is a *net pay*, without addition or deduction of any kind.

In all caſes where *perſonal pay* is now payable, three-fourth parts of the new net pay ſhall be conſidered as perſonal pay, and ſhall be payable accordingly; and all laws, regulations, or inſtructions, now exiſting, concerning *perſonal pay*, are to be taken and conſidered to apply to three-fourth parts of the new net pay; and thoſe concerning *compenſation* are to be taken and conſidered to apply to the remaining one-fourth part of the new net pay, except as may be hereinafter ordered to the contrary.

Flag-officers, or commodores with captains under them, when commiſſioned as commanders-in-chief, or properly ſucceeding to ſuch command, ſhall have a pay of 3l. per day in lieu of the preſent table-money; but this ſhall be payable only while the flag or broad pendant of the officer is flying within the actual limits of his ſtation; and, on his death or abſence, ſhall be paid to the officer on whom the command may devolve, provided he be a flag-officer, or a commodore with a captain under him.

Captains, who on the death or abſence of a commander-in-chief are authorized to hoiſt a diſtinguiſhing pendant, ſhall receive the pay of 1l. per day in addition to their pay as captains while the pendant is flying within the limits of the ſtation.

The following officers ſhall be permitted to draw bills for the amount of three-fourths of their pay quarterly: captains, commanders, lieutenants commanding, and ſurgeons.

The following officers ſhall be permitted to draw the whole of their pay quarterly: flag-officers, lieutenants not commanding, officers of royal marines, phyſicians of the fleet, maſters of the fleet, chaplains, ſecretaries, and aſſiſtant-ſurgeons.

The following officers ſhall be permitted to draw the whole of their pay half-yearly: paſſed mates, paſſed midſhipmen,

ſhipmen, ſecretaries' clerks, captains' clerks, and ſchoolmaſter.

Bills drawn by any lieutenant of the ſhip, officer of royal marines, maſter, chaplain, ſecretary, aſſiſtant-ſurgeon, clerk, mate, midſhipman, or ſchoolmaſter, muſt be certified by the purſer, and approved by the captain. The purſer ſhall be held reſponſible that the ſaid bill is not for a greater ſum than the officer had a right to draw for, after any debt for ſlops or dead men's clothes is abated from the amount of his wages, for the period for which the bill is drawn; and the captain ſhall be held reſponſible, that the officer ſo drawing has been borne for wages during the ſpecified period, and is entitled by theſe regulations to draw, and that the purſer has already approved the ſaid bills.

The rates of pay of ſurgeons and aſſiſtant-ſurgeons are regulated by his majeſty's order in council of the 23d January, 1805, viz.

Surgeons of ſhips in active ſervice.		per Day.
Of this time not more than three years, as Hoſpital Mate, or Aſſiſtant-Surgeon, ſhall be allowed,	Under 6 years' ſervice,	10s.
	After 6 ——	11
	10 ——	14
	20 ——	18
Surgeons of receiving-ſhips, ſloops, convaleſcent ſhips, priſon-ſhips, and all others (except hoſpital ſhips) in harbour-duty		10
Surgeons of hoſpital-ſhips, unleſs by length of ſervice entitled to a ſuperior rate of payment		15
Aſſiſtant-Surgeons		6s. 6d.

By command of their lordſhips,

Admiralty-office,
Dec. 10, 1816.

J. W. CROKER.

IV. RATES of HALF-PAY (per Day, payable quarterly) at preſent eſtabliſhed for the NAVY and MARINES.

	£.	s.	d.
Admiral of the Fleet	3	3	0
Admirals	2	2	0
Vice Admirals	1	12	6
Rear ditto	1	5	0
To each of the firſt 100 Captains as they ſtand on the general liſt of officers in ſeniority	0	14	6
To each of the next 150	0	12	6
To the reſt	0	10	6
To each of the firſt 150 Commanders on the liſt	0	10	0
To the remainder	0	8	6
To each of the firſt 300 Lieutenants on the liſt	0	7	0
To each of the next 700	0	6	0
To the remainder	0	5	0
Colonels of Royal Marines	0	14	6
Lieutenant-Colonels	0	11	0
Majors	0	9	6
Captains	0	7	0
Firſt Lieutenants of 7 years' ſtanding	0	4	6
The reſt	0	4	0
Second Lieutenants	0	3	0
To the firſt 100 Maſters on the liſt (being qualified for firſt or ſecond rates)	0	7	0
To the next 200 (being qualified for third or fourth rates)	0	6	3
The remainder, having ſerved 5 years in the Navy, 2 of which as acting or ſecond Maſter, or as Maſter's Mate or Midſhipman	0	5	0
Phyſicians after 10 years' ſervice	1	1	0
—— three years	0	15	0
—— under that time	0	10	6
Surgeons, after 6 years' ſervice	0	6	0
—— under that time	0	5	0
Aſſiſtant Surgeons, after 3 years' ſervice	0	3	0
—— two years	0	2	0
Diſpenſers	0	5	0
Chaplains, after 8 years' ſervice at ſea, or 10 in harbour	0	5	0

For leſs ſervice, not under three years, a proportion of the above.

	£.	s.	d.
For each year's longer ſervice than 10 years 6d. per day additional till it reach	0	10	0
To the firſt 100 Purſers on the liſt	0	5	0
The next 200	0	4	0
The remainder	0	3	0

V. WIDOWS' PENSIONS.

	Per Ann.
Widow of a Flag-Officer	£150
—— Superannuated Rear-Admiral	100
—— Poſt-Captain three years' ſtanding	90
—— Poſt-Captain under three years	80
—— Commander	70
—— Superannuated Commander	60
—— Lieutenant	50
—— Maſter or Surgeon	40
—— Purſer	30
—— Gunner, Boatſwain, Carpenter, Second Maſter of a Yacht, or Maſter of a Naval Veſſel warranted by the Navy Board	25

Widows of Officers of the Royal Marines.	Per Ann.
Widow of a General Officer	£120
—— Colonel	90
—— Lieutenant-Colonel	80
—— Major	70
—— Captain	50
—— Firſt Lieutenant and Surgeon	40
—— Second Lieut. and Aſſiſtant Surgeon	36

PRESENT RATINGS OF SHIPS.

Ships of the Firſt Rate include all of Three Decks.
—— Second Rate, include thoſe of 80 Guns and upwards.
—— Third Rate, thoſe of 70 and leſs than 80 Guns.
—— Fourth Rate, thoſe of 50 and leſs than 70 Guns.
—— Fifth Rate, thoſe of 36 and leſs than 50 Guns.
—— Sixth Rate, thoſe of 24 and leſs than 36 Guns.

The following, we believe, will be found to be the regulations for holding the ſhips on the peace-eſtabliſhment: None of the guard-ſhips (flag-ſhips excepted) to be held by any captain under the firſt 100 on the poſt-liſt; none of the frigates by any captain under five years' poſt; none of the ſloops or brigs by any commander under three years of that rank; no lieutenants to be firſt of a line-of-battle ſhip, flag-ſhip excepted, under ten years' ſtanding; no lieutenant to be firſt of a frigate under eight years' ſtanding; no lieutenant to be firſt of a ſloop or brig under four years' ſtanding. Aſſiſtant-ſurgeons are now appointed to all ſloops of war. Maſters and midſhipmen, who have paſſed their examination for the rank of lieutenant, and whoſe ſhips are, or may be, paid off, are (if they wiſh to continue in the ſervice) to be ſent on-board their reſpective flag-ſhips, and borne on their books under the denomination of "ſupernumerary admiralty mates and midſhipmen." Young gentlemen educated in the Naval College are likewiſe to be thus attached to the ſervice.

The royal navy of Great Britain, in peace and in war, is conducted, under the direction of the lords of the admiralty, by ſeven commiſſioners, and the following principal officers, who compoſe the board for managing the buſineſs of the navy-office; viz. Comptroller of the navy, who attends and comptrols the payment of all wages, is to know the rates of ſtores, &c. there is alſo a deputy-comptroller. Surveyor of the navy, who is to know the ſtate of all ſtores, to ſupply what is wanting, to eſtimate repairs, charge boatſwains, &c. with the ſtores they receive, &c. there have been generally two joint-ſurveyors. Clerk of the acts, whoſe buſineſs is to record all orders, contracts, bills, warrants, &c. Comptroller of the treaſurer's accounts. Comptroller of the victualling accounts. Comptroller of the ſtore-keeper's accounts: in time of war, or great naval exertion, there are other additional extra-commiſſioners. There are alſo commiſſioners for Deptford and Woolwich, and alſo others for the out-ports, reſiding at Chatham, Sheerneſs, Portſmouth, and

Plymouth: and in time of war commiſſioners are appointed to reſide at ſome of the principal yards abroad, as Gibraltar, Halifax in Nova Scotia, Malta, Antigua, Jamaica, Cape of Good Hope, Madras, Bombay, &c. The treaſurer of the navy is an officer, whoſe buſineſs is to receive money out of the exchequer, and to pay all the charges of the navy, by warrant from the principal officers. Each of theſe commiſſioners and officers has a number of ſubordinate clerks, with various ſalaries.

The method of ordering ſeamen in the royal fleet, and keeping up diſcipline there, is directed by certain expreſs rules, articles, and orders, firſt enacted by the authority of parliament ſoon after the reſtoration, but ſince new modelled and altered. In the 13th year of king Charles II. an act paſſed for regulating the government of the fleet, ſtat. 13 Car. II. ſt. 1. c. 9, which was repealed by 22 Geo. II. c. 33. explained and amended by 19 Geo. III. c. 17. Theſe two latter ſtatutes contain not only the 36 Articles of War, in which almoſt every poſſible offence is explicitly ſet down, and the puniſhment thereof annexed or left to the diſcretion of a court-martial; but alſo ſundry clauſes of expreſs rules and orders for aſſembling and holding courts for the trial of any of the offences ſpecified therein. By 39 & 40 Geo. III. c. 100, whereby his majeſty was authoriſed to grant commiſſions for natives of Holland to ſerve on-board certain Dutch ſhips of war which had ſurrendered, the Articles of War were directed to be tranſlated into Dutch, and the crews of the ſhips were made ſubject thereto. The following are the ARTICLES OF WAR above alluded to:

1. Officers are to cauſe public worſhip, according to the Liturgy of the Church of England, to be ſolemnly performed in their ſhips, and take care that prayers and preaching by the chaplains be performed diligently, and that the Lord's day be obſerved.

2. Perſons guilty of profane oaths, curſing, drunkenneſs, uncleanneſs, &c. to be puniſhed as a court-martial ſhall think fit.

3. If any perſon ſhall give or hold intelligence to or with an enemy without leave, he ſhall ſuffer death.

4. If any letter or meſſage from an enemy be conveyed to any in the fleet, and he ſhall not in twelve hours acquaint his ſuperior officer with it, or if the ſuperior officer, being acquainted therewith, ſhall not reveal it to the commander-in-chief, the offender ſhall ſuffer death, or ſuch puniſhment as a court-martial ſhall impoſe.

5. Spies and perſons endeavouring to corrupt any one in the fleet, ſhall ſuffer death, or ſuch puniſhment as a court-martial ſhall impoſe.

6. No perſon ſhall relieve an enemy with money, victuals, or ammunition, on like penalty.

7. All papers taken on-board a prize ſhall be ſent to the court of admiralty, &c. on penalty of forfeiting the ſhare of the prize, and ſuch puniſhment as a court-martial ſhall impoſe.

8. No perſon ſhall take out of any prize any money or goods, unleſs for better ſecuring the ſame, or for the neceſſary uſe of any of his majeſty's ſhips, before the prize ſhall be condemned; upon penalty of forfeiting his ſhare, and ſuch puniſhment as ſhall be impoſed by a court-martial.

9. No perſon on-board a prize ſhall be ſtripped of his clothes, pillaged, beaten, or ill-treated, upon pain of ſuch puniſhment as a court-martial ſhall impoſe.

10. Every commander who, upon ſignal or order of fight, or ſight of any ſhip which it may be his duty to engage, or who, upon likelihood of engagement, ſhall not make neceſſary preparations for fight, and encourage the inferior officers and men to fight, ſhall ſuffer death, or ſuch puniſhment as a court-martial ſhall deem him to deſerve. And, if any perſon ſhall treacherouſly or cowardly yield or cry for quarter, he ſhall ſuffer death.

11. Every perſon who ſhall not obey the orders of his ſuperior officer, in time of action, to the beſt of his power, ſhall ſuffer death, or ſuch puniſhment as a court-martial ſhall deem him to deſerve.

12. Every perſon who, in time of action, ſhall withdraw or keep back, or not come into the fight, or do his utmoſt to take or deſtroy any ſhip which it ſhall be his duty to engage, and to aſſiſt every ſhip of his majeſty or his allies, which it ſhall be his duty to aſſiſt, ſhall ſuffer death or other puniſhment.

13. Every perſon who, through cowardice, &c. ſhall forbear to purſue the chaſe of any enemy, &c. or ſhall not aſſiſt or relieve a known friend in view, to the utmoſt of his power, ſhall ſuffer death, or other puniſhment.

14. If any perſon ſhall delay or diſcourage any action or ſervice commanded, upon pretence of arrears of wages, or otherwiſe, he ſhall ſuffer death, or ſuch puniſhment as a court-martial ſhall deem him to deſerve.

15. Every perſon who ſhall deſert to the enemy, or run away with any ſhip, ordnance, &c. to the weakening of the ſervice, or yield up the ſame cowardly or treacherouſly to the enemy, ſhall ſuffer death.

16. Every perſon who ſhall deſert, or entice others ſo to do, ſhall ſuffer death, or ſuch puniſhment as a court-martial ſhall think fit. If any commanding officer ſhall receive a deſerter, after diſcovering him to be ſuch, and ſhall not with ſpeed give notice to the captain of the ſhip to which he belongs, or, if the ſhip is at a conſiderable diſtance, to the ſecretary of the admiralty, or commander-in-chief, he ſhall be caſhiered. [See alſo 44 Geo. III. c. 13. by which petty officers or ſeamen, taken out of the navy for any civil or criminal matter, ſhall be kept in cuſtody till diſcharged from ſuch ſuit, and ſhall then be conveyed and delivered to ſome officer of the navy to continue their ſervice therein. This act was paſſed to prevent deſertion, under the colour of falſe actions or proſecutions.]

17. Officers and ſeamen of ſhips appointed for convoy of merchant-ſhips, or of any other, ſhall diligently attend upon that charge according to their inſtructions; and whoſoever ſhall not faithfully perform their duty, and defend the ſhips in their convoy, or refuſe to fight in their defence, or run away cowardly and ſubmit the ſhips in their convoy to hazard, or exact any reward for convoying any ſhip, or miſuſe the maſters or mariners, ſhall make reparation of damages, as the court of admiralty ſhall adjudge; and be puniſhed criminally, by death or other puniſhment, as ſhall be adjudged by a court-martial.

18. If any officer ſhall receive or permit to be received on-board any goods or merchandiſe, other than for the ſole uſe of the ſhip, except gold, ſilver, or jewels, and except goods belonging to any ſhip which may be ſhipwrecked, or in danger thereof, in order to the preſerving them for the owners, and except goods ordered to be received by the lord high admiral, &c. he ſhall be caſhiered, and rendered incapable of further ſervice.

19. Any perſon making or endeavouring to make any mutinous aſſembly ſhall ſuffer death. Any perſon uttering words of ſedition or mutiny ſhall ſuffer death, or ſuch puniſhment as a court-martial ſhall deem him to deſerve. If any officer, mariner, or ſoldier, in or belonging to the fleet, ſhall behave himſelf with contempt to his ſuperior officer, being in the execution of his office, he ſhall be puniſhed according to the nature of his offence, by the judgment of a court-martial.

20. Any perſon concealing any traitorous or mutinous practice or deſign, ſhall ſuffer death, or ſuch puniſhment as a court-martial ſhall think fit. Any perſon concealing any traitorous or mutinous words, or any words, practice, or deſign, tending to the hindrance of the ſervice, and not forthwith revealing the ſame to the commanding officer; or, being preſent at any mutiny or ſedition, ſhall not uſe his utmoſt endeavours to ſuppreſs the ſame, ſhall be puniſhed as a court-martial ſhall think he deſerves. [See the act 37 Geo. III. c. 71. for reſtraining intercourſe with the crews of certain ſhips in a ſtate of mutiny and

rebellion, and for the ſuppreſſion of ſuch mutiny and rebellion; and 37 Geo. III. c. 70, (laſt continued by 47 Geo. III. c. 15.) making it felony without clergy to attempt to ſeduce ſeamen (or ſoldiers) from their duty.]

21. Any perſon finding cauſe of complaint of the unwholeſomeneſs of victuals, or upon other juſt ground, he ſhall quietly make the ſame known to his ſuperior, who, as far as he is able, ſhall cauſe the ſame to be preſently remedied; and no perſon upon any ſuch or other pretence ſhall attempt to ſtir up any diſturbance, upon pain of ſuch puniſhment as a court-martial ſhall think fit to inflict.

22. Any perſon ſtriking any his ſuperior officer, or drawing or offering to draw or lift up any weapon againſt him, being in the execution of his office, ſhall ſuffer death. And any perſon preſuming to quarrel with any his ſuperior officer, being in the execution of his office, or diſobeying any lawful command of any his ſuperior officer, ſhall ſuffer death, or ſuch other puniſhment as ſhall be inflicted upon him by a court-martial.

23. Any perſon quarrelling or fighting with any other perſon in the fleet, or uſing reproachful or provoking ſpeeches or geſtures, ſhall ſuffer ſuch puniſhment as a court-martial ſhall impoſe.

24. There ſhall be no waſteful expenſe or embezzlement of any powder, ſhot, &c. upon penalty of ſuch puniſhment as by a court-martial ſhall be found juſt.

25. Every perſon burning or ſetting fire to any magazine, or ſtore of powder, ſhip, &c. or furniture thereunto belonging, not then appertaining to an enemy, ſhall ſuffer death.

26. Care is to be taken that through wilfulneſs or negligence no ſhip be ſtranded, run upon rocks or ſands, or ſplit, or hazarded; upon pain of death, or ſuch puniſhment as a court-martial ſhall deem the offence to deſerve.

27. No perſon ſhall ſleep upon his watch, or negligently perform his duty, or forſake his ſtation; upon pain of death, or ſuch puniſhment as, &c.

28. Murder; and

29. Buggery, or ſodomy; ſhall be puniſhed with death.

30. Robbery ſhall be puniſhed with death, or otherwiſe as a court ſhall find meet.

31. Every perſon knowingly making or ſigning, or commanding, counſelling, or procuring, the making or ſigning, any falſe muſter, ſhall be caſhiered, and rendered incapable of further employment.

32. Provoſt-marſhal refuſing to apprehend or receive any criminal, or ſuffering him to eſcape, ſhall ſuffer ſuch puniſhment as a court-martial ſhall deem him to deſerve. And all others ſhall do their endeavours to detect and apprehend all offenders, upon pain of being puniſhed by a court-martial.

33. If any flag-officer, captain, commander, or lieutenant, ſhall behave in a ſcandalous, infamous, cruel, oppreſſive, or fraudulent, manner, unbecoming his character, he ſhall be diſmiſſed.

34. Every perſon in actual ſervice and full pay, guilty of mutiny, deſertion, or diſobedience, in any part of his majeſty's dominions on-ſhore, when in actual ſervice relative to the fleet, ſhall be liable to be tried by a court-martial, and ſuffer the like puniſhment as if the offence had been committed at ſea.

35. Every perſon in actual ſervice and full pay, committing on-ſhore, in any place out of his majeſty's dominions, any crime puniſhable by theſe articles, ſhall be liable to be tried and puniſhed as if the crime had been committed at ſea.

36. All other crimes not capital, not mentioned in this act, ſhall be puniſhed according to the laws and cuſtoms uſed at ſea. No perſon to be impriſoned for longer than two years.

Court-martial not to try any offence (except under the 5th, 34th, and 35th, articles) not committed upon the main ſea, or in great rivers beneath the bridges, or in any haven, &c. within the juriſdiction of the admiralty, or by perſons in actual ſervice and full pay, except ſuch perſons as mentioned in 5th article; nor to try a land-officer or ſoldier on-board of a tranſport-ſhip. The lord high admiral, &c. may grant commiſſions to any officer commanding in chief any fleet, &c. to call courts-martial, conſiſting of commanders and captains; and, if the commander-in-chief ſhall die or be removed, the officer next in command may call courts-martial. No commander-in-chief of a fleet, &c. of more than five ſhips, ſhall preſide at any court-martial in foreign parts, but the officer next in command ſhall preſide. If a commander-in-chief ſhall detach any part of his fleet, &c. he may empower the chief commander of the detachment to hold courts-martial during the ſeparate ſervice. If five or more ſhips ſhall meet in foreign parts, the ſenior officer may hold courts-martial and preſide thereat. Where it is improper for the officer next to the commander-in-chief to hold or preſide at a court-martial, the third officer in command may be empowered to preſide at, or hold, the ſame. No court-martial ſhall conſiſt of more than thirteen, nor leſs than five, perſons. Where there ſhall not be leſs than three, and yet not ſo many as five, of the degree of a poſt-captain or ſuperior rank, the officer who is to preſide muſt call to his aſſiſtance as many commanders under the degree of a poſt-captain as together with the poſt-captains ſhall make up the number five, to hold the court-martial. Proceedings ſhall not be delayed, if a ſufficient number remain to compoſe the court, which ſhall ſit from day to day (except Sunday) till ſentence be given.

The judge-advocate, and all officers conſtituting a court-martial, and all witneſſes, ſhall be upon oath. Perſons refuſing to give evidence may be impriſoned. Sentence of death within the Narrow Seas (except in caſe of mutiny) ſhall not be put in execution till a report be made to the lord high admiral, &c. Sentence of death beyond the Narrow Seas ſhall not be put in execution but by order of the commander-in-chief of the fleet, &c. Sentence of death in any ſquadron detached from the fleet, ſhall not be put in execution (except in caſe of mutiny) but by order of the commander of the fleet, or lord high admiral, &c. And ſentence of death paſſed in a court-martial, held by the ſenior officer of five or more ſhips met in foreign parts, (except in caſe of mutiny,) ſhall not be put in execution but by order of the lord high admiral, &c.

The powers given by the ſaid articles ſhall remain in force with reſpect to crews of ſhips wrecked, loſt, or deſtroyed, until they be diſcharged or removed into another ſhip, or a court-martial ſhall be held to inquire of the cauſes of the loſs of the ſhip. And if upon inquiry it ſhall appear, that all or any of the officers and ſeamen did their utmoſt to ſave the ſhip, and behaved obediently to their ſuperior officers, their pay ſhall go on; as alſo ſhall the pay of officers and ſeamen taken by the enemy, having done their beſt to defend the ſhip, and behaved obediently. If any officer ſhall receive any goods on-board, contrary to the 18th article, he ſhall further forfeit the value of ſuch goods, or 500l. at the election of the informer; half to the informer, and half to Greenwich Hoſpital.

By ſtat. 31 Geo. II. c. 10. § 33. a competent number of printed copies of the above Articles of War are to be delivered to the captain or commander of every ſhip or veſſel; who is to cauſe them to be hung up and affixed to the moſt public places of the ſhip, and to have them conſtantly kept up and renewed, ſo that they may be at all times acceſſible to the inferior officers and ſeamen on-board: and likewiſe to obſerve that ſuch abſtracts be audibly and diſtinctly read over, once in every month, in the preſence of the officers and ſeamen, immediately after the Articles of War are read. And by 32 Geo. III. c. 67, abſtracts of the ſeveral acts relating to the pay, &c. of the ſeamen are to be hung up on-board all ſhips, &c. in like manner as the Articles of War.

Some doubts having been entertained in the time of William III. whether the commiſſioners of the admiralty had

had the ſame power to iſſue commiſſions to a court-martial to try a priſoner, as the lord high admiral was allowed to have; this and all the other powers of a lord high admiral were veſted in ſuch commiſſioners by ſtat. 2 W. & M. ſtat. 2. c. 2.

Members of courts-martial are liable to anſwer, in damages, to the party injured, for the conſequences of any unjuſt ſentence. A remarkable inſtance of this occurred in the caſe of lieutenant Frye of the marines, who in the year 1743 was ſentenced to fifteen years' impriſonment by a court-martial. He brought an action againſt the preſident ſir Chaloner Ogle, and recovered 1000l. damages.

The following are ſome minor regulations reſpecting naval affairs.

Perſons ſtealing or embezzling any of the king's naval ſtores, to the value of twenty ſhillings, are guilty of felony without benefit of clergy. 22 *Car.* II. c. 5. And by 1 Geo. I. ſtat. 2. c. 25, the treaſurer and commiſſioners of the navy are empowered to enquire of naval ſtores embezzled, and appoint perſons to ſearch for them, &c. who may go onboard ſhips, and ſeize ſuch ſtores; and the commiſſioners, &c. may impriſon the offenders, and fine them double value, the ſtores being under the value of twenty ſhillings. None but the contractors with the commiſſioners of the navy ſhall make any ſtores of war, naval ſtores, &c. with the marks commonly uſed to his majeſty's ſtores, upon pain of forfeiting two hundred pounds. And perſons in whoſe cuſtody ſuch ſtores ſhall be found concealed, are liable to the ſame penalty. *Stat.* 9 & 10 *W.* 3. c. 41.

The ſtat. 3 Ann. c. 10, was made for the encouragement of the importation of naval ſtores from the plantations in America, and for preſervation thereof in thoſe countries; inflicting penalties for cutting down pine or pitch trees under ſuch and ſuch ſizes, &c. To the like purpoſe, and for the making the ſame more effectual, is the ſtat. 8 Geo. I. c. 12. Alſo naval ſtores are imported here from Scotland, under an encouragement by ſtatute; and a premium is given for the importing of naval ſtores from America and North Britain, of one pound per ton, for maſts and pitch, &c. by ſtat. 2 Geo. II. c. 35.

Juſtices may mitigate the penalty of concealing ſtores; 9 Geo. I. c. 8. Juſtices of aſſize and quarter-ſeſſions may hear and determine offences relating to ſtores; 17 Geo. II. c. 40. Pre-emption of ſtores imported in neutral ſhips given to the commiſſioners of the navy during the war; 19 Geo. II. c. 36. The exportation of naval ſtores prohibited by 33 Geo. II. § 1. The dealers in naval-ſtores, are put under certain regulations, by 49 Geo. III. c. 122. § 17, &c.

Navy and Victualling Bills, are bills or orders for the payment of money, iſſued by the commiſſioners of the navy and victualling offices, on the treaſurer of the navy, &c. for ſtores and proviſions purchaſed for the ſervice of the navy.

That the contractors may not be loſers by receiving theſe bills in payment, the current diſcount, at the time of making them out, is added to the amount of the goods delivered. The inconveniences ariſing from too great a number of theſe bills remaining undiſcharged at any time, have induced government, at different periods, to allow the proprietors to exchange them for a certain proportion of redeemable ſtock; and thus they become poſſeſſed of at leaſt an equal ſecurity, with the advantage, that any part of it can be diſpoſed of as occaſion may require, inſtead of being limited, in this reſpect, by the amount of the bills, which is generally conſiderable; the intereſt alſo becomes, by this mode of management, payable at certain periods; whereas the time of payment of the intereſt on the unfunded bills, previouſly to the regulation which took place in 1794, was always uncertain; no payment being made till the principal and the intereſt due upon it were diſcharged together. In 1794, all navy and victualling bills were made payable on a certain day, to be expreſſed in each particular bill, which day was not to exceed fifteen months from the date of the bill; but the bills now iſſued from the navy and victualling offices are at ninety days' date, bearing intereſt at 3d. per cent. per diem. commencing from the date of the bill, and payable with it; and theſe bills, being negociated as bills of exchange, of courſe cannot be bought and ſold at a diſcount. In negociating theſe bills, the whole property-tax on the ninety days' intereſt uſed to be deducted, and the intereſt for the time they have to run taken on the nett ſum.

NA'VY, in geography, a townſhip of America, in Orleans county, ſtate of Vermont.

NAVY HA'LL, a ſettlement of Upper Canada, on the river Niagar, at its union with the Lake Ontario, oppoſite Niagar-fort.

NAVY I'SLAND, an iſland in the river Niagar, about three miles in circumference: twenty miles north-eaſt of Navy Hall.

NAVY I'SLAND, a ſmall iſland on the north coaſt of Jamaica. Lat. 18. 13. N. lon. 76. 10. W.

NAW'DIA, a town of Hindooſtan, in Bahar: twenty-five miles ſouth-weſt Bahar. Lat. 25. 1. N. lon. 85. 17. E.

NAWDOWES'SIE IN'DIANS, Indians of North-America, inhabiting the banks of the river St. Croix, and lands weſtward.

NAWER'RA, a town of Hindooſtan, in Guzerat: twenty miles eaſt of Godra.

NAWL, *ſ.* An awl. See Nall.—The maſter was appointed to bore their ears through with a *nawl*, and ſo to mark them for perpetual ſervants. *Fotherby's Atheom.* 1622.

NAW'ORTH, a village in Cumberland, ten miles from Carliſle, and two from Brampton, on the borders of Scotland. Here, in a low ſituation, and ſurrounded with wood, ſtands Naworth-caſtle, the ſeat of the earl of Carliſle. It is a fine Gothic ſtructure, of conſiderable antiquity, and formerly of great ſtrength. It is ſtill entire, and inhabited. Some reparations have lately taken place, planned with great taſte and judgment. It is a large pile, ſquare, and built round a court. On the north it ſtands over the river Irthing, at a great height, the banks ſhagged with wood. The whole houſe is a very irregular building; the rooms numerous, acceſſible by thirty-ſix ſtaircaſes, with moſt frequent and ſudden aſcents and deſcents. The great hall has a gallery at one end, adorned with four vaſt creſts carved in wood, viz. a griffin and dolphin, with the ſcollops; an unicorn, and an ox with a coronet round his neck. In front is a figure in wood of an armed man; two others, perhaps vaſſals, in ſhort jackets and caps. The top and upper end of the room is painted in ſquares, repreſenting the Saxon kings and heroes. This caſtle was built by one of the Dacres about the reign of Henry III. In the garden-walls were ſtones with Roman inſcriptions, which the late earl of Carliſle gave to ſir Thomas Robinſon, and were by him removed to his muſeum at Rokeſby. On one of theſe ſtones is this inſcription, *Peditum centum quinquaginta Britannorum:* whence it appears that the Romans, when in poſſeſſion of Britain, ſometimes indulged the national troops with the favour of garriſoning their own territories.

Here the lord warden of the marches ſometimes reſided, and a garriſon was kept for the defence of the border. Between this place and Brampton is a high hill called the Mote, the ſummit of which is caſt up, and appears to have been a beacon to alarm the country in times of danger. Before the union of England and Scotland, when the rights of *meum and tuum* were little known or valued, theſe beacons were extremely neceſſary. This forms a link in the chain of communication between Penrith and other places on the ſouth, and Burnſwork and other parts of Scotland. Hence a range of country to the extent of fifty miles and upwards could be informed of an invaſion in the ſpace of a few minutes. From the ſummit of this Mote there is, perhaps, the moſt extenſive view in the north of England. The eye carries you down the pleaſant vale of Irthing, over the city of Carliſle, Solway Frith, as far as Whitehaven, or even to the Iſle of Man. Many of the Scottiſh hills too ſtand forth to view, and claim attention. This Mote is now ornamented with a young thriving wood. Juſt by this place alſo runs the famous Roman wall, erected as a barrier to prevent the ravages of the Caledonian Britons. After ramparts of earth had been tried in vain, by emperors and generals, to check the fury of the valiant but uncultivated ſons of the north, Severus at laſt built one of ſtone. This fortification extended from Tinmouth to Solway Frith, and divided the kingdom from ſea to ſea. At proper and convenient diſtances, caſtles or towers were built upon this immenſe wall, to protect the country, and carry intelligence from the one end to the other. The legionary ſoldiers of the Romans were employed in erecting this wonderful piece of architecture, the remains of which may ſtill be traced for ſeventy miles, and will probably long continue a monument of the conſummate ſkill and perſevering induſtry of that brave and formidable people. Thirlwall-caſtle ſtands on that part of the wall where it croſſes the Tippil, near the Irthing, on the borders of Cumberland. Here the Scots forced a paſſage into England; for, having ſummoned in the boors, with their mattocks and pick-axes, they made gaps in the wall for paſſage, from which gaps, this part of it was called *Thirlwall*, which in Saxon ſignifies "the perforated wall." The caſtle, which is about twenty yards long, and twelve broad, ſtands cloſe by the north ſide of the wall, has been curiouſly vaulted underneath, and its walls are nine feet thick, and on the top are ſix little turrets. The floor of one of the apartments was lately cleared, and diſcovered to be of ſingular conſtruction, conſiſting of three tiers of flags, laid upon ſand. The only light admitted is through apertures as narrow as thoſe in ſtair-caſes of ancient caſtles. The whole carries the appearance of a horrid gloomy dungeon. *Wilkes's Britiſh Directory*, vol. v. Appendix.

NAXA'RA (Emmanuel de), a learned Spaniſh Jeſuit, was born at Toledo in the year 1605. He entered on his noviciate at the age of twenty; and, after he had taken the four vows and finiſhed his ſtudies, he read lectures on the ſacred Scriptures for many years at the univerſity of Alcala, with very great celebrity. Afterwards he lectured on politics in the royal ſchools at Madrid, where he was appointed preacher to the court. He died in 1680, when about ſeventy-five years of age. He was the author of, 1. Commentarii litterales et morales in Joſue, cum Appendice de Rahab, &c. 1647, 2 vols. folio. 2. Comment. in Judices, 1656–1664, 3 vols. folio. 3. Comment. in lib. i. Regum, 1672, 3 vols. folio. 4. Conciones Quadrageſimales, 1649, 2 vols. 4to. 5. Conciones per Adventum, 1658, 4to. 6. Conciones Panegyricæ de Chriſto Domino, 1649, 4to. 7. Conciones de Dominicis per Annum, 1657, 4to. 8. Conciones Variæ, 1650–1658, 5 vols. 4to. 9. Conciones Funebres in Exequis, 1666, 4to. &c. *Sotvelli Bibl. Script. Soc. Jeſu.*

NAX'I, a town of South-America, in Tucuman: fifteen miles ſouth of St. Miguel de Tucuman.

NAX'IA, formerly *Naxos*, the largeſt of the Cyclades, and now the moſt agreeable and moſt tranquil iſland of the Grecian Archipelago. Its fertility more than its extent, being about forty-eight miles in circuit, has given occaſion for its being called the Queen. The ancients called it *Strongyle*; and it is ſaid to have been firſt peopled by Thracians, who, being in want of women, ſtole them from Theſſaly, and, among others, Iphidemia and her daughter Pancratis. Alveus ſent his ſons Otus and Ophialtes to recover their mother Iphidemia; theſe brothers vanquiſhed the Thracians, made themſelves maſters of the iſland, and called it *Dia*. The Carians eſtabliſhed themſelves in this iſland, and gave it the name of *Naxos*, their king.

Naxos, like the other iſlands of the Archipelago, has experienced all the viciſſitudes of fortune. It was formerly a powerful republic, but unable to maintain its independence. It was ſucceſſively in alliance with the Athenians; conquered and ravaged by the Perſians; tributary to the Romans; ceded by Marc Antony, after the battle of Philippi, to the Rhodians; afterwards ſubject to the emperors of the Eaſt; a long time governed by Venetian princes; and at length united to the Ottoman empire, under the reign of Selim II. The Naxians, however, have retained a ſingular privilege of being governed by their own laws and cuſtoms; they have a municipal adminiſtration, and judges of their own election. The inconſiderable importance of this iſland, and its remoteneſs from the coaſt of Aſia, have not induced the Turks to eſtabliſh themſelves there. The Porte is content to ſend thither a waiwode to exerciſe the police, to gather the taxes, and to remit them to Conſtantinople. This iſland, more free and more independent than Scio, is nevertheleſs far from having attained the ſame degree of proſperity. Trade is not ſufficiently briſk; the culture of the lands is too much neglected; and the inhabitants poſſeſs little or no induſtry. Poor and haughty, and proud of their ancient nobility, they diſdain commerce and agriculture; and thus theſe noble perſons, boaſting of their deſcent from the firſt Italian families, can bear to ſee their manſions paſs into the hands of plebeians, and their lands almoſt deſtitute of culture. The population of this iſland is eſtimated by Dr. Clarke at 18,000 perſons. The capital contains 2000; and the reſt are ſcattered through 41 villages. The taxes which it pays for the lands, the karatch, and the cuſtoms, amount to about 1666l. ſterling; excluſively of ſome other occaſional diſburſements. Although the number of catholics is diminiſhing, ſo that they have ſcarcely 600 ſettled in the town, they have an archbiſhop, a coadjutor, ſix canons, a rector, and ſeveral curates. They have alſo a houſe of lazariſts for the education of youth, a convent of capuchins, another of cordeliers, and another of cloiſtered nuns. The number of the Greeks, on the contrary, is increaſing, and their clergy are much leſs numerous, and more rich, than thoſe of the Latins.

This iſland is covered with high mountains, whoſe baſe is ſchiſtoſe or granitical. White marble, and hard calcareous ſtone, lie every where on the ſchiſtus, and give riſe to a great number of ſprings, which water and fertilize the plains. The higheſt of theſe mountains is that of Jupiter, which the inhabitants call *Dia*, or *Zia*. In this mountain is a grotto of beautiful white marble, which has been much viſited. The inhabitants regard it as a ſacred ſpot, whither the Bacchants of the country came to celebrate their feſtivals and their myſteries. It preſents now nothing very remarkable. The ſummit of the mountains affords an extenſive and intereſting proſpect. On the back of the mountains are ſome flocks of the little ſheep of Italy and Provence, with ſhort and coarſe wool, and of a ſmall ſpecies of goat, the fleſh of which is eaten by the poor. The ſhepherds are peculiarly wild, and the women unſociable. The females of Naxia, like thoſe of Scio, take pleaſure in chewing an inodorous ſubſtance, which is furniſhed by the root of the Atractylis gummifera. The root of the plant affords an aliment equally wholeſome and nutritious. The hills and riſing grounds of this iſland are covered with myrtles, arbutuſes, lentiſks, hypericums, ſavorys, thorny brooms, leguminous ſhrubs, and ſeveral ſpecies of rock-roſes, particularly that which furniſhes the labdanum. The rivulets are bordered by oleanders, agnus-caſtuſes, and plane-trees. In the eaſt part of the iſland is a mine of emery. The inhabitants of Naxos practiſe the caprification of the fig, and they cultivate the vine. Their wine has been generally commended. Athenæus, ſpeaking of it in ancient times, compares it to the nectar of the gods. Olivier ſays, that it is generally of an indifferent quality, becauſe they know neither how to make nor how to preſerve it. The iſland furniſhes wheat, kidney-beans, garden-beans, and a few other legumes for the home-conſumption. Barley, which is much more abundant, is annually exported. The oil is of an indifferent quality. Oranges, lemons, and bergamot-citrons, are leſs plentiful than they might be, as there is no town ſufficiently near that furniſhes a great conſumption. The peaches, apricots, pomegranates, pines, plums, walnuts, almonds, and figs, are conſumed in the iſland. Naxos has ſheep and goats for the wants of the inhabitants, a few ſmall-ſized oxen for huſbandry, together with mules and aſſes for draught. The wool is of bad quality, and wholly conſumed in the country. Cheeſe is an article of exportation. Cotton is but little cultivated, which is alſo the caſe with ſilk and flax. The honey and wax are conſumed in the iſland. To the ſouth of the town is a ſmall ſaltern, whence the capital is ſupplied with ſalt. Lat. 37. 6. N. lon. 25. 32. E.

NAX'IA, the capital of the above iſland, and one of the moſt beautiful towns in the Grecian Archipelago. The town ſtands on an eminence by the ſea, on the weſt coaſt of the iſland, oppoſite to Paros. It was defended, under the Venetian princes, by a citadel, and by walls, which the Turks have in a great meaſure deſtroyed. The Latins, who were formerly maſters of the country, are all lodged within their encloſure. The Greeks occupy that part which extends to the eaſtward of the caſtle, known by the name of the New Town. The ancient city extended to the north, towards the fountain which bears the name of Ariadne. There are alſo, below the caſtle, ſome remains of a ſubterranean aqueduct, that probably brought to the town the waters of a copious ſpring, which is ſeen four or five miles to the eaſt, and which at this day ſerves to water part of the plain of Naxia. Bacchus had formerly a temple at Naxos: the gate and the foundation of it are ſtill viſible on a ſmall rocky iſland, in the vicinity of Ariadne's fountain. A bridge built on a chain of rocks, it is ſaid, joined this iſland to the large one, and conducted an aqueduct for conveying water for the prieſts who inhabited the encloſure of the temple. On the north ſide of the iſland is a coloſſal ſtatue of Apollo, which is an imperfect piece of ſculpture. The harbour, facing the iſland of Paros, was formerly capable of containing thirty galleys, and cloſed by a jetty, now to be diſtinctly perceived when the ſea is ſmooth. It is at preſent ſeveral feet under water, and yet the ſmall craft of the country lie ſafely there in all ſeaſons. Ships of burden may anchor, in ſummer, off the harbour, under ſhelter of the rock, on which are the remains of the temple of Bacchus. Lat. 37. 7. N. lon. 25. 26. E. *Sonnini. Olivier. Tournefort.*

NAX'OS, or Naxus, in ancient geography, a town of Sicily, on the eaſt ſide of the iſland, on a ſmall promontory to the ſouth of Apollinis Archageta ara, and to the eaſt of Veneris Fanum. It was near the mouth of the ſmall river Arſines. Upon the deſtruction of this town, its inhabitants were removed to Mount Taurus, on which they built the town of Taurominium, called *Naxos-Taurominium.*

NAX'OS, a town of Crete, famous for its hones, called *lapis Naxius.*

NAY, a town of France, in the department of the Lower Pyrenées: nine miles ſouth-ſouth-eaſt of Pau, and fifteen eaſt of Oleron.

NAY, a town of France, in the department of the Upper Loire: twelve miles ſouth-eaſt of Brioude.

NAY, a river of France, which runs into the Charente between Saintes and Cognac.

NAY, a town of Africa, in the kingdom of Galam: twenty-five miles ſouth of Galam.

NAY, *adv.* [Goth. *ne*, Sax. na, or *ne aye.*] No; an adverb of negation:

Diſputes in wrangling ſpend the day,
Whilſt one ſays only yea, and t'other *nay.* *Denham.*

Not only ſo, but more. *A word of amplification.*—A good man always profits by his endeavour, yea, when he is abſent; *nay*, when dead, by his example and memory; ſo good authors in their ſtile. *B. Jonſon's Diſcoveries.*—If a ſon ſhould ſtrike his father, not only the criminal but his whole family would be rooted out, *nay*, the inhabitants of the place where he lived, would be put to the ſword, *nay*, the place itſelf would be razed. *Addiſon.*—Word of refuſal.—They have beaten us openly uncondemned, being Romans, and have caſt us into priſon; and now do they thruſt us out privily? *nay* verily, but let them come themſelves and fetch us out. *Acts* xvi. 37.—The fox made ſeveral excuſes, but the ſtork would not be ſaid *nay*; ſo that at laſt he promiſed him to come. *L'Eſtrange.*

He that will not when he may,
When he would he ſhall have *nay.* *Old Proverb.*

NAY, *ſ.* Denial; refuſal. See Denay, vol. v.—There is a faire bedde there alſo, which ſhe determineth to ſell, and would have you to have the firſt *nay* of it. *Radcliffe's Letters*, 1613.

There was no *nay*, but I muſt in,
And take a cup of ale. *W. Browne.*

To NAY, *v. a.* To refuſe. *Obſolete.*—The ſtate of a cardinal was *naied* and denaied him. *Holinſhed.*

NAYE, or Nayemou', a town of Africa, in Bondou: twelve miles ſouth-weſt of Fatteconda.

NAY'LAND, or Neyland, a market-town in the hundred of Babergh, and county of Suffolk, England, is ſituated in a valley on the north bank of the river Stour. This place was formerly remarkable for its woollen manufactures; but this branch of trade is now reduced to a very low ebb, only a ſmall portion of yarn being made to ſupply the crape and bombazeen manufactories of Norwich. Some white and brown ſoap, of a very ſuperior quality, is made here; as is alſo a conſiderable quantity of meal, which is ſent to Manningtree to be ſhipped for London. The trade that is carried on by the navigation on the Stour, is pretty conſiderable from Manningtree to Bury, Sudbury, &c. for all the coal that is conveyed by the barges from the former to the latter place, paſſes through Nayland; and the chalk, from the pits near Sudbury, is brought by the barges in return, which makes that neceſſary article for the farmer come cheap. The yearly meeting of the commiſſioners of this navigation is held at the Queen's Head here, the laſt Monday in September, by direction of the act of parliament.

There is a number of acres of good meadow-land in this pariſh, where the tenants of particular houſes have a right to feed a certain number of cows, &c. from May-day to October 10. There is alſo a quantity of land in the neighbourhood, that lets for about 130l. per annum, which is veſted in truſtees for the purpoſe relieving poor decayed tradeſpeople, and out of which rental a ſalary is allowed to an Engliſh maſter to teach ten boys.

The church of Nayland, the principal ornament of the town, ſtands almoſt in its centre, and is ſurmounted by a lofty ſpire. The porch is a very handſome piece of architecture, ſaid to have been erected by one Abel, a clothier, whoſe monument appears in the wall. Various other monuments in memory of clothiers are diſperſed throughout the interior of this edifice; but they are no otherwiſe worthy of regard, except as tokens of the early manufacturing opulence of the place. The living is in the gift of ſir William Rowley, bart. of Tendring-hall: the great tithes belong to the Monnock family, whoſe ſeat is at Stoke Nayland, which is the mother-church; (ſee below.)

Nayland has a ſmall market on Friday; and there is a fair annually on the 2d of October. According to the parliamentary returns of 1811, the houſes in Nayland amounted to 184 in number, and the inhabitants to 933.

Stoke Nayland, or Stoke juxta Nayland, (to which Nayland itſelf is only an appendage, though it is now the larger place,) is the adjoining pariſh; the village itſelf is near two miles from Nayland. It is diſtinguiſhed by a very noble church and ſteeple. This place was the ſite of a monaſtery of great note previous to the conqueſt, but it ſeems to have ſoon fallen to decay after that event.

Gifford's Hall, the ſeat of the Monnocks, who have been proprietors of it ſince the time of Henry VI. is a conſpicuous example of the fine old manſions. The ſhape of this houſe is quadrangular, with an open court in the middle, and the chief entrance under a tower-gateway, ſaid to have been built in the reign of Henry VIII. by Peter Gifford, eſq. a diſtant relation of queen Anne Bullen. The whole is conſtructed of brick, and the mouldings of the doors and windows are of the ſame material. Oppoſite to the gateway are the remains of an old chapel.

From the high grounds in the neighbourhood, a proſpect is commanded to Harwich harbour, upwards of twenty miles; and many beautiful views enrich its vicinity. *Britton's Architectural Antiq.* vol. ii. *Wilkes's Britiſh Directory*, vol. iv.

NAY'LAND PO'INT, Kent, is near Margate-bay.

NAY'LER (James), an Engliſh Quaker, remarkable both on account of the extravagance of the deluſions which for a time poſſeſſed him and his followers, and the exceſſive ſeverity of the puniſhment which was inflicted upon him. He was the ſon of an induſtrious farmer, who ſupported his family by the cultivation of his own ſmall eſtate; and was born in the pariſh of Ardſley, near Wakefield, in Yorkſhire, about the year 1616. He had a good natural capacity, and received the elements of a common education. About the age of twenty-two he married, and removed into the pariſh of Wakefield, where he continued till the breaking out of the civil wars in 1641. He then entered into the parliament-army, and ſerved as a ſoldier for eight or nine years, at firſt under lord Fairfax, and afterwards as quarter-maſter in Lambert's troop in Scotland; till, being diſabled by ſickneſs, he returned home about the year 1649. At this time he was a member of the independent party, and continued ſo till the year 1651, when the preaching of George Fox at Wakefield made him a convert to the communion of the Quakers, as they are called. Among them he ſoon commenced preacher, and acquitted himſelf well both in ſpeaking and writing. In the beginning of the following year he imagined that he heard a voice, calling upon him to "renounce his kindred and his father's houſe, and go into the weſt," promiſing that God would be with him. In obedience to this voice, which he believed to be the voice of God, he went about preaching from place to place, and greatly increaſed the numbers of the new ſect. Towards the cloſe of the year 1654, or early in 1655, he came to London, where he found a meeting of Friends which had been eſtabliſhed by Edward Burrough and Francis Howgill, among whom he ſo greatly diſtinguiſhed himſelf by his preaching, that many began to draw invidious compariſons between him and his brethren, which created uneaſineſs and differences in the ſociety. To ſuch a length did theſe proceed, that ſome women, admirers of Nayler, aſſumed the liberty of interrupting and diſputing with Howgill and Burrough in the midſt of their preaching, and thus diſturbed the peace of the meetings. For this conduct they were reproved by thoſe preachers; upon which they complained ſo loudly and paſſionately to Nayler, that he was weak enough to take their part, and was ſo intoxicated with their flattering praiſes, that he became eſtranged from his beſt friends, who ſtrongly diſapproved of, and lamented, his conduct. In the year 1656, we find him in Devonſhire, where he was committed to Exeter-jail for propagating his opinions. Here he received letters from ſome of his female admirers and others, written in the moſt extravagant ſtrains, calling him "the everlaſting Son of Righteouſneſs; the Prince of Peace; the only-begotten Son of God; the faireſt among ten thouſand, &c." and ſome of his followers kneeled before him in the priſon, and kiſſed his feet. Before he could have ſuffered ſuch language to be applied to him, the intoxication of his brain muſt have riſen to frenzy; of which he ſoon afforded additional evidence. While he continued in this priſon, George Fox called upon him, and reproved him for his defection and lofty pretenſions: but without effect. At parting, Nayler would have kiſſed Fox; but the latter told him, that, ſince he had turned againſt the power of God, he could not receive his ſhow of kindneſs. And it is but juſtice to the Quakers in general to mention, that they had now diſowned Nayler and his adherents.

Soon afterwards, Nayler was releaſed from impriſonment, and intended to return to London; but, taking Briſtol in his way, as he paſſed through Glaſtonbury and Wells, his deluded attendants ſtrewed their garments before him. When they came to Bedminſter, about a mile from Briſtol, they carried their extravagance to the higheſt pitch: for they formed a proceſſion, in imitation of our Saviour's entrance into Jeruſalem, in which a man walked bare-headed before Nayler, and a women led his horſe, while other women ſpread their ſcarfs and handkerchiefs in the road, and the company ſung, "Holy, holy, holy, is the Lord God of Hoſts: Hoſanna in the higheſt; holy, holy, is the Lord God of Iſrael." In this manner theſe mad people made their entrance into Briſtol, marching through the mire and dirt, to the amazement of ſome, and the diverſion of others; but the magiſtrates thought proper to interfere, and, after an examination into what had paſſed, committed them to priſon. Soon afterwards they were ſent to London, and a committee was appointed by parliament to examine witneſſes againſt Nayler, upon a charge of blaſphemy, for admitting religious worſhip to be paid to him, and for aſſuming the names and incommunicable titles and attributes of our bleſſed Saviour. Before the committee he did not deny what was alleged concerning the extraordinary proceedings in Exeter-jail, and at his entrance into Briſtol; but he defended himſelf by maintaining, that the honours which he received were not ſhown to him, but to Chriſt who dwelt within him; and that, if they were offered to any other than to Chriſt, he diſowned them. However, the committee having made a report to the houſe on the 5th of December, declaring the charge well founded, on the following day he was ſent for and heard at the bar; and on the 8th they reſolved, "that James Nayler is guilty of horrid blaſphemy; and that he is a grand impoſtor, and a great ſeducer of the people." The next buſineſs to be determined was the nature of the puniſhment to be inflicted on him; which occupied the debates of the houſe, both on forenoons and afternoons, till the 16th of December: many members being for putting him to death, and loſing their vote, as ſecretary Thurloe informs us, only by fourteen voices; while many other members totally diſapproved of the ſeverity which was uſed againſt him. At length, on the following day, after a conſiderable debate, the majority came to the reſolution, "that James Nayler be ſet on the pillory, in the Palace-yard, Weſtminſter, during the ſpace of two hours, on Thurſday next; and be whipt by the hangman through the ſtreets from Weſtminſter to the Old Exchange, and there likewiſe be ſet on the pillory, with his head in the pillory, for the ſpace of two hours, between the hours of eleven and one on Saturday next: in each place wearing a paper, containing an inſcription of his crimes. And that, at the Old Exchange, his tongue be bored through with a hot iron; and that he be there alſo ſtigmatized in the forehead with the letter B. That he be afterwards ſent to Briſtol, and be conveyed into and through the ſaid city on horſeback, and his face backward; and there alſo publicly whipt the next market-day after he comes thither. And that from thence he be committed to priſon in Bridewell, London, and there reſtrained from the ſociety of all people, and there to labour hard, till he be releaſed by parliament. And, during that time, be debarred the uſe of pen, ink, and paper; and ſhall have no relief but what he earns by his daily labour."

This ſentence was repugnant to humanity, equity, and wiſdom. For, though the religious extravagancies of Nayler might reaſonably ſhock pious and ſober minds, yet his criminality ought to have been eſtimated, not by the greatneſs of the titles and claims which he aſſumed, or which were given him, but by the deluſion and frenzy which had ſeized his brain. On this ground he was an object of pity, not of indignation; and he ſhould have been aſſigned over to a phyſician for a cure of his madneſs, and not to the executioner to be puniſhed. In its cruelty this ſentence bears a great reſemblance to that paſſed on Dr. Leighton by the infamous court of Star-chamber; (ſee vol. xii. p. 287.) and it vied with it in illegality: for the houſe of commons is no court of judicature, nor has any power to inflict a puniſhment beyond impriſonment during its ſeſſion. To the honour of humanity, however, it ought to be mentioned, that ſeveral perſons of different perſuaſions had offered petitions to parliament on his behalf; but it was reſolved not to read them till ſentence had been paſſed. On the 18th of December, the firſt part of it was carried into execution with the greateſt rigour; but he was brought into a ſtate of ſuch extreme weakneſs by his cruel whipping, that, upon repeated applications to the parliament, his further puniſhment was reſpited for one week. During this interval, many perſons again interpoſed in his favour by a petition to parliament, that the remainder of his puniſhment might be wholly remitted. But intolerance and vindictiveneſs reſiſted theſe ſolicitations. The protector was then addreſſed, and wrote a letter to the houſe; which, though it occaſioned ſome debate, obtained no reſolution in favour of the priſoner. On this the petitioners preſented a ſecond addreſs to Cromwell; but, it is ſaid, the influence of the *miniſters* with him prevented its effect. Five of theſe reverend gentlemen, Caryl, Manton, Nye, Griffith, and Reynolds, went to Nayler, in order to bring him to an acknowledgment of his offence; but, though in many reſpects excellent characters, they did not manage this interview in a manner worthy of themſelves, or honourable to their memory. For they would admit no friend of his, nor any neutral or impartial perſon, into the room, although requeſted ſo to do. When Nayler inſiſted that what paſſed ſhould be put in writing, and a copy be left with him or the jailor, they conſented; but on his remarking in the courſe of the converſation, that he thought that they were deſirous of wreſting his words, they roſe up with much warmth, burnt what they had committed to paper, and ſo left him, as he ſaid, "with ſome bemoaning expreſſions." On the 27th of December, the remainder of his ſentence was executed at the Old Exchange. Afterwards he was ſent to Briſtol, where he was publicly whipt, from the middle of Thomas-ſtreet, over the bridge, to the middle of Broad-ſtreet; which puniſhment, we are told, he bore with wonderful patience, as he had done the former. From Briſtol, he was brought back to Bridewell, London, where he was confined about two years; during which his mind recovered from the frenzy which had governed it, and he felt deep humiliation and ſincere repentance on account of his paſt conduct. Having alſo, notwithſtanding the prohibition in his ſentence, found means to procure pen, ink, and paper, he wrote letters to the parliament, the magiſtrates of Briſtol, and his friends, in which he acknowledged and condemned his extravagant behaviour, and aſked forgiveneſs of all to whom he had given offence. He likewiſe wrote ſeveral ſmall books, in which he retracted his paſt errors.

After the protector's death, Nayler was releaſed from priſon, and went to Briſtol, where, in a public meeting, he made confeſſion of his offence and fall, in a manner ſo affecting as to draw tears from moſt of thoſe who were preſent; and, having afforded ſatisfactory evidence of his unfeigned contrition, was again received into the communion of his friends. Nayler did not long ſurvive his enlargement: for, having left London in October 1660, with the intention of going home to his wife and children at Wakefield, he was taken ill in Huntingdonſhire, where, it is ſaid, he was robbed, and left bound in a field. Whether he received any perſonal injury is not certainly known; but, being found towards evening by a countryman, he was carried to a friend's houſe at Holm near King's Rippon, where he expired in the month of December, when about forty-four years of age. The expreſſions uttered by him, about two hours before his death, evince a frame of mind which probably none of his perſecutors ever felt: "There is a ſpirit which I feel," ſaid he, "that delights to do no evil, nor to revenge any wrong; but to endure all things, in hope to enjoy its own in the end. Its hope is to outlive all wrath and contention, and to weary out all exaltation and cruelty, or whatever is of a nature contrary to itſelf. Its crown is meekneſs; its life is everlaſting love unfeigned; it takes its kingdom with entreaty, and not with contention, and keeps it by lowlineſs of mind." Nayler's writings were collected together, and publiſhed in an octavo volume in 1716. *Sewell's Hiſt. of the Quakers*, book iv.

NAY'LESWORTH, a village in Glouceſterſhire, near Minchinghampton. It lies in three pariſhes.

NA'YO, a ſmall iſland in the Eaſtern Indian Sea, near the north coaſt of Celebes. Lat. 1. 24. N. lon. 124. 24. E.

NAYRE. See NAIR, p. 510.

NAYRET', a town of Syria, in the pachalic of Aleppo: ſix miles eaſt of Aleppo.

NAYS, a town of France, in the department of the Meuſe, on the Ornain: three miles ſouth of Ligny.

NAY'WARD, *ſ.* Tendency to denial:

But I'd ſay, he had not;
And, I'll be ſworn, you would believe my ſaying,
Howe'er you lean to the *nayward*. *Shakeſp. Wint. Tale.*

NAY'WORD, *ſ.* A proverbial reproach; a bye word. —If I do not gull him into a *nayword*, and make him a common recreation, do not think I have wit enough to lie ſtraight in my bed. *Shakeſpeare's Twelfth Night.* —A watch-word. *Not in uſe.*—I have ſpoke with her; and we have a *nayword* how to know one another. I come to her in white, and cry Mum; ſhe cries Budget; and by that we know one another. *Shakeſpeare's M. Wives of Windſor.*

NAZAGUN'GE, a town of Bengal: forty-five miles ſouth-ſouth-eaſt of Nattore.

NAZARE'NE. See NAZARITE.

NAZ'ARETH, now called NASRA, a town or ſmall city of Paleſtine, in the tribe of Zebulun, in Galilee, about 70 or 75 miles north of Jeruſalem; to the weſt of mount Tabor, and eaſt of Ptolemais. It was built on a hill, and noted for the wickedneſs of its inhabitants. *Mark* i. 9. *Luke* iv. 29. *John* i. 46. Here our Saviour was conceived, and laboured the moſt part of the thirty-three years of his private life; but their contempt of his miniſtry, and early attempt to murder him, by caſting him from the brow of the hill whereon their city was built, occaſioned his reſiding little afterwards, and working few miracles, among them. *Luke* iv. 16-29. *Matth.* xiv. 57.

Nazareth held the third rank among the metropolitan cities dependent on the patriarch of Jeruſalem. The Jews continued to inhabit it in the time of the Romans, till the reign of Conſtantine; and after that epoch it paſſed alternately from the Chriſtians to the Saracens. At preſent it forms part of the domains of the chief of Acre; which chief, when Dr. Clarke viſited it, was the famous Djezzar Pacha. A deſcription of the place, now only an obſcure village, from the work of that judicious and accurate obſerver, (Dr. Clarke,) we are certain will be gratifying to our readers.

"The ſmall town or village of Nazareth is ſituated upon the ſide of a barren rocky elevation, facing the eaſt, and commanding a long valley. Throughout the dominion of Djezzar Pacha, there was no place that ſuffered more from his tyrannical government than Nazareth. Its inhabitants, unable to ſuſtain the burthens impoſed upon them, were continually emigrating to other territories. The few who remained were ſoon to be ſtripped of their poſſeſſions; and, when no longer able to pay the tribute exacted from them, no alternative remained, but that of going to Acre to work in his fortifications, or to flee their country. The town was in the moſt wretched ſtate of indigence and miſery; the ſoil around might bid defiance to agriculture; and to the proſpect of ſtarvation were added the horrors of the plague. Thus it ſeemed deſtined to maintain its ancient reputation; for the Nathanael of his day might have inquired of a native of Bethſaida, whether *any good thing could come out of Nazareth?* A party of Djezzar's troops, encamped in tents about the place, were waiting to ſeize even the ſemblance of a harveſt which could be collected from all the neighbouring diſtrict. In the valley, appeared one of thoſe fountains, which, from time immemorial, have been the halting-place of caravans, and ſometimes the ſcene of contention and bloodſhed. The women of Nazareth were paſſing to and from the town with pitchers upon their heads. We ſtopped to view the groupe of camels, with their drivers, who were there repoſing; and, calling to mind the manners of the moſt remote ages, we renewed the ſolicitation of Abraham's ſervant to Rebecca, by the Well of Nahor. In the writings of early pilgrims and travellers, this ſpring is denominated "the fountain of the Virgin Mary;" and certainly, if there be a ſpot, throughout the Holy Land, that was undoubtedly honoured by her preſence, we may conſider this to have been the place; becauſe the ſituation of a copious ſpring is not liable to change; and becauſe the cuſtom of repairing thither to draw water has been continued among the female inhabitants of Nazareth, from the earlieſt period of its hiſtory.

"After leaving this fountain, we aſcended to the town, and were conducted to the houſe of the principal Chriſtian inhabitant of Nazareth. The tremendous name of Djezzar had ſucceeded in providing for us, in the midſt of poverty, more ſumptuous fare than is often found in wealthier cities; but we had reaſon to fear, that many poor families had been pinched to ſupply our board. All we could do, therefore, as it was brought with cheerfulneſs, was to receive it thankfully; and we took eſpecial care that thoſe from whom we obtained it ſhould not go unrewarded.

"Scarcely had we reached the apartment prepared for our reception, when, looking from the window into the court yard belonging to the houſe, we beheld *two women grinding at the mill,* in a manner moſt forcibly illuſtrating the ſaying of our Saviour." This ſcene has been explained under the word MILL, vol. xv. p. 384.

"The convent of Nazareth, ſituated in the lower part of the village, contains about fourteen friars of the Franciſcan order. Its church (erected, as they relate, over the cave wherein the Virgin Mary is ſuppoſed to have reſided) is a handſome edifice; but it is degraded, as a ſanctuary, by abſurdities too contemptible for notice. The other objects of veneration in Nazareth, at every one of which indulgences are ſold to travellers, are, 1. The work-ſhop of Joſeph, which is near the convent, and was formerly included within its walls; this is now a ſmall chapel, perfectly modern, and lately whitewaſhed. 2. The ſynagogue, where Chriſt is ſaid to have read the Scriptures to the Jews; at preſent a church. 3. A precipice without the town, where they ſay the Meſſiah leaped down, to eſcape the rage of the Jews, after the offence his ſpeech in the ſynagogue had occaſioned. Here they ſhow the impreſſion of his hand, made as he ſprang from the rock. From the deſcription given by St. Luke, the monks affirm, that anciently Nazareth ſtood eaſtward of its preſent ſituation, upon a more elevated ſpot. The words of the evangeliſt are, however, remarkably explicit, and prove the ſituation of the ancient city to have been preciſely that which is now occupied by the modern town. Induced, by the words of the Goſpel, to examine the place more attentively than we ſhould have otherwiſe done, we went, as it is written, *out of the city, unto the brow of the hill whereon the city is built,* and came to a precipice correſponding with the words of the evangeliſt. It is above the Maronite church, and probably the preciſe ſpot alluded to by the text of St. Luke's Goſpel." *Clarke's Travels,* Part II.

NAZ'ARETH, a town of France, in the department of the Scheldt, and chief place of a canton, in the diſtrict of Gand; containing 4574 inhabitants.

NAZ'ARETH, a beautiful poſt-town of North America, in Northampton-county, Pennſylvania, inhabited by Moravians, or United Brethren; ſixty-three miles north-by-weſt of Philadelphia. It is ſituated on the central part of a tract of land, containing about 5000 acres, bought by the brethren, near a ſmall creek, which loſes itſelf in the ground about one mile and a half eaſt of the town; and conſiſts of two principal ſtreets that form a ſquare. The principal building, called Nazareth-hall, contains a place of worſhip and a ſchool: and near this is another elegant edifice, inhabited by the ſingle ſiſters; another building is appropriated to the ſingle brethren. The ordinary dwelling-houſes are generally conſtructed of lime-ſtone, and inhabited by tradeſmen and mechanics, chiefly of German extraction. The town is ſupplied with water by pipes from an excellent ſpring in its vicinity. The ſituation of the town, and the ſalubrity of the climate, render this an agreeable place.

NAZ'ARETH, a river of Africa, which runs into the Atlantic near Cape Lopez Gonſalvo.

NAZ'ARITE, *ſ.* [from the Hebew נזיר, to diſtinguiſh, or ſeparate; in which it differs from NAZAREAN, or NAZARENE, an inhabitant of the country call *Nazareth,* which comes from נצר, to ſave, or preſerve.] A perſon diſtinguiſhed and ſet apart for particular duties.

The Nazarites were of two ſorts; viz. ſuch as were by their parents devoted to God in their infancy, or even ſometimes before they were born; and ſuch as devoted themſelves. The former are called *Nazaræi nativi,* and were Nazarites for life; and the latter *Nazaræi votivi,* who ordinarily bound themſelves to obſerve the laws of the Nazarites only for a limited time. In the number of perpetual Nazarites, were Samſon, Samuel, and John the Baptiſt. (Judg. xiii. 5. 1 Sam. i. 11. Luke i. 15.) Theſe, or the *Nazaræi nativi,* were not bound to the ſame ſtrictneſs as the *votivi:* they were only to abſtain from wine, and to let their hair grow.

The *Nazaræi votivi,* or thoſe who bound themſelves by a vow to obſerve the law of ſeparation for a time, were, like the *nativi,* not to ſhave their heads, nor to drink any wine or ſtrong drink; (and it was extremely wicked to offer them any; *Amos* ii. 12.) But, beſides this, they were not to attend a funeral, or to come near a dead body on any account: and, if they accidentally contracted any uncleanneſs in this way, or by any other means broke their vow, they had the time and duty of Nazariteſhip to begin again. They ſhaved off all their hair on the ſeventh day, and offered unto the Lord two turtle-doves or pigeons, the one for a ſin-offering, and the other for a burnt-offering, and a lamb for a treſpaſs-offering. When their vow was finiſhed, Nazarites preſented themſelves at the door of the tabernacle or temple, with an he-lamb for a burnt-offering, a ſhe-lamb for a ſin-offering, and a ram for a peace-offering, with their reſpective meat-offerings and drink-offerings, and a baſket full of cakes of unleavened bread, and wafers anointed with oil. After theſe were offered, the Nazarite ſhaved his hair at the door of the ſanctuary, and burnt it under the pot in which the fleſh of his peace-offering was boiled. The prieſt then put into his hand the roaſted ſhoulder of the ram of peace-offering, with a cake and wafer of unleavened bread. Theſe he returned to the prieſt, who waved them to and fro, dedicating them to the all-preſent God of every end of the earth; and ſo the vow was finiſhed. As the oblations at the breach of the vow atoned for the ſame, the offerings at the finiſhing of it were deſigned to expiate the unknown breaches of it, and to render God thanks for enabling to fulfil it ſo much. See Num. vi. Such as, like Samuel, Samſon, and John Baptiſt, were dedicated for life, had no occaſion for theſe offerings. Such as lived out of Canaan cut their hair in the places where the days of their vow were finiſhed, but deferred the offerings till they got to the ſanctuary; ſo Paul ſhaved off his hair at Cenchrea, but deferred his oblation till he came to Jeruſalem. *Acts* xviii. 18.

Some, who had not opportunity to perform the duties of the Nazarite themſelves, contributed to the expenſe of the ſacrifice and offerings of thoſe that had made and fulfilled this vow; and by this means became partakers in the merit of ſuch Nazariteſhip. Thus, when St. Paul came to Jeruſalem, in the year of Chriſt 58, the apoſtle St. James the Leſs, with the other brethren, ſaid to him, (Acts xxi. 23–24.) that, to quiet the minds of the converted Jews, who had been informed that he every-where preached up the entire abolition of the law of Moſes, he ought to join himſelf to four of the faithful who had a vow of Nazariteſhip upon them, and contribute to the charge of the ceremony at the ſhaving of their heads; by which the new converts would perceive that he continued to keep the law, and that what they had heard of him was not true.

The Hebrew word *nazir*, which is made uſe of to expreſs a man exalted to great dignity, (as it is ſaid of the patriarch Joſeph, Gen. xlix. 26. and Deut. xxxiii. 16. that he was *ſeparate from his brethren*, as it is in our tranſlation; or, as the Vulgate and others underſtand the Hebrew, "that he was a Nazarite among his brethren,") is variouſly underſtood. The Septuagint tranſlate this word a chief, or him that is honoured. Calmet thinks that this was a term of dignity in the courts of eaſtern princes, and that at this day in the court of Perſia the word *nazir* ſignifies the ſuperintendant of the king's houſehold, the chief officer of the crown, the high ſteward of his family, treaſures, and revenues; and that in this ſenſe Joſeph was the nazir of the court of Pharaoh. Le Clerc tranſlates the *nazir*, a prince, and calls Joſeph "the prince of his brethren," in the two places already quoted. Mr. Pool declares in favour of this laſt tranſlation.

NAZARITES, or *Nazarenes*, were likewiſe a kind of ſectaries in the church, in the firſt ages of Chriſtianity; or, as others deſcribe them, the firſt believers in Chriſtianity, proſelyted from the Jews, and therefore called Jewiſh believers. St. Epiphanius tells us, the Nazareans were the ſame with the Jews in every thing relating to the doctrine and ceremonies of the Old Teſtament; and only differed from them in this, that they added Chriſtianity to thoſe; profeſſing to believe, that Jeſus Chriſt was the Meſſiah. There were two kinds of Nazarenes; the one *pure*, who kept the law of Moſes and Chriſtianity together, and who were not placed by the ancient Chriſtians in the regiſter of heretics, but firſt ranked in this claſs by Epiphanius in the fourth century; the other, real EBIONITES; ſee that article.

Moſheim, however, obſerves, that the term Nazarenes was not originally the name of a ſect, but that which diſtinguiſhed the diſciples of Jeſus in general; as he himſelf was called a *Nazarene*, from his dwelling ſo long at Nazareth.

NAZAWA'. See NISSUWA.

NAZE, or NESS, [from *nez*, Fr. a noſe.] A projecting point of land, of which there are many ſo called on the different coaſts of the world; the moſt remarkable of which are the following.

NAZE, on the coaſt of Eſſex, is to the ſouthward of Harwich, and a noted mark for ſailing to and from that port, into or out of the various channels which are formed by the ſands at the mouth of the river Thames. It is a hooked promontory, incloſing a few low iſlands, from which the land declines to the weſtward, ſo as to form the north ſhore of the river. Near this cape, a tower for a light-houſe, eighty feet in height, has been erected for the direction and ſafety of ſhips ſailing that way. Lat. 51. 57. N. lon. 1. 14. E.

NAZE, on the coaſt of Glamorganſhire. See NASH POINT.

NAZE OF NOR'WAY, or LINDES NESS, a cape on the ſouth coaſt of Norway, in the North Sea, which joins to the main land by a very narrow iſthmus. The inhabitants have formerly attempted, for the conveniency of navigation, to cut a channel through this ſmall neck of land, and to build a town there; but this ſcheme was found impracticable, by reaſon of the rocks that obſtructed the execution of it. The cape projects into the ſea about a Norway mile towards the ſouth-weſt, and is about half a mile broad. It is a high, barren, rocky, promontory: however, it has twelve peaſants' houſes on it. This cape is commonly called *The Naze*. Lat. 58. 1. N. lon. 7. 12. E.

NAZEL'LES, a town of France, in the department of Indre and Loire: three miles north of Amboiſe.

NA'ZER, *ſ.* in the Hindooſtan police, an overſeer whoſe buſineſs is to enforce the payment of the revenues, fees, &c.

NAZERAN'NA, *ſ.* A ſum paid to government, as an acknowledgment for a grant of lands, or any public office.

NAZERUT', *ſ.* The office of nazer.

NAZIAN'ZUS, in ancient geography, a town of Cappadocia, where St. Gregory was born, and hence he is called *Nazianzenus*. See vol. ix. p. 12.

NA'ZIM, the firſt officer of a province in India, in whoſe hands the executive power is lodged. See NIZAM.

NAZIMO'VA, a town of Ruſſia, in the government of Tobolſk, on the Eniſei: ſixty-eight miles north of Eniſeiſk.

NA'ZIN, a river of Ruſſia, which runs into the Oby in lat. 60. 20. N. lon. 68. 20. E.

NAZZARE'TO, a town of Perſia, in the province of Irak: 130 miles ſouth-ſouth-weſt of Hamadan.

NE, *adv.* [Saxon. This particle was formerly of very frequent uſe, both ſingly and by contraction in compound words: as, *nill* for *ne will* or *will not*; *nas* for *ne has* or *has not*; *nis* for *ne is* or *is not*.] Neither:

His warlike ſhield all cover'd cloſely was,
Ne might of mortal eye be ever ſeen,
Not made of ſteel, nor of enduring braſs. *Spenſer.*

Not.—Yet who was that Belphœbe, he *ne* wiſt. *Spenſer.*

But when ſhe ſaw at laſt, that he *ne* would
For ought or nought be wonne unto her will,
She turn'd her love to hatred manifold. *Spenſer.*

NE EXEAT REGNO. A writ to reſtrain a perſon from going out of the kingdom without the king's licence. It may be directed to the ſheriff, to make the party find ſurety that he will not depart the realm; and, on his refuſal, to commit him to priſon; or it may be directed to the party himſelf; and, if he then goes, he may be fined. 2 *Inſt.* 178.

Some perſons there anciently were, that, by reaſon of their ſtations, were under a perpetual prohibition of going abroad without licence obtained; among which were reckoned all *peers*, on account of their being counſellors of the crown; all *knights*, who were bound to defend the kingdom from invaſions; all *eccleſiaſtics*, who were expreſsly confined, by the fourth chapter of the Conſtitution of Clarendon, on account of their attachment in the times of popery to the ſee of Rome; all *archers*, and other *artificers*, leſt they ſhould inſtruct foreigners to rival us in their ſeveral trades and manufactures. This was law in the times of Britton, who wrote in the reign of Edward I. and Coke gives us many inſtances to this effect in the time of Edward III. *Britton*, c. 123. 3 *Inſt.* 175. In the ſucceeding reign the affair of travelling wrote a very different aſpect; an act of parliament being made (5 Ric. II. c. 2,) forbidding all perſons whatever to go abroad without licence; *except* only the lords and other great men of the realm; and true and notable merchants; and the king's ſoldiers. But this act was repealed by ſtat. 4 Jac. I. c. 1. and at preſent every body has, or at leaſt aſſumes, the liberty of going abroad when he pleaſes. Yet undoubtedly, if the king, by writ of *Ne exeat regnum* under his great ſeal or privy ſeal, thinks proper to prohibit him from ſo doing, and the ſubject diſobeys, it is a high contempt of the king's prerogative, for which the offender's lands ſhall be ſeized till he return, and then he is liable to fine and impriſonment. 1 *Hawk. P. C. c.* 22. 1 *Comm. c.* 7.

At preſent this writ is occaſionally granted on a ſuit being commenced againſt a man in the chancery, when the plaintiff fears the defendant will fly to ſome other country, and thereby avoid the juſtice and equity of the court; which hath been ſometimes practiſed: and, when thus granted, the party muſt give bond to the maſter of the rolls, in the penalty of 1000l. or ſome other large ſum, for yielding obedience to it; or ſatisfy the court, by anſwer, affidavit, or otherwiſe, that he hath no deſign of leaving the kingdom.

NE'A, a river of Norway, which runs into the Sœlbo-lake in the province of Drontheim.

NE'A, in ancient geography. See Neapolis.—Alſo, a town of the Troade, according to Pliny, but placed by Steph. Byz. in Myſia.—Alſo, an iſland of the Ægean Sea, placed by Pliny between Lemnos and the Helleſpont, and conſecrated to Minerva.

NE'A PA'PHOS, a town of the iſland of Cyprus, ſixty ſtadia from Palæ Paphos, according to Strabo. It was ſituated in the ſouth-weſt part of the iſland, in a gulf formed by the promontory of Zephyrium.

NEAF, *ſ.* [*neſi*, Icelandic.] A fiſt. It is retained in Scotland, and the north of England: pl. *neaves.* See Neif.—Give me thy *neaf,* Monſieur Muſtardſeed. *Shakeſp.*

NEAGEDE'YN, a town of Bohemia, in the circle of Pilſen: two miles ſouth-eaſt of Taus.

NEAGH, a river of Wales, which runs into the Conway ſix miles below Llanroſt, in the county of Denbigh.

NEAHOS'NOS, a town of Croatia: four miles north of Carlſtadt.

NEAL (Daniel), a learned Engliſh Proteſtant-diſſenting divine, was born in London in the year 1678. Having loſt his parents when very young, the care of his education devolved on his maternal uncle, who ſent him to Merchant Taylors' ſchool, where he continued till he became the head ſcholar; but, from an unwillingneſs to ſubſcribe to the church-articles, he declined an offer made him of an exhibition to St. John's college, Oxford. About the year 1696 he entered himſelf as ſtudent in a diſſenting academy under the direction of Mr. Rowe, an eminent tutor. After ſpending three years in this ſeminary, he went for farther improvement to Holland, where he proſecuted his ſtudies during two years at the univerſity of Utrecht, under the celebrated profeſſors d'Uries, Grævius, and Burmann; and then he removed to Leipſic, where he remained another year. In 1703 he returned to his native country, in company with Mr. Martin Tomkins, and Mr. (afterwards Dr.) Nathaniel Lardner, and ſoon began to officiate as a preacher. In 1704 he was choſen aſſiſtant to Dr. Singleton, miniſter of an independent congregation in Alderſgate-ſtreet; upon whoſe death, in 1706, he was elected to the paſtoral office among them. In this connection he continued thirty-ſix years, diſcharging the duties of his office with the greateſt aſſiduity and zeal.

The ſmall portion of time which he allowed himſelf from his official ſervices, as a preacher and paſtor, he devoted to the ſtudy of hiſtory; and in 1720 he publiſhed his work, under the title of “The Hiſtory of New England, being an impartial Account of the civil and eccleſiaſtical Affairs of the Country, &c.” This work, which conſiſted of two volumes octavo, contains an entertaining and inſtructive narrative of the firſt planting of the goſpel in a foreign heathen land, and of the riſe of an infant commonwealth, ſtruggling with a thouſand difficulties, but triumphing over them all, together with biographical memoirs of the principal perſons in church and ſtate. In 1722 Mr. Neal publiſhed “A Letter to Dr. Francis Hare, Dean of Worceſter, occaſioned by his Reflections on the Diſſenters, &c.” and in the ſame year he gave the public “A Narrative of the Method and Succeſs of inoculating the Small-pox in New England, by Mr. Benjamin Colman, &c.” On the appearance of this piece, her royal highneſs Caroline princeſs of Wales ſent for Mr. Neal, to obtain from him ſome farther account of the actual practice of inoculation.

From this period he publiſhed only ſome ſingle ſermons till the year 1732, when he ſent into the world the firſt volume of his great work, “The Hiſtory of the Puritans, or Proteſtant Non-conformiſts, from the Reformation to the Death of Queen Elizabeth, with an Account of their Principles, &c.” The circumſtances that gave riſe to this publication were as follow: Some years before, Dr. Edmund Calamy, in his Abridgment of the Life of Baxter, had laid before the public a view of the ſtate of non-conformity, and of the characters and ſufferings of its principal adherents, during the period immediately ſucceeding the Act of Uniformity in 1662. This work ſuggeſted to Dr. John Evans the deſign of writing a Hiſtory of Non-conformity from the Reformation to the Commencement of the Civil Wars in England in 1640. Mr. Neal was requeſted to take up the hiſtory from that period, and to carry it on to the Act of Uniformity. Dr. Evans had not by any means accompliſhed his work at the time of his death in 1730; but before this Mr. Neal had finiſhed his intended labour, and had rendered his manuſcript in every reſpect ready for the preſs. The deceaſe of Dr. Evans obliged him to take up the hiſtory from the reformation to the year 1640, in order to render his own work complete and more generally intereſting. Mr. Neal had not long publiſhed his firſt volume, when he ſaw he had abundant encouragement to proceed with the undertaking; and in the year 1733 he publiſhed a ſecond volume. It was not till the year 1736 that he gave the public his third volume; but, during the interval, he engaged with other miniſters in certain lectures preached in London, juſtifying and recommending the principal topics of the Chriſtian religion, and expoſing the erroneous tenets of the church of Rome. In 1738 Mr. Neal publiſhed his fourth volume, which brought down the hiſtory of non-conformity to the Act of Toleration in 1689. By this work he has ſecured to himſelf a permanent and unfading reputation: it is thus deſcribed by Dr. Jennings: “The ſtyle is moſt eaſy and perſpicuous; and the judicious remarks which he leads his readers to make upon facts as they go along, occaſion his hiſtory to be not only more entertaining, but to be more inſtructive and uſeful than moſt books of that kind.”

In a controverſy which he had with Dr. Maddox, Mr. Neal publiſhed “A Review of the principal Facts objected to in the firſt Volume of the Hiſtory of the Puritans,” which was conſidered to be written with great judgment, and to eſtabliſh the author's character as an accurate and diligent hiſtorian. His health now began to decline, or he would, probably, have vindicated the other volumes from the animadverſions of Dr. Zachary Grey. This taſk has been very judiciouſly performed by Dr. Toulmin, in Notes to a new edition of Mr. Neal's Hiſtory. Mr. Neal, after a long ſeries of illneſs, died at Bath in 1743. “He had,” ſays his biographer, “filled the relations of domeſtic life with integrity and honour; and his loſs occaſioned a deep regret in the hearts of his family. In his public connexions, he was a prudent counſellor, and a faithful ſteady friend.” He was probably a Calviniſt in his religious faith; but neither his charity nor his friendſhips were confined to men of his own opinions. The Bible alone was his ſtandard for religious truth; and he was willing and deſirous that others ſhould have the ſame liberty of judging of its contents as he claimed for himſelf. He had married a ſiſter of the celebrated Lardner, by whom he left a ſon and two daughters. His ſon, Mr. Nathaniel Neal, an eminent attorney, and ſecretary to the million-bank, was author of "A free and ſerious Remonſtrance to Proteſtant-Diſſenting Miniſters on occaſion of the Decay of Religion;" which was republiſhed by Mr. Job Orton in the year 1775. One of the daughters married the ſon of Dr. David Jennings; and the other the Rev. Mr. Liſter, of Ware in Hertfordſhire, whoſe ſons are the eminent Dr. William Liſter, of London, and Mr. Daniel Liſter, to whom Dr. Toulmin has dedicated his edition of The Hiſtory of the Puritans, to which we refer our readers for more information on the ſubject of this article.

To NEAL, *v. a.* [anælan, Sax. to heat.] To temper by a gradual and regulated heat.—If you file, engrave, or punch upon your ſteel, *neal* it firſt, becauſe it will make it ſofter, and conſequently work eaſier. The common way is to give it a blood-red heat in the fire, then let it cool of itſelf. *Moxon's Mech. Ex.*

To NEAL, *v. n.* To be tempered in fire.—Reduction is chiefly effected by fire, wherein if they ſtand and *neal*, the imperfect metals vapour away. *Bacon.*

NEALAM', or CU'TY, a town of Thibet: 240 miles weſt-ſouth-weſt of Laſſa. Lat. 28. 22. N. lon. 87. 5. E.

NE'ALED, *adj.* Deep towards the ſhore, foul, oozy. *Aſh.*

NE'ALING, *ſ.* The art or act of tempering in a gentle heat.

NEALS, a town of North Carolina: nine miles north-north-eaſt of Fayetteville.

NEAN'DER (Michael), a German philologer, was born at Sorau in 1525. Though his parents were in poor circumſtances, he received a good education in his native place, and made himſelf ſo familiar with the Greek language, that he could repeat from memory the greater part of the Golden Verſes of Pythagoras, the Sententiæ of Theognis and Phocylides, and of the works of other Greek poets. He ſtudied afterwards chiefly at Wittemberg; and, having acquired an extenſive knowledge of the Greek, Latin, and Hebrew, he became rector of the ſchool of Northauſen, and afterwards of the gymnaſium of Ilefeld, which he raiſed to a flouriſhing condition. He died a bachelor, in the month of April 1595. He was the author or editor of various works, of which the greater part relate to Greek poetry. *Teiſſier, Eloges des Hommes Savans.*

NEAN'DER (Michael), a German phyſician, who was more celebrated, however, for his mathematical knowledge, was born in the year 1529, at Joachimſthal, a town of Miſnia, on the borders of Bohemia. After the uſual ſtudies, he received the degree of maſter-of-arts at the univerſity of Wittemberg, in 1550. He afterwards ſettled at Jena, as a teacher of Greek and mathematics; and fulfilled theſe duties for the ſpace of ſeven years, during which, he alſo applied himſelf to the ſtudy of medicine; and in 1558 he was admitted to the degree of M. D. Two years after this, he was appointed profeſſor of medicine in the ſame univerſity, of which he alſo twice filled the office of rector. He died in 1581, at the age of fifty-two, leaving behind him ſeveral learned publications. The titles of theſe are, 1. Synopſis Menſurarum et Ponderum, &c. 4to. Baſle, 1555. 2. Methodorum in omni genere Artium brevis et ſuccincta *υφηγησις*, in 1556. 3. Phyſice, ſeu Sylloge Phyſica Rerum Eruditarum ad omnem Vitam utilium, Partibus duabus, ex Prælectionibus Michaelis Neandri, 1585 and 1591. 4. Spherica Elementa, cum Computo Eccleſiaſtico, &c. *Gen. Biog.*

NEAN'DRIA, or NEANDRIUM, in ancient geography, a town of the Troade, upon the Helleſpont, according to Strabo. The inhabitants of this town were transferred to Alexandria.

NE'ANT, a town of France, in the department of the Morbihan: five miles north-north-eaſt of Ploermel, and four ſouth-ſouth-weſt of Moron.

NEAP, *ſ.* [nep-ꝼloꝺ, Sax. Skinner derives it from næꝼte, næꝼtıᵹ, want, poor; implying, I ſuppoſe, that a *neap* is when the water flows not copious.] Low tide. Seamen uſe the expreſſion "deep *neap*."—The mother of waters, the great deep, hath loſt nothing of her ancient bounds. Her motion of ebbing and flowing, of high ſprings and dead *neaps*, are as conſtant as the changes of the moon. *Hakewill on Providence.*

NEAP, *adj.* Low; decreſcent. Uſed only of the tide. See the ſubſtantive.—The waters are in perpetual agitation of flux and refluxes; even when no wind ſtirs, they have their *neap* and ſpring tides. *Bp. Hall.*—How doth the ſea conſtantly obſerve its ebbs and flows, its ſprings and *neap* tides, and ſtill retain its ſaltneſs, ſo convenient for the maintenance of its inhabitants. *Ray.*

NE'APED, *adj.* Wanting ſufficient depth of water. Spoken of ſhips. The ſame as *beneaped.* See BENEAPED, vol. ii.

NEAP'OLIS, in ancient geography, *Naples*, a town of Italy, in Campania, upon a gulf to which it has given its name. This town was built by the Cumæans, who called it *Νεαπολις Κυμαιων*, or the New Cumes. This city became municipal, and obtained the privilege of a borough by the Julian law. Strabo ſays, that in his time many Romans reſorted hither to paſs a voluptuous life after the manner of the Greeks, whoſe language they adopted. Alaric, after having ſacked Rome, A. D. 409, paſſed Naples without damaging it; and the ſame conduct was purſued by Genſeric. Hither the young Auguſtulus retired, when he was dethroned by Odoacer. The town was taken by this prince, and afterwards by Theodoric. For farther particulars, and its preſent ſtate, ſee the article NAPLES, p. 568 of this volume.

NEAPOLIS, or the *New City*, was the name very naturally given to many places in Greece and Egypt at their firſt erection; as—A city of the Higher Egypt, in the Nomos Panopolitanus, between Thebæ to the ſouth, and Panopolis to the north, on the eaſt ſide of the Nile; otherwiſe called *Cacne.*—A ſecond Neapolis of Babylonia, ſituated near the Euphrates on the ſouth ſide.—A town mentioned in the Acts of the Apoſtles, (ch. xvi. 11.) This was a town of Macedonia, where St. Paul arrived from the iſland of Samothrace.—A town of Aſia Minor, in Ionia, according to Strabo. It was ſituated north-eaſt of the Iſle of Samos, north of Mount Mycale, and ſouth-ſouth-eaſt of Epheſus. This town belonged to the Samians, who had received it in exchange of the inhabitants of Epheſus.—A town of Aſia, in Iſauria, according to Suidas, probably the ſame which Ptolemy places in Piſidia.—A town of Egypt, in the Thebaid, called alſo *Nea*, and placed by Herodotus in the vicinity of Chemnis.—A town of Africa, now *Nabal*, ſituated five leagues ſouth-weſt of Curobis. It was near the ſea-coaſt, and ſeems to have been a conſiderable place.—Several others of which the ſituation is not now known, or concerning which nothing worth notice has been tranſmitted.

NEAPOL'ITAN, *ſ.* A native of the kingdom of Naples.—O Stephano! two *Neapolitans* 'ſcaped. *Shakeſpeare's Tempeſt.*

NEAPOL'ITAN, *adj.* Belonging to Naples.—When a *Neapolitan* cavalier has nothing elſe to do, he gravely ſhuts himſelf up in his cloſet, and falls a tumbling over his papers to ſee if he can ſtart a law-ſuit, and plague any of his neighbours. *Addiſon on Italy.*

NEAR, *prep.* [neꞃ, Sax. from neah, nigh.] At no great diſtance from; cloſe to; nigh; not far from. It is uſed both of place and time.—This child was very *near* being excluded out of the ſpecies of man, barely by his ſhape. *Locke.*

I have heard thee ſay,
No grief did ever come ſo *near* thy heart,
As when thy lady and thy true love died. *Shakeſpeare.*

NEAR, *adv.* Almoſt:

Whoſe fame by every tongue is for her minerals hurl'd,
Near from the mid-day's point throughout the weſtern world. *Drayton.*

At hand; not far off. Unleſs it be rather in this ſenſe an adjective.

adjeƈtive.—Thou art *near* in their mouth, and far from their reins. *Jer.* xii. 2.

He ſerv'd great Heƈtor, and was ever *near*,
Not with his trumpet only, but his ſpear. *Dryden's Æn.*

Within a little.—He that paid a buſhel of wheat per acre, would pay now about twenty-five pounds per annum; which would be *near* about the yearly value of the land. *Locke.*—By relation or alliance:

The earl of Armagnac, *near* knit to Charles,
A man of great authority in France,
Proffers his only daughter to your grace
In marriage. *Shakeſpeare's Hen.* VI. P. I.

NEAR, *adj.* Not diſtant in place, or time. [Sometimes it is doubtful whether *near* be an adjeƈtive or adverb.]—This city is *near* to flee unto. *Gen.* xix. 20.

Whether they *nearer* liv'd to the bleſt times,
When man's Redeemer bled for human crimes;
Whether the hermits of the deſart fraught
With living praƈtice, by example taught. *Harte.*

Advanced towards the end of an enterpriſe or diſquiſition.—Unleſs they add ſomewhat elſe to define more certainly what ceremonies ſhall ſtand for beſt, in ſuch ſort that all churches in the world ſhould know them to be the beſt, and ſo know them that there may not remain any queſtion about this point; we are not a whit the *nearer* for that they have hitherto ſaid. *Hooker.*—Direƈt; ſtraight; not winding.—Taught to live the *neareſt* way. *Milton.*

To meaſure life, learn then betimes, and know
Tow'rd ſolid good what leads the *neareſt* way. *Milton.*

Cloſe; not rambling; obſervant of ſtyle or manner of the thing copied.—Hannibal Caro's, in the Italian, is the *neareſt*, the moſt poetical, and the moſt ſonorous, of any tranſlation of the Æneid. Yet, though he takes the advantage of blank verſe, he commonly allows two lines for one in Virgil, and does not always hit his ſenſe. *Dryden.*—Cloſely related.—If one ſhall approach to any that is *near* of kin to him. *Lev.* xviii. 6.—Intimate; familiar; admitted to confidence.—If I had a ſuit to maſter Shallow, I would humour his men with the imputation of being *near* their maſter. *Shakeſpeare.*—Touching; preſſing; affeƈting; dear.—He could never judge that it was better to be deceived than not, in a matter of ſo great and *near* concernment. *Locke.*

Every minute of his being thruſts
Againſt my *near'ſt* of life. *Shakeſpeare's Macbeth.*

Parſimonious, inclining to covetouſneſs; as, a *near* man.

Near Hand. Cloſely; without aƈting, or waiting at a diſtance.—The entring *near hand* into the manner of performance of that which is under deliberation, hath overturned the opinion of the poſſibility or impoſſibility. *Bacon's Holy War.*

To NEAR, *v. a.* [*naederen*, Teut.] To approach; to be near to:

Give up your key
Unto that lord that *neares* you. *Heywood's Royal King.*

To NEAR, *v. n.* To draw near. A naval expreſſion; as, The veſſels *neared* faſt; i. e. drew near to each other.

NEAR'CHUS, one of Alexander's captains, was employed by that conqueror in conduƈting his fleet from India, by the Ocean to the Perſian Gulf. This expedition proved ſo tedious and fatiguing, that the leader, on his return, was not recogniſed by his friends till he had made himſelf known. His ſervice was ſo much eſteemed, that he was crowned with a garland by Alexander at Suſa; and, wherever he went through the camp, flowers were thrown upon him. He is ſuppoſed to have been the ſame perſon who, after Alexander's death, became prefeƈt of Lycia and Pamphilia. Nearchus is reckoned among the hiſtorians of Alexander, and is referred to as ſuch by Strabo, Suidas, and Arrian; the latter of whom has copied much from him in his "Indica." The relation of his voyage is extant, and is a very curious and valuable piece. It is publiſhed among the Geographi Minores, by Hudſon. *Gen. Biog.*

NEAR'DA. See Naarda, p. 498.

NE'ARLY, *adv.* At no great diſtance; not remotely.—Many are the enemies of the prieſthood: they are diligent to obſerve whatever may *nearly* or remotely blemiſh it. *Atterbury.*—Cloſely; preſſingly.—It concerneth them *nearly*, to preſerve that government which they had truſted with their money. *Swift.*

Nearly it now concerns us to be ſure
Of our omnipotence. *Milton's P. L.*

In a niggardly manner.

NE'ARNESS, *ſ.* Cloſeneſs; not remoteneſs; approach.—Delicate ſculptures be helped with *nearneſs*, and groſs with diſtance; which was well ſeen in the controverſy between Phidias and Alcmenes about the ſtatute of Venus. *Wotton.*—Alliance of blood or affeƈtion.—Whether there be any ſecret paſſages of ſympathy between perſons of near blood; as, parents and children, brothers and ſiſters. There be many reports in hiſtory, that, upon the death of perſons of ſuch *nearneſs*, men have had an inward feeling of it. *Bacon's Nat. Hiſt.*—Tendency to avarice; caution of expenſe.—It ſhews in the king a *nearneſs*, but yet with a kind of juſtneſs. So theſe little grains of gold and ſilver helped not a little to make up the great heap. *Bacon's Hen.* VII.

NEAT, *ſ.* [neaꞇ, neaꞇen, nıꞇen, Sax. *naut*, Icel. The Scotch uſe *nowt* and *nolt*; and the former is old Engliſh alſo: "Goodly *nowt*, both fat and bigge with bone." Churchyard's Worth. of Wales, 1578. And ſo *nowt-herd* is in the north of England a *neat-herd*. *Naut* is uſed in the Iſle of Man.] Black cattle; oxen. It is commonly uſed collectively.—Smoak preſerveth fleſh; as we ſee in bacon, *neats'* tongues, and martlemas beef. *Bacon's Nat. Hiſt.*

The ſteer, the heifer, and the calf,
Are all call'd *neat.* *Shakeſpeare's Winter's Tale.*

A ſingle cow or ox.—What ſay you to a *neat's* foot? *Shakeſpeare.*

Who both by his calf and his lamb will be known,
May well kill a *neat* and a ſheep of his own. *Tuſſer.*

NEAT, *adj.* [*net*, Fr. *nitidus*, Lat.] Elegant, but without dignity.—The thoughts are plain, yet admit a little quickneſs and paſſion; the expreſſion humble, yet as pure as the language will afford; *neat*, but not florid; eaſy, and yet lively. *Pope.*—Cleanly.—If you were to ſee her, you would wonder what poor body it was that was ſo ſurpriſingly *neat* and clean. *Law.*—Pure; unadulterated; unmingled: now uſed only in the cant of trade, but formerly more extenſive:

Tuns of ſweet old wines, along the wall
Neat and divine drink. *Chapman's Odyſſey.*

NEAT-HAND'ED, *adj.* Cleanly; neat in dreſſing food:

Herbs and other country-meſſes,
Which *neat-handed* Phyllis dreſſes. *Milton's Allegro.*

NE'AT-HERD, *ſ.* A cowkeeper; one who has the care of black cattle:

The ſwains and tardy *neat-herds* came, and laſt
Menalcas, wet with beating winter maſt. *Dryden.*

NEAT-LAN'D, *ſ.* A law term; land let out to the yeomanry.

NEAT-WEI'GHT, *ſ.* The weight of any commodity without the package or caſk.

NEATES, a town of North-Carolina: twenty-three miles ſouth-weſt of Exeter.

NEATH, a market-town in the county of Glamorgan, South Wales, ſeated in a valley on the eaſtern bank of a river which gave name to the place, and which is navigable for ſmall veſſels. Here was formerly a Roman ſtation, called *Nidum*. In the reign of king Henry I. a caſtle with an abbey were built here by Richard de Granavilla, or Granville, who was lord of Neath, and who is ſaid to have come to this part of the country to co-operate with Robert Fitzhammon and others againſt Rhys-ap-Tudor. Having ſubdued this prince, Richard de Granville ſeems to have ſettled here; and from him have ſprung the preſent noble family of Granville.

Neath is a borough by preſcription. The corporation conſiſts of a portreeve, twelve aldermen, a recorder, and an indefinite number of burgeſſes. The portreeve, and the conſtable of the caſtle, hold a court of pleas once every month, and a court-leet twice a-year. Here are likewiſe held the petty-ſeſſions for the hundred, and there is a court of quarter-ſeſſions once in twelve months. This is one of the contributory boroughs with Cardiff, which ſend one member to parliament. The contributory boroughs, beſides Neath and Cardiff, are Aberavon, Cowbridge, Kenfigg, Llantriſſent, Lougher, and Swanſea. The number of voters is about 1000. The marquis of Bute has nominated the member for theſe boroughs in the laſt eight parliaments; his influence prevails principally in Cardiff and Cowbridge; that of the duke of Beaufort, in Swanſea and Lougher; Mr. Talbot of Margam has the influence of Aberavon and Kenfigg; and Mr. Hanbury that of Neath. But the marquis of Bute is allowed to have the control, and his nomination is implicitly obeyed: his uncle, lord Evelyn-James Stuart, is the preſent member.

No manufactures of any conſequence are carried on within the limits of the borough of Neath; but its vicinity is crowded with iron-works, ſome of which are conducted upon a very extenſive ſcale. Here are likewiſe ſeveral copper-works, and a very productive colliery. The produce of theſe ſeveral eſtabliſhments is conveyed to Neath and Swanſea by means of canals, and from thence ſhipped to different parts of the kingdom. Much of the copper from Paris Mountain in Angleſey is ſmelted in this neighbourhood; and about 60 or 70,000 chaldrons of coals are annually carried from this town to Somerſet, Devon, Cornwall, and other places. The market-days are Wedneſday and Thurſday in each week. A legacy has been lately left for the endowment of a free-ſchool; but it is not yet eſtabliſhed. This pariſh, according to the parliamentary returns of 1811, contained 583 houſes, and 2740 inhabitants.

On the weſtern bank of the river Neath, one mile from the town, are the ruins of a fine monaſtery called Neath-abbey, ſurrounded on all ſides by the moſt beautiful and romantic ſcenery. It was founded in the beginning of the reign of Henry I. by Richard de Grana Villa or Granville, before mentioned. The monks here were, at firſt, of the order of Savigny, but ſoon afterwards became Ciſtercians. Mr. Windham juſtly obſerves (in his Tour through Monmouthſhire and Wales), that there are no "traces among the ruins ſo ancient as the original foundation;" for, the plain Gothic ſtyle of building, which the preſent remains exhibit, was not introduced into this country until the latter end of the reign of Henry II. nor did it generally prevail until that of Henry III. This abbey once afforded a temporary aſylum to an unfortunate monarch and his favourite. Edward II. and Hugh Le Deſpenſer the younger, having taken a veſſel at Briſtol, A.D. 1326, with a deſign to ſail to the Iſland of Lundy, or (according to other accounts) to Ireland, were driven by contrary winds on the coaſt of Glamorganſhire, and remained concealed a ſhort time at this place. This flight of the king is the more memorable, as it furniſhed the queen and her party with a ſpecious pretext for declaring the prince of Wales guardian of the kingdom.

Louis of Glamorgan, a celebrated Welſh poet, who flouriſhed about the year 1520, gives a particular deſcription of this abbey, in an ode compriſing the twenty-four different metres of ancient Britiſh poetry. He deſcribes it as a ſpacious building covered with lead, with fine painted windows, and a pavement of glazed brick. Theſe bricks are, at preſent, frequently picked up among the rubbiſh. We likewiſe learn from this ode, that it was once a ſeat of the Muſes, youth being inſtructed here (among other branches of learning) in arithmetic, rhetoric, logic, and the civil and canon laws; and that this ſchool had attained a conſiderable degree of celebrity; nor does he forget to mention the adjacent parks, from which the holy fathers were ſupplied with veniſon, or to beſtow a proper encomium on their ſumptuous table. He alſo informs us, that the arms of ſeveral of the nobility and gentry were to be ſeen here. Some armorial bearings cut in freeſtone, and placed over the principal entrance to the abbot's houſe, have been lately removed; and the different quarterings of the Pembroke family executed in the above manner, which were taken hence, are now at Courtraiîr, a houſe belonging to the abbey-eſtate. The church conſiſted of a nave, about two hundred and ten feet long, and ſixty-ſix wide, with a croſs-aiſle, about one hundred and fifty feet long, and fifty-four wide; a large tower in the centre, and two light turrets at the weſt end; a good part of the latter, with the winding ſtaircaſe in each, ſtill remain. The ſhell of the abbot's houſe is entire, and includes ſeveral ſpacious rooms, the largeſt of which is the refectory (now called the great hall), being ſeventy feet in length, and thirty feet wide, with a vaulted ſtone roof, ſupported by a row of plain columns, running lengthways through the middle of the room.

Leland in his Itinerary calls Neath "the faireſt abbey of all Wales;" but in his Collectanea he is inclined to give Margam the preference. It continued until the general diſſolution of religious houſes, when its annual revenues were eſtimated at 132l. 7s. 7½d. according to Dugdale, but Speed ſtates them at 150l. 4s. 9d. This valuation muſt have been very low even at that time, ſince the demeſne itſelf is of a conſiderable extent; and formerly there were ſeveral detached eſtates belonging to the monaſtery, which are not held with it now, ſome in the neighbourhood, and others in the different pariſhes of Llandilo-tal-y-bont, Oyſtermouth, Llanridian, Penmain, Portelnon, and Llandewi, in Gower, all within the county of Glamorgan. It was granted 33d of Henry VIII. to ſir Richard Williams, alias Cromwell, great-grandfather to the protector. We find it afterwards in the poſſeſſion of the Herberts; from whom it was transferred to ſir William Dodington, of Breymore, in the county of Southampton, by his marriage with Mary, the daughter of ſir John Herbert, ſecretary of ſtate to queen Elizabeth, and nephew to William earl of Pembroke. Edward Dodington, eſq. ſon of the ſaid ſir William Dodington, gave it to his nephew Philip Hobby, eſq. fourth ſon of Peregrine Hobby, eſq. of Byſhen, in the county of Berks, who reſided at the abbey until his death, and ſo did his relict Elizabeth Hobby, daughter of ſir Timothy Tyrrell, of Shottover, in the county of Oxford, and grand-daughter of the learned archbiſhop Uſher. At Mrs. Hobby's death, the houſe was deſerted, and ſuffered to fall to decay. Philip Hobby, eſq. the laſt ſole proprietor, died A.D. 1678, leaving three daughters co-heireſſes, Elizabeth, Catharine, and Anne: the eldeſt of whom (Elizabeth) married Henry Compton, eſq. of Biſtern, Hants; Catharine married Griffith Rice, eſq. of Newton, in the county of Camarthen; and Anne married Mr. Stanley, grandfather of the late Hans Stanley, eſq. The preſent proprietors are lord Dinevor, a lineal deſcendant of the ſaid Griffith Rice, eſq. John Compton, eſq. lord Mendip, and Chriſtopher d'Oyley, eſq. the two laſt-mentioned gentlemen having married each a daughter of the ſaid Hans Stanley. There are no monuments of the dead remaining, either in the church or adjoining it. The ſolitary ſtump of an old yew-tree only marks the ſite of the church-yard; the figure of an eccleſiaſtic in a cumbent poſture, and holding in his hand the model of a building

building (probably deſigned to repreſent the abbey), has been preſerved from deſtruction, and is placed on the lawn, before Courtherbert-houſe, a ſmall diſtance from the monaſtery. The ruins are extenſive, and the luxuriant mantling of ivy in which they are enveloped, gives them a very ſolemn and venerable aſpect. Weeds and briers now cover the ſpot where the prieſt diſcharged the ſolemn duties of his function, and the ſwelling note of the organ aided "the frequent praiſes of white-robed monks." *Wilkes's Britiſh Directory*, vol. iv.

The very-pictureſque village of Cadoxton is ſituate on the ſouth ſide of the river Nidd, immediately oppoſite the town of Neath. Its church, a plain and neat ſtructure, lately repaired and beautified, is dedicated to St. Cadoc, an old Britiſh ſaint of ſome celebrity. In its chancel are ſeveral monuments of the ancient family of Williams of Dyffryn, in this pariſh, one of which includes in it a very long pedigree on copper of that family, in Engliſh, which is a very curious ſpecimen of Welſh pedigree. Some of the ſhorter inſcriptions, including a curious acroſtic-epitaph on Roſe Williams, are inſerted in the *Gent. Mag.* for May 1816.

NEATH, a river of South-Wales, which runs into the ſea a little below Swanſea.

NEATIME'RI, a town of Hindooſtan, in Travancore: fifteen miles eaſt of Anjenga.

NE'ATLY, *adv.* Elegantly, but without dignity; ſprucely.—I will never truſt a man again for keeping his ſword clean; nor believe he can have every thing in him, by wearing his apparel *neatly*. *Shakeſpeare's All's well.*

To love an altar built,
Of twelve vaſt French romances *neatly* gilt. *Pope.*

Cleanlily.—Whether there be any inſtance of a ſtate, wherein the people, living *neatly* and plentifully, did not aſpire to wealth? *Bp. Berkeley's Queriſt.*

NE'ATNESS, *ſ.* Spruceneſs; elegance without dignity.—Pelagius carped at the curious *neatneſs* of men's apparel. *Hooker.*—Cleanlineſs.—That no hardneſs of heart do ſteal upon me, under ſhew of more *neatneſs* of conſcience than is cauſe. *Bacon to K. James.*

NE'ATRESS, *ſ.* She who takes care of cattle:

I knew the lady very well, but worthleſs of ſuch praiſe,
The *neatreſſe* ſaid; and muſe I do, a ſhepherd thus ſhould blaze
The coate of beautie. *Warner's Albion's England.*

NEAU'PHLE LE CHATEAU', a town of France, in the department of the Seine and Oiſe: five miles north-eaſt of Montfort.

NEB, a river of the Iſle of Man, which runs into the ſea at Peel-town.

NEB, *ſ.* [nebbe, Sax.] Noſe; beak; mouth. Retained in the north.—Take a glaſs with a belly and a long *neb*. *Bacon.*

How ſhe holds up the *neb*, the bill, to him!
And arms her with the boldneſs of a wife.
Shakeſpeare's Winter's Tale.

[In Scotland.] The bill of a bird. See NIB.

NEBA'IOTH, [Heb. words.] A man's name.

NE'BAT, [Heb. a beholder.] A man's name.

NEB'BIO, or NE'BIO, a town of the iſland of Corſica, and the ſee of a biſhop; in ruins: nine miles ſouth-weſt of Baſtia.

NEBDAN'SKOI, a town of Ruſſia, in the province of Uſtiug, on the Sola: twenty-four miles ſouth of Uſt Siſolſk.

NE'BEL, or NABLUM, a muſical inſtrument among the Jews. See p. 349.

NEBER'YBIS, a town of Poland, in the palatinate of Kiev: ſixty miles ſouth of Bialacerkiew.

NEB'FLEUR, or FRUR, a ſmall iſland in the Perſian gulf; ſometimes alſo called *Tavem.* Lat. 26. 10. N. lon. 54. 20. E.

NE'BI A'BEL, a village of Syria, where they pretend Abel was buried by his brother Cain: ſixteen miles north-weſt of Damaſcus.

NE'BI EI'NAB, a town of the Arabian Irak, on the Euphrates: ſix miles ſouth of Helleh.

NE'BI SHI'IT, a village of Syria, in which the inhabitants pretend to ſhow the tomb of the patriarch Seth: ſixteen miles north-north-weſt of Damaſcus.

NE'BI TA'RAN, a town of the Arabian Irak: five miles ſouth-weſt of Mendeli.

NE'BIO, a town of European Turkey, in the Morea: twenty miles weſt of Miſitra.

NEBITAU', a town of Bohemia, in the circle of Pilſen: five miles ſouth of Teuſing, and twenty-two weſt-north-weſt of Pilſen.

NE'BO, [Heb. one that ſpeaks.] In ancient geography, a town of the tribe of Reuben, which, being in the vicinity of the land of Moab, was taken poſſeſſion of by the Moabites, and belonged to them, as we learn from the prophet Jeremiah.—Alſo, a town of the tribe of Judah, about eight miles from Hebron, which appears to have been a deſert in the time of Euſebius and Jerome.—Alſo, a mountain placed by Moſes in the Land of Moab, though ſeated on the other ſide of the Arnon, and conſequently in the kingdom of Sihon. On this mountain Moſes died. *Deut.* xxxii. 49.

NE'BO, or NABO, a deity of the Babylonians, who poſſeſſed the next rank to Bel. It is mentioned by Iſaiah, ch. xlvi. 1. Voſſius apprehends that Nebo was the moon, and Bel the ſun; but Grotius ſuppoſes that Nebo or Nabo was ſome celebrated prophet of the country, which opinion is confirmed by the etymology of the name, ſignifying, according to Jerome, "one that preſides over prophecy." Moſt of the Babyloniſh kings bore the name of that god joined to their own; as, Nabonaſſar, Nebuchadnezzar, &c.

NEBOU'SAN, before the revolution, a province of France, of which St. Gauden's was the capital: now the department of the Upper Garonne.

NE'BRA, a town of Saxony, in Thuringia: twelve miles north-weſt of Naumburg, and four ſouth of Querfurt. Lat. 51. 18. N. lon. 11. 45. E.

NEBRIS'SA, in ancient geography, now *Lebrixa*, a town of Spain, in Bœtica, towards the north in aſcending the river Bœtis. See LEBRIXA, vol. xii. p. 430.

NEB'STICH, a town of Moravia: nine miles north-eaſt of Brunn.

NEBUCHADNEZ'ZAR. See NABUCHODONOSOR, p. 500.

NEB'ULA, *ſ.* [Latin.] It is applied to appearances like a cloud in the human body; as alſo to films upon the eyes.

NEBULÆ, in aſtronomy, a term applied to thoſe fixed ſtars, which exhibit a dim hazy light, being leſs than thoſe of the ſixth magnitude; and therefore ſcarcely, or not at all, viſible to the naked eye, to which, if ſeen at all, they appear like duſky ſpecks, or clouds, through teleſcopes: hence the name. See the article ASTRONOMY, vol. ii. p. 344-349.

NEBULE', or NEB'ULY, *adj.* See HERALDRY, vol. ix. p. 423.

NEBULO'SE, *adj.* Cloudy, miſty.

NEBULOS'ITY, *ſ.* The appearance cauſed by nebulæ, or nebulous ſtars.—The changes I have obſerved in the great milky *nebuloſity* of Orion, twenty-three years ago, and which have alſo been noticed by other aſtronomers, cannot permit us to look upon this phenomenon as ariſing from immenſely-diſtant regions of fixed ſtars. Even Huygens, the diſcoverer of it, was already of opinion that, in viewing it, we ſaw, as it were, through an opening into a region of light. Much more would he be convinced now, when changes in its ſhape and luſtre have been ſeen, that its light is not, like that of the milky way, compoſed of ſtars. To attempt even at a gueſs at what this light may be would be preſumptuous. If it ſhould be ſurmiſed, for inſtance, that this *nebuloſity* is of the nature of the zodiacal light, we ſhould then be obliged to admit the exiſtence of an effect without its cauſe. An idea of its phoſphorical condition is not more philoſophical, unleſs we could ſhew from what ſource of phoſphorical matter ſuch immeaſurable tracts of luminous phenomena could draw their exiſtence and permanency; for, though minute changes have been obſerved, yet a general reſemblance, allowing for the difference of teleſcopes, is ſtill to be perceived in the great *nebuloſity* of Orion, ever ſince the time of its firſt diſcovery. *Herſchel.*

NEB'ULOUS, *adj.* Miſty; cloudy.

NEBUS'CHEL, a town of Bohemia, in the circle of Boleſlau: ſix miles north-eaſt of Melnik.

NEBU'ZAR A'DAN, [Heb. fruits of judgment.] A man's name.

NACA'TION, *ſ.* [from Lat. *neco,* to kill.] The act of killing. *Bailey.*

NECAU', a town of Africa, in the country of Biledulgerid: 150 miles ſouth-eaſt of Beni Mezzab.

NECAU'S, a town of Africa, in the country of Algiers: 100 miles ſouth-weſt of Conſtantinople.

NECESSA'RIAN, *ſ.* One of thoſe who are advocates for the doctrine of philoſophical neceſſity. More properly *neceſſitarian.* But it is a bad word, ſays Mr. Todd, and has no uſeful meaning. Dr. Prieſtley employs it.

NEC'ESSARILY, *adv.* Indiſpenſably.—I would know by ſome ſpecial inſtance, what one article of Chriſtian faith, or what duty required *neceſſarily* unto all men's ſalvation, there is, which the very reading of the word of God is not apt to notify. *Hooker.*—Every thing is endowed with ſuch a natural principle, whereby it is *neceſſarily* inclined to promote its own preſervation and well-being. *Wilkins.*—By inevitable conſequence.—They who recall the church unto that which was at the firſt, muſt *neceſſarily* ſet bounds and limits unto their ſpeeches. *Hooker.*—By fate; not freely.—The church is not of ſuch a nature as would *neceſſarily,* once begun, preſerve itſelf for ever. *Pearſon.*—They ſubjected God to the fatal chain of cauſes, whereas they ſhould have reſolved the neceſſity of all inferior events into the free determination of God himſelf; who executes *neceſſarily* that which he firſt propoſed freely. *South.*

NEC'ESSARINESS, *ſ.* The ſtate of being neceſſary.

NEC'ESSARY, *adj.* [*neceſſarius,* Lat.] Needful; indiſpenſably requiſite.—Being it is impoſſible we ſhould have the ſame ſanctity which is in God, it will be *neceſſary* to declare what is this holineſs which maketh men be accounted holy ones, and called ſaints. *Pearſon.*—A certain kind of temper is *neceſſary* to the pleaſure and quiet of our minds, conſequently to our happineſs; and that is holineſs and goodneſs. *Tillotſon.*—The Dutch would go on to challenge the military government and the revenues, and reckon them among what ſhall be thought *neceſſary* for their barrier. *Swift.*

All greatneſs is in virtue underſtood;
'Tis only *neceſſary* to be good. *Dryden's Aureng.*

Not free; fatal; impelled by fate:

Death, a *neceſſary* end,
Will come when it will come. *Shakeſpeare.*

Concluſive; deciſive by inevitable conſequence. They reſolve us not what they underſtand by the commandment of the word; whether a literal and formal commandment, or a commandment inferred by any *neceſſary* inference. *White.*—No man can ſhew by any *neceſſary* argument, that it is naturally impoſſible that all the relations concerning America ſhould be falſe. *Tillotſon, Pref.*

NEC'ESSARY, *ſ.* That which is not only convenient, but needful, and not to be left out of daily uſe; as, Tea is become a *neceſſary* of life. It is moſtly uſed in the plural.—The right a ſon has, to be maintained and provided with the *neceſſaries* and conveniences of life, out of his father's ſtock, gives him a right to ſucceed to his father's property for his own good. *Locke.*

NEC'ESSARY, *ſ.* a privy.—The boatmen make uſe of this part of the beach as a *neceſſary.* *Swinburne's Trav. through Spain.*

To NECES'SITATE, *v. a.* [from *neceſſitas,* Latin.] To make neceſſary; not to leave free; to exempt from choice.—The marquis of Newcaſtle, being preſſed on both ſides, was *neceſſitated* to draw all his army into York. *Clarendon.*

Man ſeduc'd,
And flatter'd out of all, believing lies
Againſt his Maker: no decree of mine
Concurring to *neceſſitate* his fall. *Milton.*

NECESSITA'TION, *ſ.* The act of making neceſſary; fatal compulſion.—Where the law makes a certain heir, there is a *neceſſitation* to one; where the law doth not name a certain heir, there is no *neceſſitation* to one, and there they have power or liberty to chooſe. *Bramhall againſt Hobbes.*

NECES'SITIED, *adj.* In a ſtate of want. *Not uſed.*

This ring was mine; and, when I gave it Helen,
I bad her, if her fortunes ever ſtood
Neceſſitied to help, that by this token
I would relieve her. *Shakeſpeare's All's well.*

NECES'SITOUS, *adj.* [*neceſſiteux,* Fr.] Preſſed with poverty.—In legal ſeiſures, and righting himſelf on thoſe who, though not perfectly inſolvent, are yet very *neceſſitous,* a good man will not be haſty in going to extremities. *Kettlewell.*—There are multitudes of *neceſſitous* heirs and penurious parents, parſons in pinching circumſtances, with numerous families of children. *Arbuthnot.*

NECES'SITOUSNESS, *ſ.* Poverty; want; need.—Univerſal peace is demonſtration of univerſal plenty, for where there is want and *neceſſitouſneſs,* there will be quarrelling. *Burnet's Theory.*

NECES'SITUDE, *ſ.* [from *neceſſitudo,* Lat.] Want; need.—The mutual *neceſſitudes* of human nature neceſſarily maintain mutual offices between them. *Hale's Orig. of Mankind.*—Dr. Johnſon adds "Friendſhip" as another meaning of this word. It is indeed one of the ſignifications of *neceſſitudo,* Lat. but we have never met with it in Engliſh.

NECESSITU'DINARY, *adj.* Belonging to friendſhip. *Bailey.*

NECES'SITY, *ſ.* [*neceſſitas,* Lat.] Cogency; compulſion; fatality.—Though there be no natural *neceſſity,* that ſuch things muſt be ſo, and that they cannot poſſibly be otherwiſe without implying a contradiction; yet may they be ſo certain as not to admit of any reaſonable doubt concerning them. *Wilkins.*

Neceſſity and chance
Approach not me; and what I will is fate. *Milton.*

State of being neceſſary; indiſpenableneſs.—Racine uſed the chorus in his Eſther, but not that he found any *neceſſity* of it; it was only to give the ladies an occaſion of entertaining the king with vocal muſick. *Dryden.*—Want; need; poverty.—We are firſt to conſult our own *neceſſities;* but then the *neceſſities* of our neighbours have a Chriſtian right to a part of what we have to ſpare. *L'Eſtrange.*

The art of our *neceſſities* is ſtrange,
That can make vile things precious. *Shakeſpeare.*

Things neceſſary for human life.—Great part of the world are free from the *neceſſities* of labour and employment, and have their time and fortunes in their own diſpoſal. *Law.*

Theſe ſhould be hours for *neceſſities,*
Not for delights; times to repair our nature
With comforting repoſe. *Shakeſpeare's Hen. VIII.*

Cogency of argument; inevitable conſequence.—There
never

never was a man of ſolid underſtanding, whoſe apprehenſions are ſober, and by a penſive inſpection adviſed, but that he hath found, by an irreſiſtible *neceſſity*, one true God and everlaſting being. ***Ralegh.***—Good-nature, or beneficence and candour, is the product of right reaſon; which of *neceſſity* will give allowance to the failings of others. *Dryden.*—Violence; compulſion;

Never ſhall
Our heads get out; if once within we be,
But ſtay compell'd by ſtrong *neceſſitie.* *Chapman.*

By *neceſſity*, in metaphyſics, we underſtand whatever is done by a cauſe or power that is irreſiſtible; in which ſenſe it is oppoſed to *freedom.* Man is a neceſſary agent, if all his actions be ſo determined by the cauſes preceding each action, that not one paſt action could poſſibly not have come to paſs, or have been otherwiſe than it hath been; nor one future action can poſſibly not come to paſs, or be otherwiſe than it ſhall be. But he is a free agent, if he be able, at any time, under the circumſtances and cauſes he then is, to do different things; or, in other words, if he be not unavoidably determined in every point of time, by the circumſtances he is in, and the cauſes he is under, to do that one thing he does, and not poſſibly to do any other thing. Whether man is a neceſſary or a free agent, is a queſtion which has been debated with much ingenuity by writers of the firſt eminence, from Hobbes and Clarke, to Prieſtley and Kant. See METAPHYSICS, vol. xv. p. 199, 230. and PREDESTINATION.

NECESSITY, in mythology, a power ſuperior to all other powers; and equally irreſiſtible by gods and by men. Herodotus, as he is quoted by Cudworth, mentions an oracle which declared that "God himſelf could not ſhun his deſtined fate." And among the fragments of Philemon collected by Le Clerc, is the following ſentence: *Δουλοι βασιλεων εσμεν, οι βασιλεις θεων, ο θεος αναγκης.* "We are ſubject to kings, kings to the gods, and God to Neceſſity." Hence it is, that, in the Iliad, we find Jove himſelf, the ſire of gods and men, regretting that he was reſtrained by *Neceſſity*, from reſcuing his favourite ſon from the ſword of Patroclus. Nay, to ſuch a height was this impiety carried in the earlieſt ages of Greece, that we find Heſiod and Homer teaching that the gods themſelves were generated by *Neceſſity* of Night and Chaos. This power, though always repreſented as blind and unintelligent, was however worſhipped as a goddeſs, bearing in her hand large iron nails, wedges, anchors, and melted lead, as emblems of the inflexible ſeverity of her nature. ***Horace***, Ode 35. In the city of Corinth ſhe had a temple, in which the goddeſs *Violence* likewiſe reſided, and into which no perſon was ever permitted to enter but the prieſt who officiated. *Pauſanias in Corinth.* cap. iv.

Learned men have exerciſed their ingenuity in vain attempts to trace this portentous notion to its origin. Some, who wiſhed to interpret it in a pious ſenſe, have ſuppoſed that the gods who are ſubject to *Neceſſity* were only thoſe who were the miniſters of the ſupreme *Numen;* and that by *Neceſſity* itſelf was meant nothing more than Divine Providence. But this is not conſiſtent with Heſiod and Homer's Generation of the Gods, or with the epithets *ſæva neceſſitas, dura neceſſitas,* by which this power was perpetually diſtinguiſhed. Others, and among them Moſheim, have ſuppoſed that this monſtrous fable was invented by the pagan prieſts, and diligently inculcated upon the minds of the people, in order to excuſe the villanies of the objects of their worſhip. For, ſays he, who could be indignant at Jupiter's numberleſs adulteries, after it was known that in all his actions he was the ſervant of blind Neceſſity? In the thefts of Mercury, the whoredoms of Venus, and the frequent ſquabbles of the other gods, there could be no moral turpitude, if they were under the influence of a ſuperior power:

Numina cum videas duris obnoxia fatis,
Invidia poſſis exonerare deos. Martial, ix. 88.

This account of the matter is at leaſt as plauſible as any other which is uſually given; but the real caſe undoubtedly was, that, when men "did not like to retain God in their knowledge, God gave them over to a reprobate mind, to do thoſe things which are not convenient; when their fooliſh heart was darkened, and, profeſſing themſelves to be wiſe, they became fools." See FATE, vol. vii. p. 271.

NECESSITY, in law, as it implies a defect of will, excuſes from the guilt of crimes.

Compulſion and inevitable neceſſity are a conſtraint upon the will, whereby a man is urged to do that which his judgment diſapproves; and which, it is to be preſumed, his will (if left to itſelf) would reject. As puniſhments are therefore only inflicted for the abuſe of that free will which God has given to man, it is highly juſt and equitable that a man ſhould be excuſed for thoſe acts which are done through unavoidable force and compulſion.

1. Of this nature, in the firſt place, is the obligation of *civil ſubjection*, whereby the inferior is conſtrained by the ſuperior to act contrary to what his own reaſon and inclination would ſuggeſt: as when a legiſlator eſtabliſhes iniquity by a law, and commands the ſubject to do an act contrary to religion or ſound morality. How far this excuſe will be admitted *in foro conſcientiæ*, or whether the inferior in this caſe is not bound to obey the divine rather than the human law, it is not our buſineſs to decide; though, among the caſuiſts, it is believed the queſtion will hardly bear a doubt. But, however that may be, obedience to the laws in being is undoubtedly a ſufficient extenuation of *civil guilt* before the municipal tribunal. The ſheriff who burnt Latimer and Ridley, in the bigotted days of queen Mary, was not liable to puniſhment from Elizabeth for executing ſo horrid an office; being juſtified by the commands of that magiſtracy which endeavoured to reſtore Superſtition, under the holy auſpices of its mercileſs ſiſter, Perſecution.

As to perſons in private relations, the principal caſe where conſtraint of a ſuperior is allowed as an excuſe for criminal miſconduct, is with regard to the matrimonial ſubjection of the wife to her huſband: for neither a ſon nor a ſervant are excuſed for the commiſſion of any crime, whether capital or otherwiſe, by the command or coercion of the parent or maſter; though in many caſes the command or authority of the huſband, either expreſs or implied, will privilege the wife from puniſhment, even for capital offences. And therefore, if a woman commit theft, burglary, or other civil offences againſt the laws of ſociety, by the coercion of her huſband, or even in his company, which the law conſtrues a coercion, ſhe is not guilty of any crime; being conſidered as acting by compulſion, and not of her own will. This doctrine is at leaſt a thouſand years old in this kingdom, being to be found among the laws of Ina the Weſt Saxon. And it appears, that, among the northern nations on the continent, this privilege extended to any woman tranſgreſſing in concert with a man, and to any ſervant that committed a joint offence with a freeman: the male, or freeman, only was puniſhed, the female, or ſlave, diſmiſſed; *procul dubio quod alterum libertas, alterum neceſſitas impelleret.* But (beſides that, in our law, which is a ſtranger to ſlavery, no impunity is given to ſervants, who are as much free agents as their maſters,) even with regard to wives, this rule admits of an exception in crimes that are *mala in ſe*, and prohibited by the law of nature; as murder, and the like: not only becauſe theſe are of a deeper dye, but alſo, ſince in a ſtate of nature no one is in ſubjection to another, it would be unreaſonable to ſcreen an offender from the puniſhment due to natural crimes, by the refinements and ſubordinations of civil ſociety. In treaſon alſo (the higheſt crime which a member of ſociety can, as ſuch, be guilty of), no plea in coverture ſhall excuſe the wife; no preſumption of the huſband's coercion ſhall extenuate her guilt: as well becauſe of the odiouſneſs and dangerous conſequence of the crime itſelf, as becauſe the huſband, having broken through the moſt ſacred tie of ſocial community by rebellion againſt the ſtate, has no right to that obedience from a wife, which he himſelf as a ſubject has forgotten to pay. In inferior miſdemeanors alſo, we may remark another exception; that a wife may be indicted and ſet in the pillory with her huſband, for keeping a brothel: for this is an offence touching the domeſtic economy or government of the houſe, in which the wife has a principal ſhare; and is alſo ſuch an offence as the law preſumes to be generally conducted by the intrigues of the female ſex. And in all caſes where the wife offends alone, without the company or coercion of her huſband, ſhe is reſponſible for her offence as much as any femme-ſole.

2. Another ſpecies of compulſion or neceſſity is what our law calls *dureſs per minas;* or threats and menaces, which induce a fear of death or other bodily harm, and which take away for that reaſon the guilt of many crimes and miſdemeanors, at leaſt before the human tribunal. But then that fear which compels a man to do an unwarrantable action ought to be juſt and well-grounded; ſuch *qui cadere poſſit in virum conſtantem, non timidum et meticuloſum,* as Bracton expreſſes it in the words of the civil law. Therefore, in time of war or rebellion, a man may be juſtified in doing many acts, by compulſion of the enemy or rebels, which would admit of no excuſe in the time of peace. This, however, ſeems only, or at leaſt principally, to hold as to poſitive crimes, ſo created by the laws of ſociety, and which therefore ſociety may excuſe; but not as to natural offences, ſo declared by the law of God, wherein human magiſtrates are only the executioners of divine puniſhment. And, therefore, though a man be violently aſſaulted, and hath no other poſſible means of eſcaping death but by killing an innocent perſon, this fear and force ſhall not acquit him of murder; for he ought rather to die himſelf than eſcape by the murder of an innocent. But in ſuch a caſe he is permitted to kill the aſſailant; for there the law of nature, and ſelf-defence its primary canon, have made him his own protector.

3. There is a third ſpecies of neceſſity, which may be diſtinguiſhed from the actual compulſion of external force or fear; being the reſult of reaſon and reflection, which act upon and conſtrain a man's will, and oblige him to do an action which without ſuch obligation would be criminal. And that is, when a man has his choice of two evils ſet before him, and, being under a neceſſity of chooſing one, he chooſes the leaſt pernicious of the two. Here the will cannot be ſaid freely to exert itſelf, being rather paſſive than active; or, if active, it is rather in rejecting the greater evil than in chooſing the leſs. Of this ſort is that neceſſity, where a man by the commandment of the law is bound to arreſt another for any capital offence, or to diſperſe a riot, and reſiſtance is made to his authority; it is here juſtifiable, and even neceſſary, to beat, to wound, or perhaps to kill, the offenders, rather than permit the murderer to eſcape, or the riot to continue. For the preſervation of the peace of the kingdom, and the apprehending of notorious malefactors, are of the utmoſt conſequence to the public; and therefore excuſe the felony, which the killing would otherwiſe amount to.

4. There is yet another caſe of neceſſity, which has occaſioned great ſpeculation among the writers upon general law; viz. whether a man in extreme want of food or clothing may juſtify ſtealing either to relieve his preſent neceſſities. And this both Grotius and Puffendorff, together with many other of the foreign juriſts, hold in the affirmative; maintaining, by many ingenious, humane, and plauſible, reaſons, that in ſuch caſes the community of goods, by a kind of tacit conceſſion of ſociety, is revived. And ſome even of our lawyers have held the ſame; though it ſeems to be an unwarranted doctrine, borrowed from the notions of ſome civilians; at leaſt it is now antiquated, the law of England admitting no ſuch excuſe at preſent. And this its doctrine is agreeable not only to the ſentiments of many of the wiſeſt ancients, particularly Cicero, who holds, That *ſuum cuique incommodum ferendum eſt, potius quam de alterius commodis detrahendum;* but alſo to the Jewiſh law, as certified by king Solomon himſelf: *If a thief ſteal to ſatisfy his ſoul when he is hungry, he ſhall reſtore ſevenfold, and ſhall give all the ſubſtance of his houſe;* which was the ordinary puniſhment for theft in that kingdom. And this is founded upon the higheſt reaſon: for men's properties would be under a ſtrange inſecurity, if liable to be invaded according to the wants of others; of which wants no man can poſſibly be an adequate judge but the party himſelf who pleads them. In England eſpecially, there would be a peculiar impropriety in admitting ſo dubious an abuſe: for by the laws ſuch ſufficient proviſion is made for the poor by the power of the civil magiſtrate, that it is impoſſible that the moſt needy ſtranger ſhould ever be reduced to the neceſſity of thieving to ſupport nature. The caſe of a ſtranger is, by the way, the ſtrongeſt inſtance put by Puffendorff, and whereon he builds his principal arguments; which, however they may hold upon the continent, where the parſimonious induſtry of the natives orders every one to work or ſtarve, yet muſt loſe all their weight and efficacy in England, where charity is reduced to a ſyſtem, and interwoven in our very conſtitution. Therefore our laws ought by no means to be taxed with being unmerciful, for denying this privilege to the neceſſitous; eſpecially when we conſider, that the king, on the repreſentation of his miniſters of juſtice, hath a power to ſoften the law, and to extend mercy in caſes of peculiar hardſhip. An advantage which is wanting in many ſtates, particularly thoſe which are democratical: and theſe have in its ſtead introduced and adopted, in the body of the law itſelf, a multitude of circumſtances tending to alleviate its rigour. But the founders of our conſtitution thought it better to veſt in the crown the power of pardoning particular objects of compaſſion, than to countenance and eſtabliſh theft by one general undiſtinguiſhing law.

NECES'SITY FO'RT, an American fort ſituated in the Great Meadow, Virginia, within four miles of the weſt branch of Maryland, and on the north ſide of the head-water of Redſtone-creek, which diſcharges itſelf from the eaſt into the Monongahela, in lat. 39. 43. N. above ſixteen miles from the ſpot where this fort was erected: 238 miles weſt by north from Alexandria, and 258 north-weſt of Fredericksburg. This ſpot deſerves notice, as it was the firſt ſcene on which general Waſhington diſplayed his abilities as a commander. In 1753 this gallant officer, in the twenty-ſecond year of his age, being then a colonel, having the command of 300 men, defeated the French; and, when M. de Villiere ſent a force, amounting to 900 men beſides Indians, Waſhington, in this unfiniſhed fort, with his ſmall body of troops, defended himſelf ſo well, as to conſtrain the French officer to grant him honourable terms of capitulation.

NECH'ANETZ, a town of Bohemia, in the circle of Konigingratz: eight miles weſt of Konigingratz.

NECH'ELS, a village in Staffordſhire, near Wolverhampton.—A village in Warwickſhire, near Alſton.

NECH'ERS, a town of France, in the department of the Puy de Dôme: ſix miles north-weſt of Iſſoire.

NECH'IN, a village of France, in the department of the Lys: ſeven miles eaſt-north-eaſt of Courtray.

NE'CHUS, or PHARAOH NECHO. See the article EGYPT, vol. vi. p. 295. and p. 613 of this volume.

NECK, *ſ.* [from hnecca, necca, Sax. *hniga,* Icel. to bow, to bend. *Serenius.*] The part between the head and body.—The length of the face twice exceedeth that of the *neck. Brown's Vulg. Err.*—The *necks* of quadrupeds, Dr. Derham obſerves, are always equal to the length of their legs: this is contrived by nature, to enable them to reach the ground for their food without ſtooping the body. Indeed the elephant is an exception from the rule; its *neck* is very ſhort; but then it has a peculiar proviſion by a proboſcis or trunk. *Chambers.*

He'll beat Aufidius' head below his knee,
And tread upon his *neck.* *Shakeſpeare's Coriol.*

A long narrow part.—The acceſs of the town was only by a *neck* of land, between the ſea on the one part, and the harbour-water on the other. *Bacon.*

Thou walk'ſt as on a narrow mountain's *neck,*
A dreadful height, with ſcanty room to tread. *Dryden.*

On the NECK. Immediately after; from one following another cloſely.—The ſecond way to aggregate ſin, is by addition of ſin to ſin, and that is done ſundry ways; firſt by committing one ſin *on the neck* of another; as David ſinned, when he added murther to adultery. *Perkins.*

He depos'd the king,
And, *on the neck* of that, taſk'd the whole ſtate. *Shakeſp.*

To break the NECK *of an affair.* To hinder any thing being done; or, to do more than half.

NECK-BEE'F, *ſ.* The coarſe fleſh of the neck of cattle, ſold to the poor at a cheap rate.—They'll ſell (as cheap as *neck-beef)* for counters. *Swift.*

NECK'-CLOTH, *ſ.* That which men wear on their necks.—It would be an endleſs taſk to attempt to adopt the dreſs to the various temperatures of the weather in this uncertain climate; but there is one thing worn by the moderns in Europe, the abolition of which would be particularly acceptable in this warm weather, that is, the *neck-cloth.* Indeed we wonder who could ever have thought of ſuch a ridiculous incumbrance. It is not only diſagreeable, but we ſhould think injurious, in hot weather, perfectly uſeleſs in cold, for the throat is quite as capable of expoſure to the air as the face; and moreover ugly and expenſive at all times. *Examiner,* Aug. 9, 1818.

Will ſhe with huſwife's hand provide thy meat,
And ev'ry Sunday morn thy *neck-cloth* plait? *Gay.*

NECK'-LAND, *ſ.* A long narrow part of land; a neck of land.—Promontories and *neck-lands,* which butt into the ſea, what are they but ſolid creeks? *Hakewill.*

NECK'-VERSE. The Latin ſentence, *Miſerere mei Deus,* Pſ. li. 1. was thus called, becauſe the reading of it was made a teſt, by which to diſtinguiſh thoſe who, in preſumption of law, were qualified in point of learning, and admiſſible to benefit of clergy: but this ground of diſtinction was ſet aſide by 5 Ann. cap. 6.—They have a ſanctuary for thee, to ſave thee, yea and a *necke-verſe,* if thou canſt rede but a lytle latenly, thoughe it be never ſo ſoryly. *Tyndall's Obed. of a Chriſten Man.*

If a monk had been taken for ſtealing of bacon,
For burglary, murder, or rape;
If he could but rehearſe (well prompt) his *neck-verſe,*
He never could fail to eſcape. *Brit. Apollo,* 1710.

NECK'-WEED, *ſ.* Hemp: in ridicule.

NECK'AR, a river of Germany, which riſes in the Black Foreſt; paſſes by or near to Kothweil, Sultz, Horb, Rothenburg, Ehingen, Tubingen, Nurtingen, Wendlingen, Eſslingen, Conſtadt, Ludwigſburg, Marpach, Heilbron, Wimper am Berg, Neckar Gemund, Heidelberg, &c. and joins the Rhine at Manheim.

NECK'AR GEMUN'D, a town of the grand duchy of Baden, five miles eaſt of Heidelberg, and forty-two north of Stuttgart. Lat. 49. 22. N. lon. 9. 18. E.

NECKAR's UL'M, a town of Germany, on the eaſt ſide of the Neckar, three miles north of Heilbron, and twenty-three ſouth-eaſt of Heidelberg. Lat. 49. 12. N. lon. 9. 18. E.

NECKATEE', or NECK'ERCHIEF, *ſ.* A gorget; handkerchief for a woman's neck.

NECK'ED, *adj.* Uſed in compoſition, figuratively and literally; having a neck.—Stiff-*neck'd* pride nor art nor force can bend. *Denham.*

The horſe,
Dauntleſs at empty noiſes, lofty *neck'd.* *Dryden.*

NECK'ER (Noel Joſeph), an eminent botaniſt, was born in Flanders in 1729. At a very early period he devoted himſelf to the ſtudy of botany; and, to enlarge his knowledge in that ſcience, he undertook ſeveral tours through Germany, France, and other countries. He afterwards became botaniſt to the Elector Palatine, and hiſtoriographer of the palatinate, and of the duchies of Berg and Juliers. He died at Manheim, in the month of December 1793. He had obtained the degree of M. D. from the univerſity of Douay, and was an honorary member of the college of medicine at Nanci. He was a member alſo of the academies of Bavaria and Manheim, as well as of other learned bodies. Necker was the author of ſeveral botanical works, among which were the following: 1. Deliciæ Gallo-Belgicæ Sylveſtres, ſeu tractatus generalis plantarum Gallo-Belgicarum ad genera relatarum, &c. ſecundum principia Linnæana; Argent. 1768, 2 vols. 12mo. 2. Methodus Muſcorum; Manheim, 1771, 8vo. Necker had applied particularly to the ſtudy of moſſes, of which he forms only one claſs; this he divides into three orders, the characters of which are taken from the effects of germination. All the moſſes, according to his ſyſtem, ought to be conſidered as perennial, but their germination is not always the ſame: in ſome it is foliaceous, in others plumous, and in ſome it is by ſimple buds. 3. Phyſiologia Muſcorum; ibid. 1774. 8vo. cum fig. This work has been tranſlated into French, under the title of "Phyſiologie des Corps organiſés," &c. Bouillon, 1775, 8vo. 4. Traité ſur la Mycitologie, ou Diſcours hiſtorique ſur les Champignons en general; Manheim, 1788, 8vo. avec fig. 5. Elementa Botanica; Neovedæ, 1791, 3 vols. 8vo. Necker was the author alſo of ſeveral diſſertations, publiſhed in the Tranſactions of the Theodoro-Palatine Academy. *Nekrolog für Freunde Deutſcher Literatur von G. S. Rötger.*

NECK'ER (James), a ſtateſman and financier, diſtinguiſhed by the part he acted in the French revolution, was born in 1732 at Geneva, where his father was profeſſor of civil law in the college. He received the liberal education uſually beſtowed upon youth in that city, though his deſtination was a commercial life. In his fifteenth year he went to Paris, where he was employed as a clerk, firſt in the banking-houſe of Vernet, and then in that of Theluſſon. Such was the ability and aſſiduity which he diſplayed in this ſtation, that he roſe to the poſt of firſt caſhier, and finally a partner, in the houſe. His ſpeculations, and eſpecially his concerns with the French Eaſt-India company, turned out highly advantageous, and he rapidly accumulated a fortune. About the year 1765 he married Madlle. Curchod, the daughter of a pariſh-miniſter in the Pais de Vaud, a lady of extraordinary merit and accompliſhments, who had already poſſeſſed the heart of the hiſtorian Gibbon. He was ſoon after appointed the miniſter of the republic of Geneva at Paris; his ſhare in the buſineſs was increaſed; and on the death of Theluſſon he ſet up a bank of his own, in partnerſhip with Girardot and Haller, the latter a ſon of the illuſtrious baron Haller.

His high reputation for financial knowledge cauſed him, in 1776, when the French finances were in a very diſordered ſtate, to be appointed director, and ſoon after comptroller-general, of that department in the ſtate; and he was the firſt Proteſtant, ſince the revocation of the edict of Nantes, who had held any important place in the French adminiſtration. At that time Maurepas was prime-miniſter, an old courtier, who occaſionally made him feel his inferiority of birth, and was with difficulty brought to acquieſce in his ſchemes of reform. Economy and regularity were the leading points of Necker's financial government. He ſuppreſſed the poſts of intendans des finances, eſtabliſhed provincial aſſemblies, and reſtored public credit, though, as his cenſurers aſſert, at the expenſe of improvident loans, which left a great additional burden. Whether his meaſures were wiſe and ſolid, or ſpecious and illuſory, may be diſputed; but it is generally admitted that his intentions were pure, and his conduct diſintereſted. He refuſed all emolument for his ſervices, and advanced a large ſum to government from his private property, which he never drew out from the funds. His adminiſtration was popular, but his ſaving-plans could not fail of making him many enemies at court; and, upon his applying to be admitted to a ſeat in the council, for the purpoſe of increaſing his conſequence, he received no anſwer. Regarding this as a purpoſed indignity, he reſigned, after having been five years in office. Some time before his reſignation, he publiſhed his "Compte Rendu," which was a ſtatement of what he had done in the financial department, and what were his views in this important branch of policy. It was artfully compoſed, and had a great effect upon the public mind. He followed it by a work, "De l'Adminiſtration des Finances," which treated the ſame ſubject more largely, and was read with great avidity. Its details were accurate, and its ſpeculations ingenious; and it had a powerful influence in exciting the popular attention to matters of government.

When M. de Calonne was appointed to the office which Necker had reſigned, he made an attack, before the aſſembly of Notables, upon the veracity of Necker's ſtatements in the Compte Rendu. The latter drew up a memoir in reply, which he ſent to the king; and his majeſty intimated that, if he would forbear making it public, he ſhould ſhortly be reſtored to his place. Necker, however, in whom a regard for reputation was a predominant feeling, thought proper to make an appeal to the nation by publiſhing his defence; and this diſobedience to the royal pleaſure was puniſhed by exile to his ſeat of St. Ouen, forty leagues from Paris. It was during his retreat from buſineſs that he wrote his work "De l'Importance des Opinions Religieuſes," a performance of great eloquence, in which he ſpeaks of the influence of religion like one who had felt it, and who was fully convinced of its importance both to individuals and to ſociety. When the prevalence of oppoſite opinions in France at that time is conſidered, it can ſcarcely be ſuppoſed by the moſt uncandid eſtimator of his motives that he had in this inſtance any other than the moſt purely philanthropic views.

When the dazzling operations of Calonne had only augmented the deficiencies of revenue, and the incapacity of Brienne had become notorious, nothing was left to the court but to recall a man whoſe diſmiſſion had rendered him more popular, and whoſe virtues had confirmed the confidence which his talents had inſpired. It was in Auguſt 1788, that Necker was reinſtated in his former poſt, to the apparent ſatisfaction as well of the court as the people. It was, however, a period of extreme difficulty; and the miniſter who could venture to aſſume the helm in ſuch circumſtances, may be preſumed to have felt as much confidence in his abilities as in his good intentions. His firſt ſteps were to recall the baniſhed members of the parliament of Paris, and to reſtore that body to its functions; to repleniſh the treaſury, which he found almoſt empty: and to relieve the ſcarcity of corn under which the kingdom and capital then laboured. His next great concern was, the convocation of the States-General, which had been already promiſed by the king. He has been blamed for his forwardneſs in promoting this meaſure, which proved the immediate forerunner of the revolution; and eſpecially for having conſented that the number of members of the tiers état ſhould be equal to that of the nobles and clergy united. With reſpect to the firſt point, there is no reaſon to ſuppoſe that any miniſterial artifices could have counteracted the ſtrong will of the nation, which looked to ſuch an aſſembly as the only remedy for the public diſorders. The proportion given to the tiers état he aſſerts to have been ſo generally expected, that it could not ſafely have been refuſed. In fact, however Necker's own political principles were in favour of a limited monarchy; and he certainly did not wiſh to render the aſſembly of the States a mere pageantry, that ſhould leave the defects of the conſtitution as it found them. His error lay in thinking too well of the temper of the nation, and in ſuppoſing it was in his own power to guide and moderate that ſpirit which had rendered the convocation of the States neceſſary, and was continually betraying itſelf by violences. His own ſtrong moral principles, joined with vanity and ſelf-confidence, ſeem to have blinded him to the probable conſequences of his plans. If the impending evils were to have been averted by ſincerity and moderation, his counſels would have been ſalutary; if the ſtrong arm of power ought to have been employed, he was in no reſpect the man to wield it.

Necker delivered an elaborate ſpeech at the opening of the States, the ideas in which were too moderate to pleaſe any party. He afterwards propoſed a royal ſitting, and drew up a plan of government to be recommended by the king in a ſpeech, which underwent ſeveral alterations in the council. His abſence at the time of its delivery was much cenſured, as indicative of his diſpleaſure at theſe alterations, and prejudicing the people againſt the court. That he ſhould ſeem to approve what in reality he diſapproved, and had oppoſed with all his power, was hardly to be expected; but his diſſent ſhould rather have been ſhown by an open reſignation than by an inſinuated diſſatisfaction. This reſignation, indeed, according to his own aſſertion, he had from this time reſolved upon: but the rumour of it excited great commotion among the people, and ſerved to diſplay his popularity. When, in the progreſs of events, the king was perſuaded to ſhow a ſpirit of reſiſtance to the increaſing claims of the popular party, and had determined upon the aſſembling of troops round Paris and Verſailles, the diſmiſſion of Necker, who decidedly oppoſed theſe meaſures, was a matter of courſe. In July 1789, a ſudden order was brought to him, while ſitting at table with company, that he ſhould quit the kingdom within twenty-four hours. The manner in which he ſubmitted to it fully acquits him of any wiſh to raiſe a diſturbance on his own account. Pretending a head-ache, he retired from the company after dinner, threw himſelf into a chaiſe with his wife, and drove incognito firſt to his country-ſeat, and then to Bruſſels, with all poſſible ſpeed. As ſoon as his diſmiſſion was known, all Paris was in a flame. The deſtruction of the Baſtille ſoon followed; and ſuch ſymptoms of popular fury appeared, that the king found it neceſſary immediately to ſend a meſſage inviting his return. This overtook him at Baſil, where he had been firſt appriſed of the events at Paris by his enemy the ducheſs de Polignac, who was herſelf now become a fugitive. He determined upon compliance with the invitation; and his return was a ſcene of triumph, ſimilar to that of Cicero from his baniſhment. On his approach to Paris, he learnt the danger of the baron de Bezenval, who was on the point of falling a ſacrifice to popular rage. He ſucceſsfully interfered in his favour; and alſo exerted his influence to calm the fury which was let looſe againſt the perſons and properties of the whole ariſtocratic and royal party.

But his popularity had now reached a ſummit from which it was thenceforth to decline. As miniſter of finance, it was neceſſary for him to propoſe expedients which could not but be ungrateful to the maſs of the people. His moderate ſentiments with reſpect to government left him far behind the *advanced principles* which now began to be avowed by the popular leaders. Above all, the intrigues of his rival Mirabeau, a man of no ſcruples, and much better qualified than himſelf for directing the torrent of public opinion, undermined the foundation of his favour with the people. Of the part he took in the debates reſpecting a new conſtitution, the moſt remarkable circumſtances were, his propoſal of a ſuſpenſive veto in the crown, as a middle meaſure between an abſolute veto and none at all; and his oppoſition to the abolition of titles and orders of nobility. He alſo propoſed the eſtabliſhment of a national bank; and, when the red book, or private liſt of royal penſions and expenditures had been inſidiouſly publiſhed by the National Aſſembly, he greatly reſented that proceeding, and defended the contents, though there were no expenſes incurred in his own adminiſtration to be juſtified. Such was the alteration of ſentiments, that he came to be regarded as an ariſtocrat; and, as the violent party acquired the aſcendancy, his perſonal ſafety was at length endangered. Alarmed and mortified at the ſymptoms of his loſs of influence, he wrote a letter to the Conſtituent Aſſembly in September 1790, deſiring leave to reſign, and at the ſame time offering to leave the money which he had advanced to government, two millions of livres, and his houſe and furniture, as pledges for his integrity. His reſignation was accepted with marks of perfect indifference; and he left Paris with the poignant reflexions of a man, who had found his utter incapacity of doing the good he expected to have done, and who had ſeen that popularity fade away which had ſupported him through former trials. In his journey towards his eſtate of Copet in Swiſſerland, he was arreſted at one place, and with difficulty ſuffered to proceed; and at another he was ſtopped and inſulted by the populace. His ſtate of mind in his retreat may be judged of by the following paſſage in a letter from Gibbon. "I paſſed four days at the caſtle of Copet with Necker; and could have wiſhed to have ſhown him, as a warning to any aſpiring youth poſſeſſed with the demon of ambition. With all the means of private happineſs in his power, he is the moſt miſerable of human beings: the paſt, the preſent, and the future, are equally odious to him. When I ſuggeſted ſome domeſtic amuſements of books, building, &c. he anſwered, with a deep tone of deſpair, In the ſtate in which I am, I can feel nothing but the blaſt that has overthrown me." Domeſtic affliction was ſoon added to his political misfortunes. His beloved wife died after a long illneſs, in which he attended on her with the moſt affectionate aſſiduity. His mind ſupported itſelf chiefly by his favourite occupation of writing; and ſeveral works of different kinds were the product of his ſolitude. He wrote a defence of his public conduct, entitled "Sur l'Adminiſtration de M. Necker; par lui-même." Whilſt the king's trial was depending, he endeavoured to ſerve him by the publication of "Reflexions addreſſed to the French Nation." He gave his ideas on the executive part of government in an eſſay "Du Pouvoir Executif," which is much commended even by thoſe who are little inclined to favour him. His "Courſe of Religious Morality" ſhows him in the light of an eloquent preacher. One of the laſt of his compoſitions was a novel, entitled "The fatal Conſequences of a ſingle Fault," written at the ſuggeſtion of his daughter, and left in manuſcript. In all his writings he was extremely attentive to the elegance and harmony of his language; and this attention has been ſaid to be diſcernible in a pomp of expreſſion which gives his ſtyle an air of ſtiffneſs and uniformity. It however abounds in paſſages of true eloquence.

Though deprived by the French and Swiſs revolutions of three-fourths of his fortune, he was ſtill able to make a reſpectable appearance, and to indulge his benevolent diſpoſition. He had been placed in the liſt of emigrants, but the directory unanimouſly eraſed his name; and, when the French army entered Swiſſerland, the generals treated him with marked attention. He continued to reſide at Copet, in the boſom of his friends, till his death, which took place in April 1804, at the age of ſeventy-two.

The grand feature in Necker's character was overweening vanity; a weakneſs which appeared in all his actions and diſcourſes. In every meaſure, he brought forward the *author*, when the *act* performed ſhould alone have been ſubmitted to attention; and, while thus laviſh of encomiums on himſelf, he ſeemed, unluckily, to have none in ſtore for other perſons. Though he laid great claims to ſenſibility, he appears to have been almoſt a total ſtranger to it, unleſs perhaps towards mankind taken collectively. Eagerneſs for diſtinction abſorbed all his other paſſions, and confined his feelings of affection to his wife and daughter, who were, in a manner, parts of himſelf. It would be difficult to expreſs how keenly alive he was to attention from perſons of conſequence. A flattering reception from M. de Maurepas or the king, the applauſe of the people, or of the national aſſembly, would tranſport him beyond all bounds; while a contrary treatment appeared to ſink him into deſpair. On both occaſions of his diſmiſſion from office, in 1781 as in 1791, he became ill; and, when he had finally loſt all hope of returning to the miniſtry, or of engaging the public notice, he grew indifferent about life. His vanity made him commence author, and write on a variety of topics, religion, politics, trade, and finances: but all his compoſitions bear the mark of very limited information; a defect proceeding, not from want of induſtry, but from the neceſſity under which he had laboured of paſſing a great part of his life in the barren details of a banking-houſe. Concerning the hiſtory of France, and even the hiſtory of her finances, his information was very ſlender; and, amid all his official reports, his pamphlets, and printed volumes, we meet with no compariſon of his own ideas with thoſe of others. As to political views, he ſeems to have been familiarly acquainted with no conſtitution except that of his native city, Geneva. Of the governments of England and America, though quoted by him as models, he ſeems to have had only a ſuperficial knowledge; and it may be remarked, generally, that his unacquaintance with books was ſuch as to prevent him, on almoſt all occaſions, from adducing the ſupport of great authorities in behalf of his favourite plans. This deficiency of information led him to give free courſe to his imagination, and to indulge in vaſt and romantic projects. His boldneſs, like that of many others, is greateſt on the ſubjects of which he knows leaſt. No man wrote more freely on the plan of a conſtitution for France, though nobody could know leſs of the matter; for he had neither ſtudied the theory in his cloſet, nor partaken in the active deliberations of the aſſembly: but, in treating of the taxes of France, a ſubject with which he was practically converſant, he obſerves a much more cautious courſe; and, while he deſcribes them very perſpicuouſly, both as to their objects and the amount of their produce, he takes care to avoid propoſing any ſcheme for new-modelling them. Clearneſs of ſtatement is in fact his *fort* in compoſition, and a quality in which few if any writers on finance have ſurpaſſed him. His ſtyle, though prolix, is not weariſome: but his egotiſm was equally conſpicuous in his publications and in his miniſterial proceedings. It is to the prevalence of this egotiſm that the viciſſitudes in his political career are to be aſcribed. We have ſeen it bring him in colliſion with the all-powerful Maurepas; and, in his ſecond miniſtry, ſeveral years after the death of that leader, it proved equally pernicious to his views. All contradiction of his plans he treated as a puniſhable offence; and he made no ſcruple of adapting his miniſterial meaſures to the attainment of a popularity which was deſigned to render him independent of the court. When called for the third time to the miniſtry of finance, the flattering circumſtances attending his re-inſtatement proved too much for his diſcretion, and ſeduced him into ſuch acts of preſumption as induced the leading members of the national aſſembly to let him run his race uninterrupted; ſatisfied that he would ſoon bring himſelf into ridicule. It happened as they had foreſeen; and Necker fell, for the laſt time, wholly diſregarded by the public.

In Necker's perſonal appearance, the moſt ſtriking feature was his eyes; they were quick and lively; and his look all together, though indicative neither of openneſs nor concealment, was that of a man of ſpirit and obſervation. His body was large and unwieldy; his manner was ungraceful; and it was waggiſhly remarked, that he was accuſtomed to erect and throw back his head in proportion to the degree of favour which he enjoyed at court. His converſation, without being marked by eaſe or by feeling, received a degree of intereſt from the active ſtate of his mind. He was one of thoſe men who never ſeem to be at reſt, nor to find adequate reſources within themſelves. Either the deſire of ſomething new, or the regret of ſomething that was paſt, ſeemed perpetually to agitate him. As a miniſter, his great advantage lay in obtaining credit for government among men of capital. Nobody was more ſucceſsful in inſpiring confidence; and, in one of his loans, it was remarked that nearly a third of the amount was ſubſcribed by foreigners. His loans, likewiſe, bore a premium; a very rare thing in France; and, though the ſums borrowed were large, the rate of intereſt was moderate. Theſe advantages were evidently the reſult of his long experience and dexterity in banking buſineſs.

The daughter of M. Necker, who married the baron de Stael, the ambaſſador from Sweden to France, made herſelf well known to the literary world by ſeveral ingenious publications. Among theſe are "Memoirs of the Character and private Life of her Father," written in a ſtrain of high ſentiment and elaborate panegyric, or rather adoration: for never does a parent ſeem to have been more idolized by a child. She died at Paris, July 15, 1817, aged 53. See STAEL-HOLSTEIN. This article is collected from her *Memoirs of the Life of her Father;* and *Particulars reſpecting the moſt celebrated Finance-Miniſters of France,* Paris, 1812.

NECKER's I'SLAND, one of the ſmaller Virgin Iſlands, near the north coaſt of Virgin Gorda.

NECKER I'SLANDS, a cluſter of nine ſmall iſlands, in the North Pacific Ocean, near the weſt coaſt of America, about three miles from Cape Blanco. Lat. 42. 50. N.

NECKER I'SLE, a ſmall iſland in the Pacific Ocean, conſiſting of an almoſt barren rock about 500 toiſes in length and 60 in height, without a ſingle tree, but having on the ſummit a good deal of graſs. M. la Perouſe points it out to navigators, that they may avoid the danger of approaching it: within a ſpace of ten miles from it, no other ground was found beſides coral and broken ſhells. Lat. 23. 31. N. lon. 164. 32. W.

NECK'ERA, *ſ.* [received its name from Hedwig, "in the memory of the moſt eminent oppoſer of the doctrine of the ſexual propagation of moſſes, to whom nevertheleſs botany is not a little indebted." This was Dr. N. Joſeph Necker, mentioned p. 662.] In botany, a genus of the claſs cryptogamia, order muſci.—*Eſſential Character.* Capſule oblong, from a lateral ſcaly ſheath; outer fringe of ſixteen acute teeth; inner of as many intermediate thread-ſhaped teeth; veil ſmooth.

The habit of Neckera is like that of Hypnum, under which genus ſome of its ſpecies have been deſcribed by Linnæus; but ſtill nearer to Fontinalis in the ſhortneſs of the fruit-ſtalk. Accordingly ſeveral of the ſpecies, more recently diſcovered, have been referred to the latter genus. (See HYPNUM and FONTINALIS.) Neckera differs, in eſſential character, from both in its inner fringe, which conſiſts of diſtinct and ſeparate teeth or briſtles; not combined by a membranous baſe, as in the former; nor connected by tranſverſe lattice-work, as in the latter. Sixteen ſpecies are deſcribed in the Species Muſcorum of Hedwig, five of which are Britiſh. They are diſpoſed in two ſections, and theſe are each ſubdivided into two more, according as the leaves are two-ranked or ſcattered. We ſhall ſelect a few ſpecimens, including the new ſpecies from the Linnæan Tranſactions. Indeed the old ſpecies are deſcribed under ſuch various names, that we hardly know where to place them.

I. Fruit-ſtalk ſhorter than the capſule; leaves ſcattered.

1. Neckera heteromalla, or lateral neckera: ſtem branched, diffuſe; leaves ovate, concave, imbricated every way; capſules turned to one ſide. Native of England and Ireland, but, as far as has hitherto been obſerved, of no other country. Sherard firſt found it at Badminton, Glouceſterſhire. It grows in tufts cloſely preſſed to the trunks of trees, and is not uncommon in Norfolk. The ſtems are about 1½ inch long, diffuſe, rigid, with pinnate branches, thickly clothed with ſmall dull-green acute ſingle-ribbed leaves.

II. Fruit-ſtalk longer than the capſule.

2. Neckera pumila, or ſmall feathery neckera: branches pinnate; leaves two-ranked, ovate, obliquely pointed, tranſverſely corrugated; fruit-ſtalk ſcarcely longer than the ſheath. Native of trunks of trees in Weſtmoreland, Suſſex, and Scotland, nor has it been obſerved in any other country. Firſt diſcovered in the ſummer of 1782, on trees near Ambleſide, as indicated in the Flora Angl. but without capſules; theſe Mr. Dickſon met with in Suſſex.

3. Neckera criſpa, or criſped neckera: branches pinnate; leaves two-ranked, oblong, tranſverſely corrugated; fruit-ſtalk twice the length of the ſheath. Native of chalky or limeſtone countries, in dry woods, very abundant, producing capſules in April. The great ſize of this ſpecies; its regular ſemilunar plaits; the contraſt of ſhining green and brown in its foliage; all together render it one of the handſomeſt Britiſh moſſes. The branched ſtems, leafy throughout, lie over each other in thick elaſtic horizontal maſſes, and are excellent for package.

4. Neckera curtipendula, or pendulous neckera: ſtem branched, diffuſe; leaves ovate-lanceolate, pointed, even, ſpreading; capſules on longiſh ſtalks, drooping. Native of rocks and trees, in various parts of Europe, but not common in England. Mr. Menzies gathered it on the weſt coaſt of North America. The ſtems are long, and either proſtrate or pendulous, their principal diviſions pinnate with numerous ſhort tapering branches. Leaves imbricated, ſpreading every way, of a yellowiſh ſhining green, ovate, pointed, ſingle-ribbed, ſlightly concave, without any tranſverſe plaits.

5. Neckera viticuloſa, or cylindrical neckera: ſtem creeping; branches erect, cylindrical; leaves lanceolate, imbricated, ſpreading, ſlightly turned to one ſide; capſules erect. Found about the roots of trees, in old dry woods, throughout Europe, bearing fruit plentifully in the ſpring. The wiry creeping ſtems throw up numerous, erect, crowded, level-topped, ſimple or divided, branches, thickly clothed with dark-green or yellowiſh leaves, which, though imbricated every way, are curved toward one ſide. Fruit-ſtalks an inch or more in length, from very ſhort ſheaths.

Three new ſpecies have been added by Mr. W. Hooker, in his paper (Linn. Tranſ. vol. ix.) on the Moſſes found by Dr. Buchanan in Nepaul. Theſe are,

6. Neckera ſphærocarpa: ſtem pinnate, with ſhort branches; leaves ovate, pointed, ſingle-ribbed at the baſe; capſules nearly ſeſſile, almoſt globular, turned one way. Found on trees at Kargoo in Nepaul, bearing fruit in March. Nearly a-kin to N. heteromalla, next to which it ought to be inſerted; but the more lax and ſpreading habit, and eſpecially the ſpherical capſule, unlike every other known Neckera, diſtinguiſh it.

7. Neckera flaveſcens: ſtem erect, pinnate; branches moſtly ſimple; leaves ovate, ribleſs; capſule cylindrical, erect; lid awl-ſhaped. Gathered at Narain-hetty. This forms ſilky tufts of a tawny yellow. It belongs to the laſt ſection of the genus, along with N. curtipendula and viticuloſa; but differs widely from both in its fine crowded branches; from the former in its long capillary fruit-ſtalks; from the latter in its ſtill more ſlender capſules, and leaves not turned to one ſide.

8. Neckera tenuis: ſtem doubly pinnate; leaves imbricated, ſerrated; thoſe of the ſtem roundiſh-heart-ſhaped, with two furrows at the baſe; capſule erect; lid incurved. Gathered at Narain-hetty in January. This belongs to the ſame diviſion as the laſt, with which it agrees in colour; but its habit, and growth in broad denſe ſilky tufts, is like ſome of the feathery ſpecies of Hypnum. Beſides the marks indicated in the ſpecific character, the long dark capillary fruit-ſtalks, and turgid capſules, are peculiar.

The three laſt ſpecies are repreſented on the annexed Engraving. Fig. 1. Neckera ſphærocarpa, natural ſize; *b*, part of a branch, magnified; *c*, upper leaf, magnified; *d*, apex of the ſame, more highly magnified; *e*, lower leaf, magnified; *f*, perichætial leaf; *g*, apex, more highly magnified; *h*, capſule and interior perichætial leaf; *i*, operculum; *k*, operculum ſeen internally with the annulus; *l*, part of the periſtomium; *m*, ſeeds. Fig. 2. Neckera flaveſcens, natural ſize; *n*, part of a branch, magnified; *o*, leaf; *p*, perichætial leaf; *q*, capſule; *r*, operculum; *s*, capſule covered with a calyptra. Fig. 3. Neckera tenuis, natural ſize; *t*, part of a ſtem and branch, magnified; *u*, ſtem-leaf; *x*, leaf of the branch; *y*, perichætial leaf; *z*, capſule; *a*, operculum.

NECKERAU', a village on an iſland in the Rhine, fortified by the French, and taken by the Auſtrians in September 1799: four miles ſouth of Manheim.

NECK'ERHAUSEN, a town of the grand duchy of Baden: five miles eaſt of Manheim.

NECK'HAM (Alexander), an Engliſh abbot, and one of the moſt learned men in the thirteenth century; was born at St. Alban's in Hertfordſhire. He poſſeſſed an early inclination for acquiring knowledge, and that he might indulge it embraced the religious life among the canons regular of the order of St. Auguſtine. He proſecuted his ſtudies with great diligence and ſucceſs, not only in his native country, but in France and Italy, and directed them to all the various branches of learning and ſcience then known. Conſidering the age in which he lived, he became an excellent divine, an able philoſopher, an accompliſhed orator, and an elegant poet. Some ſpecimens of his poetic taſte may be ſeen in Leland. In the year 1215, he was elected abbot of the monaſtery at Cirenceſter in Glouceſterſhire, where he appears to have died about three years afterwards. He was the author of Commentaries on Eccleſiaſtes, the Song of Songs, the Pſalms, and the Creed of Athanaſius; biblical criticiſms; ſermons; religious and moral treatiſes; a treatiſe on the Nature of Things; poems, &c. of which a long liſt is given in *Lelandi Comment. de Script. Britan.*

NECK'LACE, *ſ.* An ornamental ſtring of beads or precious ſtones, worn by women on their necks.—Ladies, as well then as now, wore eſtates in their ears. Both men and women wore torques, chains, or *necklaces*, of ſilver and gold ſet with precious ſtones. *Arbuthnot on Coins.*

NECK'LACED, *adj.* Marked as with a necklace.—The hooded and the *necklaced* ſnake. *Sir W. Jones.*

NECRO'LIUM, *ſ.* A word uſed by ſome of the alchemical writers to expreſs a remedy almoſt always capable of averting death, and continuing life to its utmoſt period.

NECROL'OGY, *ſ.* [*necrologium*, Lat. from the Gr. νεκρος, dead, and λογος, diſcourſe or enumeration.] A book anciently kept in churches and monaſteries, wherein were regiſtered the benefactors of the ſame, the time of their deaths, and the days of their commemoration; as alſo the deaths of the priors, abbots, religious, canons, &c. This was otherwiſe called *calendar*, and *obituary*.

NEC'ROMANCER, *ſ.* [νεκρός and μαντις, Gr. Sometimes corruptly written by old authors *negromancer;* and thus Cotgrave calls it, in French alſo, "*nigromance*, one who practiſes the black art;" miſtakenly alluding to *niger*, black, as part of the etymology: but it is certainly from νεκρος, a dead perſon.] One who by charms can converſe with the ghoſts of the dead; a conjurer; an enchanter.—There ſhall not be found among you a charmer, or a conſulter with familiar ſpirits, or a wizard, or a *necromancer*, [in old tranſlations, *that aſketh advice or counſel of the dead*, or *that ſeeketh to the dead.*] *Deut.* xviii. 11.—I am employed like the general who was forced to kill his enemies twice over, whom a *necromancer* had raiſed to life. *Swift's Miſcell.*

NEC'ROMANCY, *ſ.* [νεκρος, dead, and μαντις, divination.] The art of revealing future events, by communication with the dead.—The reſurrection of Samuel is nothing but deluſion in the practice of *necromancy* and popular conception of ghoſts. *Brown.*—Enchantment; conjuration.—He did it partly by *necromancy*, wherein he was much ſkilled. *Abbot's Deſc. of the World.*

This palace ſtandeth in the air,
By *necromancy* placed there. *Drayton.*

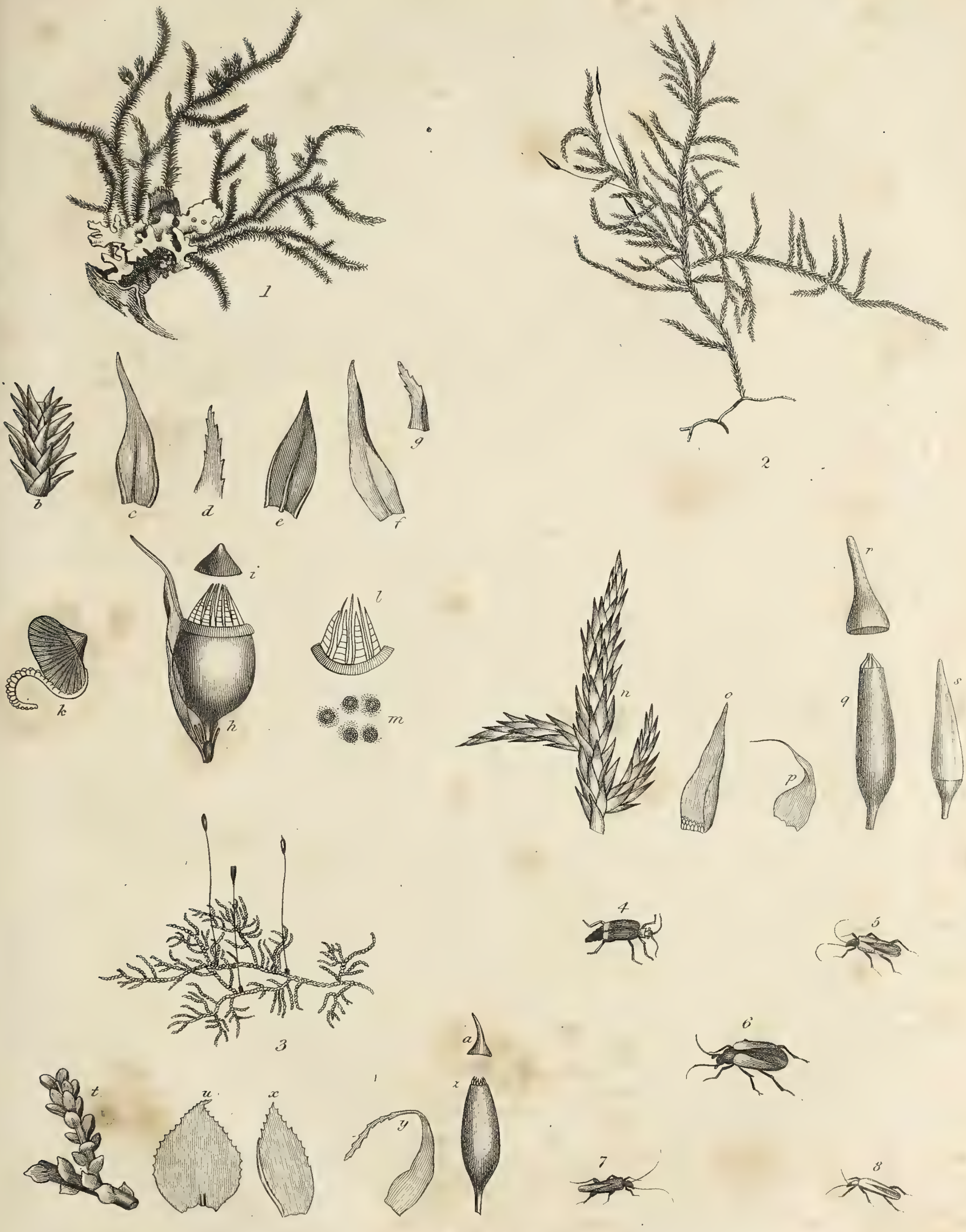
This ſuperſtitious and impious impoſture appears to have had its origin at a very early period in Egypt, and to have been thence propagated in every nation with the manners of which hiſtory has made us acquainted. The conqueſts of Seſoſtris might introduce it into India; the Iſraelites would naturally borrow it from the people among whom they ſojourned four hundred years; and it would eaſily find its way into Phœnicia, from the vicinity of that country to the land of its nativity. From the Egyptians and Phœnicians it was adopted, with the other rites of paganiſm, by the Greeks; and it was imported into Rome with Grecian literature and Grecian manners. It was not however confined to the pagan nations of antiquity: it ſpread itſelf through all the modern nations of Europe, and took ſuch deep root as to be long retained even after thoſe nations were converted to the Chriſtian faith.

Of its early antiquity we have complete evidence in the writings of Moſes, where it is ſeverely condemned as an abomination to the Lord, (Deut. xviii. 10.) and, though it appears to have been even then ſpread into Phœnicia, we might yet conclude its birth-place to have been Egypt, becauſe, at their *exody*, the Iſraelites were corrupted only by Egyptian ſuperſtitions, and becauſe necromancy ſeems to be one of thoſe whoredoms which the prophet Ezekiel repreſents his countrymen as having brought with them from Egypt, and continued to practiſe till they were carried captives into Babylon.

If from ſacred we proceed to conſult profane authors, we ſhall find them not only affirming Egypt to have been the birth-place of necromancy, but in ſome degree accounting for the origin of ſo impious a deluſion. From Diodorus Siculus (lib. i. § 2.) we learn, that the Grecian fable of Charon the ferryman of hell, of Styx, Cocytus, the Elyſian Fields, Tartarus, the judgment of Minos and Rhadamanthus, &c. with the whole ſcenery of the infernal regions, were imported from Egypt into Greece. (See the article MYTHOLOGY.) The ancient Egyptians, and indeed all the people of the eaſt, made uſe of caves for burying-places, which were well ſuited to the ſolemn ſadneſs of the ſurviving friends, and proper receptacles for thoſe who were never more to behold the light. In Egypt, many of thoſe ſubterraneous cavities, being dug out of the natural rock, ſtill remain, and command the admiration of travellers; and near to the pyramids in particular there are ſome apartments of a wonderful fabric, which, though they extend in length 4400 feet, and are about 30 feet in depth, appear to have been, if not entirely dug, at leaſt reduced to form by the chiſſel or pickaxe of the artiſt.

From the practice of burying in ſuch caverns ſprung the opinion that the infernal manſions were ſituated ſomewhere near the centre of the earth, which by the Egyptians was believed to be not very diſtant from its ſurface. (Bryant's Analyſis of Mythology.) In theſe dreary manſions, it was very eaſy for ſuch adepts as the prieſts of Egypt to fabricate Erebus, Tartarus, the Elyſian Fields, and all thoſe ſcenes which were diſplayed before the initiated

NECKERA AND NECYDALIS.



1, 2, 3. *Species of Neckera, from the Linn. Trans.* 4, 5, 6, 7, 8. *Species of Necydalis or Carrion Eater.*

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tiated, (ſee MYTHOLOGY,) and by them deſcribed to the million of the people. As it was in thoſe dark abodes that necromancy was practiſed, it would be no difficult matter for ſuch magicians as withſtood Moſes to impoſe ſo far upon the credulous vulgar, as to make them believe, that in conſequence of their invocations they actually ſaw the ghoſts of their friends aſcend out of the earth. It appears from the book of Exodus, that the Iſraelitiſh women were, even in the wilderneſs, well acquainted with the uſe of the mirror, which was therefore undoubtedly known to the Egyptians. Now a mirror of a particular form, and properly illuminated at the inſtant required, might eaſily be made to reflect, in a cavern from which all other light was carefully excluded, the image of the deceaſed, who was called upon by the necromancer; and we can readily conceive, that, with reſpect to the queſtion to be propoſed, a perſon might be concealed prepared to give ſuch ambiguous anſwers as would ſatisfy the inquirer, and at the ſame time ſave the credit of the oracle. The terrified imaginations of the ſpectators would aid the deluſion, and make a very ſlight reſemblance paſs for the ghoſt or ειδωλον of their departed friend; or the necromancer might aſſign plauſible reaſons why a ſpectre, after having dwelt for ſome time in the infernal regions, ſhould loſe ſomething of its reſemblance to the body which it animated. Such juggling tricks, though performed by artiſts leſs accompliſhed than Jannes and Jambres, have gained credit among people much more enlightened than the Egyptians can poſſibly have been when the ſcience of necromancy was invented by their prieſts.

That the Iſraelites, notwithſtanding the prohibition of their legiſlator, continued to practiſe the rites of necromancy, is apparent from Saul's tranſaction with the witch of Endor (ſee MAGIC). From the ſame tranſaction it is likewiſe apparent, that the witches of Iſrael, and therefore in all probability the necromancers of Egypt, pretended to evocate the ghoſts of the dead by a *demon*, or *familiar ſpirit*, which they had at their command to employ upon every emergency. This demon was called OB; and therefore Saul deſires his ſervants to find him a woman who was miſtreſs of an OB (1 Sam. xxviii. 7.) It is probable that thoſe wretched impoſtors had in their pay ſome perſons who occaſionally acted the part of the demon, and, when the execution of the plot required their agency, emitted, by means of a cavity dug for that purpoſe, a low hollow voice from below the ground. Hence we find Iſaiah, in his denunciations againſt Ariel, ſaying, *Thou ſhalt be brought down, and ſhalt ſpeak out of the ground; and thy ſpeech ſhall be low out of the duſt, and thy voice ſhall be as of one that hath a familiar ſpirit* [an OB] *out of the ground, and thy ſpeech ſhall whiſper out of the duſt.* Iſa. xxix. 4.

The original, or radical, ſignification of the word *ob* occurs in Job xxxii. 19. where Elihu compares his belly to *new bottles*, which he calls *oboth*, the plural of *ob*. Now, as bottles were then made of leather, new bottles filled with wine and ready to burſt, as Elihu deſcribes them, would of courſe be of a form nearly globular. Hence it may be inferred that the original import of OB was *round* or *globular*: but *b* and *p*, being labials, are often changed into each other; and therefore, from the Hebrew *ob* is derived the Greek οψ, eye, οπτομαι, I ſee, and the Latin *Ops*, a name under which the Earth was worſhipped. *Upis* was a name of Diana, or the Moon: the father of one of the Dianas was likewiſe *Upis*; but this *Upis* was undoubtedly the Sun. Now the difference between *upis* and *opis* is nothing; hence we are led to believe, that as they are all derived from *ob*, this word was employed by the early idolaters of Egypt to denote the firſt and greateſt of Pagan gods, the Sun. If ſo, thoſe who pretended to be miſtreſſes of *obs*, were exactly the ſame kind of impoſtors with the Pythoneſſes of the Greeks.

But, though the Egyptian prieſts were undoubtedly the inventors of the whole myſtery of necromancy, and though it was from them imported into Greece by the prieſts of Dodona, it does not appear that the Grecian necromancers pretended to be maſters of OBS, or familiar ſpirits. Mopſus, Orpheus, Linus, Eumolpus, &c. who either travelled into Egypt in queſt of knowledge, or were actually natives of that country, inſtructed the early Greeks in this occult ſcience: but, whatever might be the practice of theſe apoſtles themſelves, their diſciples profeſſed to do all the feats of magic by performing certain rites, by offering certain ſacrifices, by muttering a certain form of words, by charms, ſpells, and exorciſms. By theſe they pretended to evocate the dead as certainly as the Egyptians and Jews did by their *familiar ſpirits.* This might be eaſily proved from the popular ſtory of Orpheus and Eurydice, which certainly was founded on one of theſe necromantic deceptions exhibited in a cave near Dodona, where the prieſts had a *hades*, or infernal manſion, in humble imitation of thoſe with which the firſt of them were well acquainted in Egypt. It is indeed evident, without the aid of criticiſm: no man of letters is ignorant, that whatever ſuperſtitions of this kind prevailed among the Romans were borrowed from the Greeks. But we all know that the Virgil makes one of his ſhepherds, by means of certain herbs, poiſons, and ſenſeleſs charms, raiſe up ghoſts from their graves; and Lucan has fabricated a ſtory of this kind, which may be conſidered as an exact parallel to the witch of Endor. Juſt before the battle of Pharſalia, he makes young Pompey travel by night to a Theſſalian ſorcereſs, and anxiouſly inquire of her the iſſue of the war. This female necromancer, by a tedious proceſs of charms and incantations, conjures up the ghoſt of a ſoldier who had been lately ſlain. The phantom, after a long preamble, denounces a prediction much of the ſame kind with that which the king of Iſrael received from Samuel at Endor; and, though we have elſewhere ſhown, that nothing but the ſpirit of God could have foreſeen the inevitable deſtruction of Saul, his ſons, and his army (ſee MAGIC), it was very eaſy for any man of tolerable ſagacity to foreſee the defeat of Pompey's raw and undiſciplined troops by the hardy veterans of the victorious Cæſar. See Lucan's Pharſalia, book vi.

It would be endleſs to enumerate all the fallacious evocations of ghoſts, and the ambiguous reſponſes returned by thoſe pretended ſpirits, of which we have accounts from the poets and hiſtorians of the celebrated nations of antiquity. We ſhall therefore proceed to mention a few which occur in the fabulous hiſtory of more modern nations, and then leave the ſubject to the meditation of our readers.

In Mallet's Northern Antiquities, we have the following account of a necromantic exploit, between which, and the deſcent of the ancient heroes into hell, it is impoſſible not to remark a ſtriking ſimilitude. "Odin, the ſovereign of man, ariſes. He ſaddles his horſe Sleipner; he mounts, and is conveyed to the ſubterraneous abode of *Hela*. The dog which guards the gates of death meets him. His breaſt and his jaws are ſtained with blood. He opens his voracious mouth to bite, and barks a long time at the father of magic. Odin purſues his way; and the infernal cavern reſounds and trembles under his horſe's hoofs. At length he reaches the deep abode of death, and ſtops near the eaſtern gate, where ſtands the tomb of the propheteſs. He ſings with a voice adapted to call up the dead; he looks towards the world; he engraves Runic characters on her tomb; he utters myſterious words; and he demands an anſwer, until the propheteſs is conſtrained to ariſe and thus utter the words of the dead: "Who is this unknown that dares to diſturb my repoſe, and drag me from the grave, in which I have been dead ſo long, all covered with ſnow, and moiſtened with the rains?" &c.

The Gaelic druids pretended to be maſters of the ſame ſecret. This is evident from the name of a ſpecies of divination, not uncommon among the Scotch Highlanders ſo lately as in the beginning of the 18th century. By a gentleman excellently verſed in the antiquities of that people, we have been informed, that not many years ago ſome of the highlanders relied implicitly upon certain oracular reſponſes, called in their language *taghairm*. This word ſeems to be compounded of *ta*, which in ſome parts of the Highlands is ſtill uſed to denote a ſpirit or ghoſt, and *ghairm*, which ſignifies "calling upon, or invoking." *Taghairm*, therefore, in its original import, is *necromancy* in the moſt proper ſenſe of that word. There were different kinds of *taghairm*, of which one was very lately practiſed in Skye. The diviner covered himſelf with a cow's hide, and repaired at night to ſome deep-ſounding cave, whither the perſon who conſulted him followed ſoon after without any attendants. At the mouth of the cave he propoſed aloud the queſtions of which he wanted ſolutions; and the man within pronounced the reſponſes in a tone of voice ſimilar to that with which the OBS, or pretended demons of antiquity, gave from beneath the ground their oracular anſwers. That in the latter days of *taghairm*, the Gaelic diviners pretended to evocate ghoſts, and from them to extort ſolutions of difficulties propoſed, we have no poſitive evidence; but that ſuch was the original pretence there can be little doubt, when we reflect either upon the place where this ſpecies of divination was practiſed, or upon the import of the word by which it was denominated.

As we have been led to mention *taghairm*, we ſhall beg leave to make a few obſervations on another ſpecies of it, called *taghairm an uiſge*, or "taghairm by water." This too was laſt practiſed in the Iſle of Skye, by a man of the name of M‘Cuidhean, whoſe anceſtors had long been famous for the art. He lived near a beautiful caſcade on a ſmall river; and, when conſulted on any matter of conſequence, he covered his whole body with a cow's hide, that neceſſary implement of Highland divination, and placed himſelf between the water of the caſcade and the rock over which it flowed. Then another man with a heavy pole gave repeated ſtrokes to the water, the diviner behind it crying out now and then in Gaelic, "Is this a ſtock of arn?" This operation was continued till M‘Cuidhean was perceived to be frantic or furious, when he was conſidered as in a condition to anſwer the moſt important queſtions. He was frequently conſulted about futurity, and though he could not, in the proper ſenſe of the word, be called a *necromancer*, his reſponſes were liſtened to as proceeding from ſomething more than human. A degree of frenzy, either real or affected, ſeems to have accompanied the predictions of certain kinds of diviners in all ages; and we cannot help remarking the ſimilarity between the madneſs of M‘Cuidhean and that of the Sibyl in the ſixth book of the Æneid; though we cannot ſuppoſe the one to have been borrowed from the other:

At, Phœbi nondum patiens, immanis in antro
Bacchatur vates, magnum ſi pectore poſſit
Excuſiſſe Deum: tanto magis ille fatigat
Os rabidum, fera corda domans, fingitque premendo.

Struggling in vain, impatient of her load,
And lab'ring underneath the pond'rous god;
The more ſhe ſtrove to ſhake him from her breaſt,
With more and far ſuperior force he preſs'd. *Dryden.*

That all theſe pretences, whether ancient or modern, to the power of divination by means of familiar ſpirits, or by the art of necromancy, were groundleſs as well as impious, it would be affronting the underſtandings of our readers to offer any proof. Under the article MAGIC (and the places there referred to) we have ſaid enough on the ſubject, and perhaps more than enough, to thoſe who know that demons, if they have any exiſtence, and the departed ſpirits of good and bad men, are all under the controul of Him who governs the intellectual as well as material world by fixed and equal laws.

NECROMAN'TIC, *ſ.* Trick; conjuration.—With all the *necromanticks* of their art. *Young's Night-Thoughts.*

NECROMAN'TIC, or NECROMANTICAL, *adj.* Belonging to necromancy; performed by enchantment.—His *necromantical* prophecies. *Sir T. Brown's Miſcell.*—Strange effects performed by *necromantick* arts. *Hallywell's Melam.*

Thy *necromantic* forms, in vain,
Haunt us on the tented plain. *Warton's Ode.*

NECROMAN'TICALLY, *adv.* By charms; by conjuration.—Lamps muſt be ſolemnly burned before it; and then, after ſome diabolical exorciſms *necromantically* performed, the head ſhall prove vocal. *Gregory.*

NECROP'OLIS, a ſuburb of Alexandria in Egypt, wherein there were temples, gardens, and ſuperb mauſoleums. Here Cleopatra is ſaid to have applied the aſpic to her breaſt, to prevent being led in triumph by Auguſtus. For a full account of its preſent ſtate, ſee the article EGYPT, vol. vi. p. 350.

NECRO'SIS, *ſ.* [from νεκρος, Gr. dead.] A word ſynonymous with *mortification;* but it has been applied more particularly to denote the death, or mortification, of a part, or the whole, of a bone.

Sauvages has confounded caries with necroſis; but caries differs from necroſis, in the ſame reſpects as an ulcer of the ſoft parts differs from gangrene and ſphacelus. In *caries*, the organization and nutrition of the bone are only injured, a part of its compoſition being removed, yet its vitality continuing. On the contrary, in *necroſis* there is always a portion of bone deprived of nutrition and life; and which portion, ſince it can no longer be ſupported like the living part, muſt neceſſarily be detached.

The cauſes of this diſorder are not altogether different from ſuch as produce ulcers and gangrene in the ſoft parts. As, however, the vital power of the bones is leſs than that of the fleſh, it is probable that necroſis may be brought on by ſlighter cauſes than thoſe which induce the preceding affections of the ſoft parts; and it ſeems likely, that ſuch cauſes as would only give riſe to ſuppuration of the fleſh, may produce necroſis of the bones.

When the perioſteum has been injured by external violence, ſo that it becomes affected with conſiderable inflammation, or when it has been more haſtily killed by the action of the cauſtic, fire, cold, or other cauſes, ſuch veſſels as give nouriſhment to the bone are hurt and deſtroyed, ſo that it muſt inevitably follow, that the portion of bone, which is deprived of the perioſteum, muſt die. But, when the ſeparated piece of the perioſteum, and the expoſed portion of bone, are of trivial ſize; the patient young, and in other reſpects healthy; proper antiphlogiſtic treatment been purſued; and the veſſels ramifying within the texture of the bone preſerved; hope may be entertained that granulations will ariſe from the ſurface of the bone, and an union to the adjoining fleſh be eſtabliſhed. The larger the portion of perioſteum is which is deſtroyed, while the bone itſelf has been bruiſed, *and long expoſed to the air*, the greater chance is there of a necroſis taking place. The reaſon to be apprehenſive of ſuch miſchief is ſtill ſtronger, when the patient is advanced in years, his vital powers on the decline, or his conſtitution bad.

According to Weidmann, it is proved by frequent obſervation, that the vitality of the bones may be deſtroyed by the effects of acute malignant fevers, exanthemata, ſmall-pox, and meaſles. When the habit is ſcrofulous, or affected with lues venerea, or ſcurvy, writers alſo inform us that a necroſis may more readily occur. It is remarked, alſo, that quickſilver, which, when judiciouſly employed, is capable of preventing necroſis in venereal caſes, may become a cauſe of ſuch miſchief, particularly in the lower jaw, if too much of the ointment has been rubbed in, or the frictions have been made without ſufficient intervals, or the patient has expoſed himſelf to the cold, lived improperly, &c.

In order to diſtinguiſh caries from necroſis, it ought to be underſtood, that the former diſeaſe, for the moſt part,

part, ariſes in the ſpongy parts of the bones, and from an internal cauſe, in young ſubjects of debilitated and bad conſtitutions, the diſcharge being fetid, copious, thin, and ſanious. If the bone itſelf be touched with a probe, it does not feel dry, as in necroſis, but excavated by ulceration, and, as it were, worm-eaten.

It is a remarkable circumſtance in the hiſtory of necroſis, that, in favourable inſtances of the diſeaſe, the inflexibility and firmneſs of the limb are preſerved during the whole of the proceſs by which the new bone is formed. Conſequently, the new bone muſt have begun to grow, and muſt have acquired firmneſs before the old bone ſeparates, or is abſorbed. Were this not the caſe, the limb muſt become flexible and uſeleſs the moment the dead bone is removed. Another conſequence of the new bone being formed before the removal of the old one, is, that the former muſt ſurround and include the latter. For, ſince the lifeleſs portion of bone completely occupies the ſpace between the two living ends, theſe cannot be immediately connected by the new bony matter. The connexion can alone be completed by the new bone being depoſited on the outſide of the old one, from one end to the other, and attaching itſelf to the portions which ſtill remain alive. The new bone muſt alſo be neceſſarily larger than the old one, becauſe externally ſituated; and hence the affected limb, after the cure is complete, will always continue larger, clumſier, and leſs ſhapely, than the other. The length of it, however, remains unaltered, becauſe the old bone retains its attachments, while the rudiments of the new bone are lying on its outſide, and connect the living ends of the old one by an inflexible maſs, equal in length to the portion which is deſtroyed.

According to Mr. Ruſſell, an incipient caſe of necroſis is characteriſed by a deep-ſeated excruciating pain, not at firſt aggravated by preſſure, and which is ſoon followed by a rapid enlargement of the parts along the courſe of the bone. Soon, however, after the commencement of the attack, an external inflammation ſucceeds, which quickly ends in the formation of matter. The abſceſs at length burſts by a ſmall opening. The extent of this inflammation is not in general great. Moſt commonly ſeveral inflammations of a circumſcribed kind occur about the ſame time; the abſceſſes burſt by ſmall openings, which do not cloſe, but continue diſcharging matter as fiſtulous ſores. The apertures are generally ſituated over the moſt ſuperficial part of the affected bone. The pus is uſually of good quality, and large in quantity, iſſuing from extenſive cavities, into which the fiſtulæ lead. Such abſceſſes, being ſituated within the newly-formed oſſeous ſhell, cannot be diſcharged by preſſure, nor can any fluctuation be felt. A probe can ſeldom be introduced far into the fiſtulous openings, or diſcover any looſe piece of bone. In this ſtage, the dead bone, technically called the *ſequeſtrum*, can ſeldom be felt; though, in a few inſtances, ſmall ſpiculæ make their way outward, together with the diſcharge. Fiſtulous openings may be regarded as neceſſarily attendant on all caſes of necroſis.

After the openings have formed, the caſe may take one of the following courſes. The ulcerations may in time heal up, the ſequeſtrum never be ſeen, and no veſtige of the diſeaſe remain, except a permanent enlargement and induration along the courſe of the bone. This is the moſt favourable manner in which a necroſis may terminate. In the other one, the ſequeſtrum makes its appearance externally, through the new bone and the integuments, attended with different degrees of pain, inflammation, and ſuppuration, in different caſes. The ſequeſtrum may at firſt be moved by ſhaking it; but is too firmly wedged in the ſurrounding parts to be completely taken out. In time, however, it becomes looſe enough to be removed. Sometimes the middle portion of the ſequeſtrum preſents itſelf externally, while its ſides are every-where wedged in the ſubſtance of the new bone. The natural end of ſuch a caſe would be very tedious of accompliſhment, and the interference of art is eſſentially ſerviceable in accelerating the ſeparation of the dead bone, thus circumſtanced. After the ſequeſtrum has been either abſorbed or thrown off, in one of the above ways, the cavity of the new bone becomes filled up with granulations, which are, at length, converted into bony matter. Thus the new bone differs from the original one, in being ſolid inſtead of hollow.

When the ſequeſtrum is thrown off ſlowly, the inflammation is moderate; but, when it ſeparates quickly, while the new bone is in a ſoft ſtate, the detachment is always preceded by ſevere inflammatory ſymptoms, and followed by a temporary loſs of the natural firmneſs of the limb. This premature ſeparation of the ſequeſtrum often occurs in necroſis of the lower jaw, and the chin conſequently falls down on the neck. In certain caſes, the ſequeſtrum ſeparates at each end from the living portions of the old bone, before the new oſſeous ſhell has acquired firmneſs, ſo that the limb feels as if it were broken in two places.

The tibia, femur, lower jaw, clavicle, humerus, fibula, radius, and ulna, are moſt frequently affected with necroſis. Excepting the lower jaw and ſcapula, the proceſs of regeneration has only been noticed in the cylindrical bones. From twelve to eighteen years of age is the time of life moſt ſubject to necroſis. The necroſis of the lower jaw, however, ſeldom occurs before the age of thirty. In ſome perſons, two bones are affected at once, owing to conſtitutional cauſes. The proceſs of cure is ſaid to take place with more celerity in the lower jaw than any other bone, and may be completed in three months. Mr. Ruſſell has never known a necroſis of the tibia get well in leſs than a year; but, in general, nearly two years elapſe firſt; ſometimes the cure is protracted to a much greater length of time.

Necroſis of the lower jaw and clavicle never proves fatal: that of the lower extremities, which is the worſt caſe, does ſo very ſeldom, and only from the violence of the firſt inflammatory ſymptoms, which rapidly bring on a hectic fever, that proves incurable without removing its local cauſe by a timely amputation. When the violence of the firſt ſtage, however, has abated, the irritation ceaſes, and the hectic ſymptoms, if there are any, are generally moderate. Nor is this ſtate of tranquillity diſturbed, till the ſequeſtrum, in making its way outward, again produces irritation. At this ſecond period of urgency, extenſive inflammation may originate, ulceration ſpread all over the ſurface of the limb, aſſume an unhealthy appearance, violent fever ſucceed, and the patient either periſh, or ſink into a ſtate in which he muſt conſent to amputation as the only means of ſaving his life. This is the laſt criſis of imminent danger; but, in general, it is leſs perilous than when the inflammation comes on in the incipient ſtage of necroſis.

The following caſe of necroſis of the thigh-bone is related by Dr. Mackenzie:—William Baxter, a boy thirteen years old, received a blow on his thigh at ſchool, of which he at firſt hardly complained; but in a few months he began to have pain in the thigh, which inflamed, ſwelled, and appeared to have matter in it. The parents being poor, no ſurgeon was called, and the boy was allowed to linger for a great while. At length the matter made its way through the ſkin, by a ſmall opening on the interior part of the thigh, about three inches above the knee, and a thin ſanies continued to be diſcharged for eighteen or twenty months. At length, the hole in the ſkin enlarged, and the point of a bone began to protrude, and give a good deal of pain when the clothes rubbed againſt it. After ſuffering in this manner for two years and a half, the boy, as he lay in bed one morning, felt the bone looſer, and projecting more than ordinary. He gave it a ſtrong pull, and brought the piece away entirely, which proved to be ſeven inches and a half of the thigh-bone. A good deal of bleeding followed; but the wound ſoon healed, and he has never ſince found the leaſt inconvenience. Dr. Mackenzie, hearing of this ſingular caſe, ſent for the boy, carefully examined his thigh, and found it as firm as the other. The only difference was, that it was ſomewhat thicker, and a little more curved. The muſcles retained their natural ſoftneſs and looſeneſs on the bone. The detached piece of bone was a portion of its whole circumference.

Though necroſis moſtly attacks the cylindrical bones, the flat ones are not exempt from the diſeaſe. Pott makes mention of a parietal bone, the whole of which was detached, and of an os frontis, the greateſt part of which came away. In a theſis on necroſis, in 1776, *aux écoles de chirurgie*, may be found the caſe of a young man, a very large part of whoſe *ſcapula* periſhed and came away. Chopart, who relates the caſe, mentions, that he ſaw the patient quite recovered, and felt a new triangular moveable bone, firmly ſupporting the clavicle, but ſmaller and flatter than natural, and without any ſpinous proceſs. The ſame has happened to the lower jaw, as may be ſeen by referring to the Ephemerides Germaniæ, and Mem. de l'Acad. de Chirurgie. In the fifth volume of the latter work is an account of a woman who applied to be relieved of ſome venereal complaints. From the beginning of the treatment, the bone was diſcovered to be looſe juſt under the gums, and ſeemed ſhortly afterwards to move backwards and forwards with a tooth. Mr. Guernery took hold of the tooth with a key-inſtrument, and found it firmly inſerted in the moveable piece of the jaw; he made with caution the neceſſary manœuvres for extracting the portion of bone; but was greatly ſurpriſed on finding what an extenſive part yielded to his very moderate efforts. It was the whole of the lower jaw, above its right angle, from its diviſion into the coronoid and condyloid proceſſes to the ſpace between the firſt and ſecond of the front grinders of the left ſide. On the right, there only remained the condyle in the articular cavity of the temporal bone. This deſtruction left a conſiderable empty ſpace, from which great deformity was apprehended, in conſequence of the unſupported ſoft parts falling down. The woman, however, got well in two months, and had the moſt perfect uſe of a new jaw. A ſimilar fact is recorded in the Journal de Medecine, 1791.

In caſes of necroſis, the ſurgical indications are few and obvious; viz. 1. When inflammation attends any ſtage of the diſeaſe, to have recourſe to common antiphlogiſtic means. 2. To promote the ſeparation or abſorption of the dead bone, according as it tends to make its way outward, or to become completely incaſed with new bony matter; and, in this ſituation, to be inviſibly and gradually removed by a natural proceſs. 3. When the conſtitution ſeems unable to ſuſtain any longer the effects of the local diſeaſe, to amputate, if the ſituation of the affection will permit. For farther inſtruction, ſee Ruſſell on Necroſis, 1794. Mem. de l'Acad. de Chirurgie, tom. v. Boyer on the Diſeaſes of the Bones; Crowther on White Swelling; Richerand's Noſographie Chirurgicale, tom. iii. Leveillé Nouvelle Doctrine Chirurgicale, tom. iv. v. but eſpecially Weidmann De Necroſi Oſſium, with plates, folio; Frankf. 1793.

NECTAN'DRA, *ſ.* in botany. See GNIDIA, POROSTEMA, and STRUTHIOLA.

NECTANE'BIS I. and II. kings of EGYPT. See that article, vol. vi. p. 297, 8.

NEC'TAR, *ſ.* [Gr. Lat. and Fr.] Pleaſant liquor, ſaid to be drunk by the heathen deities; any pleaſant liquor:

Thus having ſpoke, the nymph the table ſpread,
Ambroſial cates with *nectar* roſy red. *Pope's Odyſſ.*

Nectar is alſo uſed, by ſome of the ancients, to expreſs honey: this ſignification of the word was owing to the ſuppoſition that honey was the drink of the bees, as they eſteemed the yellow matter collected on their thighs to be their food. They called the latter *ambroſia*. It ſeems that the ancients have been more in the right, as to their opinion of the ambroſia, than other authors, who have uſually eſteemed that yellow ſubſtance to be true wax: but it appears from experiments, that it is not really ſo; nor can wax be ſeparated from it by any of the known proceſſes of chemiſtry. It ſeems rather that the bees eat it, agreeably to the opinion of the ancients, and that, after having ſerved them as nouriſhment, it is converted in the bowels into the ſubſtance we call wax.

NEC'TAR-DROPPING, *adj.* Yielding nectar:

Zephyr in the ſpring
Gently diſtils his *nectar-dropping* ſhowers. *Drummond.*

Exceeding ſweet and harmonious.—Thy *nectar-dropping* muſe, thy ſugar'd ſong. *Moore's Cupid's Conflict*, 1647.

NECTA'REAL, or NECTAREAN, *adj.* Sweet as nectar; reſembling nectar.—A *nectarean*, a balſam, kiſs. *Burton's Anatomy of Melancholy.*

Thy *nectareal* fragrancy
Hourly there meets
An univerſal ſynod of all ſweets. *Craſhaw's Poems.*

NEC'TARED, *adj.* Tinged with nectar; mingled with nectar; abounding with nectar:

How charming is divine philoſophy!
Not harſh and crabbed, as dull fools ſuppoſe,
But muſical as is Apollo's lute,
And a perpetual feaſt of *nectar'd* ſweets,
Where no crude ſurfeit reigns. *Milton's Comus.*

He with the Naïs wont to dwell,
Leaving the *nectar'd* feaſts of Jove. *Felton.*

NECTA'REOUS, *adj.* Reſembling nectar; ſweet as nectar:

Annual for me, the grape, the roſe, renew
The juice *nectareous* and the balmy dew. *Pope.*

NEC'TARINE, *adj.* Sweet as nectar:

To their ſupper-fruits they fell,
Nectarine fruits. *Milton's Paradiſe Loſt.*

NEC'TARINE, *ſ.* [French.] A fruit of the plum kind, greatly eſteemed for its delicious flavour, and ſuppoſed to have its name from the nectar of the gods, in heathen ſtories. It differs in nothing from the peach, but in having a ſmooth rind and the fleſh firmer. See AMYGDALUS Perſica, vol. i. p. 494. and the article HORTICULTURE, vol. x. p. 394, 5.—The only *nectarines* are the murry and the French; of the laſt there are two ſorts, one, which is the beſt, very round, and the other ſomething long; of the murry there are ſeveral ſorts. *Temple.*

NECTA'RIUM, *ſ.* in botany, the nectary, or honey-cup; ſo denominated by Linnæus, according to the metaphorical ſenſe in which the word *nectar* is often elegantly applied, by the Latin writers, to honey. This in Linnæan language is reſtrained to ſome part of the flower, and is defined an organ which contains, or which ſecretes, honey. Similar organs are found on the ſtalks or leaves of ſeveral plants, which produce a liquid, differing in no reſpects from what is found in flowers; but ſuch are termed *nectariferous glands.* See the article BOTANY, vol. iii. p. 248. and Plate VIII.

In diſcriminating the genera, the nectarium often furniſhes an eſſential character. Plants which have the nectarium diſtinct from the petals, that is, not lodged within their ſubſtance, are affirmed by Linnæus to be generally poiſonous. The following are adduced as examples: monk's-hood, hellebore, columbine, fennel-flower, barren-wort, oleander, bean-caper, ſucculent ſwallow-wort, fraxinella, honey-flower, and a few others.

NECTA'RIUS, made patriarch of Conſtantinople by the younger Theodoſius in 381. Having governed the church with great piety, and aboliſhed the uſe of confeſſion in the Eaſt, he died 397, and was ſucceeded by St. Chryſoſtom. *Jones's Biog. Dict.*

To NEC'TARIZE, *v. a.* [from *nectar.*] To ſweeten. *Not in uſe. Cockeram.*

NEC'TAROUS, *adj.* Sweet as nectar:

Nectarous draughts between from milky ſtream,
Berry, or grape. *Milton.*

NECTRIS, *ſ.* [a genus of Schreber's, derived from the Gr. νηκτρις, "any thing that floats;" a name however which might, with equal propriety, be applied to various other aquatics.] In botany, a genus of the claſs hexandria, order digynia, natural order of tripetaloideæ, (junci, *Juſſ.*) Generic characters—Calyx: perianthium one leafed, ſix-parted; the three outer ſegments ovate, acute, coloured within; the three inner, alternate with theſe, ovate, blunt, ſmaller, coloured on both ſides. Corolla: none. Stamina: filaments ſix, capillary, inſerted into the baſe of the calycine ſegments; antheræ ovate. Piſtillum: germens two, ſuperior, oblong; ſtyles ſhort; ſtigmas blunt. Pericarpium: capſules two, ovate, ſomewhat fleſhy, crowned with the permanent ſtyles, one celled. Seeds: numerous, very ſmall.—*Eſſential Character.* Calyx one-leafed, ſix-parted, coloured; corolla none; ſtyles permanent; capſules two, ſuperior, ovate, one-celled, many-ſeeded.

Nectris aquatica, a ſolitary ſpecies. This plant grows in ponds, lakes, and rivers that have not a rapid current, puſhing out long branched knotted fiſtulous ſtems, with a pair of leaves at each joint. Theſe leaves are divided into five branches, and each of theſe into three others, and ſo on three times, finiſhing by two; theſe diviſions are very fine: the top leaves float on the water; theſe are alternate, entire, oval, peltate, on a long petiole, like thoſe of Hydrocotyle. The flowers come out from the axils of theſe on a long peduncle: ſometimes there is a flower from the axil of one of the upper cut leaves. The three outer leaves of the calyx are green on the outſide, and yellow within; the three inner are entirely yellow. Native of Guiana and the iſland of Cayenne.

NECYDA'LIS, *ſ.* the CARRION-EATER; in entomology, a genus of coleopterous inſects. Generic characters—Antennæ ſetaceous or filiform; feelers four, filiform; wing-ſheaths leſs than the wings, and either ſhorter or narrower than the abdomen: tail ſimple. The thorax is narrow and rounded; the body of a lengthened ſhape. There are thirty-nine ſpecies, which have obtained their Engliſh name from their ſuppoſed predilection for carrion. In their winged ſtate, they generally frequent woods.

I. Antennæ ſetaceous; wing-ſheaths, ſhells, or elytra, ſhorter than the wings and abdomen.

1. Necydalis major, the larger carrion-eater: elytra ferruginous and immaculate; eyes large and prominent. The head is black; the jaws are of a dark brown. The antennæ, placed on the top of the head between the eyes, have their firſt articulation long and raiſed upright, the reſt bent and turned aſide. The antennæ vary as to length and colour: in individuals whoſe thorax is yellow, they are brown, and equal only to two-thirds of the body in length: on the contrary, in thoſe whoſe thorax is black, they are likewiſe black, and ſomewhat longer than the body. The thorax is margined; in ſome it is yellow and longer; in others it is black, ſhorter, and edged only with a little yellow. The elytra are iron-grey, ſomewhat clearer in the middle, and terminating in a lemon-coloured ſpot. The wings are rather black, ſomething longer than the body, exceed the elytra by one third, and are croſſed one over the other. In thoſe that have their thorax yellow, the legs and under part of the belly are ſo likewiſe. In individuals with a black thorax, the legs are black as well as the belly, which has only a little yellow on the ſides. It inhabits various parts of Europe; but the larva is as yet unknown. Barbut found the perfect animal in Norwood, upon an oak-tree, the beginning of Auguſt; and from his work it is copied on the preceding Plate, at fig. 4.

2. Necydalis variegata, the variegated carrion-eater: abdomen black, with fulvous bands. Inhabits New Holland.

3. Necydalis minor, the ſmaller carrion-eater: elytra teſtaceous, with a ſmall white line at the tip; antennæ long. This ſpecies is found in ſeveral parts of Europe: it is a common inſect in fields and about hedges in the ſummer-months, and has ſomewhat of the habit of a ſmall Cerambyx; but the wing-ſheaths are only half the length of the body, and are grey-brown, each marked at the tip with a linear white ſpot; the reſt of the inſect being black. Its length is rather more than a quarter of an inch.

4. Necydalis umbellatarum: elytra teſtaceous and immaculate; antennæ long. This alſo is an European inſect; and is repreſented at fig. 5.

II. Antennæ filiform; elytra ſubulate, or awl-ſhaped, narrower than the wings, and as long as the body.

5. Necydalis thalaſſina: thorax channelled; body green, legs black. It inhabits Germany, and is ſaid to be twice as large as the next, viz. the

6. Necydalis viridiſſima: thorax roundiſh; body green, fore-legs teſtaceous. In inhabits this and other European countries.

7. Necydalis cæruleſcens: thorax roundiſh; body blue, and nearly opaque. It is an European inſect.

8. Necydalis vireſcens: thorax unequal; body dull green, antennæ and legs black. It inhabits Germany, and is leſs than the N. thalaſſina. The thorax is impreſſed on each ſide; the ſhells have two raiſed lines; the hind-thighs in one ſex are clavate, and in the other ſimple.

9. Necydalis cyanea: thorax ovate, blue; antennæ and legs black; thighs blue. It inhabits Germany, and is the ſame ſize as the laſt.

10. Necydalis ſanguinicollis: thorax roundiſh, and rufous; body brown. It inhabits Saxony.

11. Necydalis Barbara: thorax uneven, greeniſh; tip of the ſhells and legs yellow; hind-thighs black. Inhabits Barbary.

12. Necydalis ſeladonia: thorax uneven; body green, and poliſhed; ſhells blue, and thickened at the top. It inhabits Germany, and is ſomething leſs than N. vireſcens.

13. Necydalis ruficollis: thorax roundiſh, and with the abdomen rufous; head and ſhells braſſy-green; antennæ and legs black. It inhabits Italy.

14. Necydalis melanocephala: black; thorax and abdomen fulvous; ſhells teſtaceous. It inhabits Italy, and is the ſize of the laſt.

15. Necydalis triſtis: black; thorax roundiſh, and with the baſe of the thighs rufous. It is found in Van Diemen's Land. The ſhells of this ſpecies are very ſmooth.

16. Necydalis atra: ſhells ſubulate, black; thighs clavate. It inhabits the ſouthern parts of Europe.

17. Necydalis humeralis: ſhells ſubulate, black, yellow at the baſe. This is an Engliſh inſect. The ſhells are without lines; body and legs black. A large ſpecies; repreſented at fig. 6.

18. Necydalis uſtulata: black; baſe of the ſhells and broad ſuture teſtaceous. It inhabits Germany.

19. Necydalis melanura: black; thorax and ſhells teſtaceous, the latter tipt with black. This is found on various plants in Spain.

20. Necydalis notata: head and thorax ferruginous; ſhells teſtaceous, tipt with black. It inhabits Germany; ſame ſize as the laſt.

21. Necydalis fulvicollis: black; thorax and tail fulvous; ſhells with a bluiſh ſhade. It inhabits Germany, and is leſs than N. melanura.

22. Necydalis rufa: ſhells ſubulate; body black; thighs clavate; ſhells and antennæ rufous. This is found here and in other parts of Europe.

23. Necydalis præuſta: black; ſhells teſtaceous, tipt with black; thighs clavate. It is found in Barbary.

24. Necydalis cærulea: ſhells ſubulate; body blue; hind-thighs clavate and arched. It is found here and in other parts of Europe, in woods, during the ſummer-months. This is a beautiful ſpecies. It is about half an inch in length, and entirely of a bright blue colour, ſometimes greeniſh blue: the wing-ſhells are of the length of the body, but narrow, ſo as not to cover the ſides of the wings; and the hind-thighs are very thick. See fig. 7.

25. Necydalis podograria: ſhells ſubulate, teſtaceous; body black; hind-thighs clavate, and teſtaceous at the baſe. It is found in gardens in Europe.

26. Necydalis flaveſcens: ſhells teſtaceous; body black; hind-thighs clavate and curved. An European inſect, and is thought to be a mere variety of the laſt.

27. Necydalis bicolor: bluiſh; edge of the thorax, abdomen, and legs, teſtaceous. It inhabits the Cape of Good Hope.

28. Necydalis clavipes: black; ſhells tapering, greeniſh; hind-thighs thickened and curved. This is found at Kiel, and is a ſmall ſpecies. The thorax is impreſſed on each ſide black-green; ſhells with a raiſed duſky line reaching not half way down.

29. Necydalis teſtacea: black; thorax and ſhells teſtaceous; legs rufous. This ſpecies is found in divers parts of Germany.

30. Necydalis glauceſcens: ſhells ſubulate and glaucous; body black; inciſures of the abdomen white. It inhabits the ſouthern parts of Europe. See fig. 8.

31. Necydalis ſimplex: ſhells ſubulate and teſtaceous; the legs are ſimple. It is found in Europe; and is thought to be a variety of N. podagraria.

32. Necydalis quercus: ſhells ſubulate; abdomen and legs yellowiſh. It inhabits Denmark, on the oak; and is very ſmall.

33. Necydalis brevicornis: ſhells very minute; head and thorax brown, with a yellow line; the antennæ are very ſhort and thick. It inhabits Guinea; and is large and long.

34. Necydalis ſtriata: greeniſh; ſhells with four raiſed lines. It is found in Berlin.

35. Necydalis melanocephala: ſhells teſtaceous; head and wings black; antennæ brown. Inhabits Saxony.

36. Necydalis glauca: black; thorax and ſhells blue. Found at Berlin.

37. Necydalis collaris; black; thorax teſtaceous, with two punctures; legs ſimple. It inhabits North America.

38. Necydalis exuſta: brown; ſhells ſubulate and teſtaceous, darker at the margin; legs ſimple. It inhabits Europe.

39. Necydalis clavata: black; ſhells ſubulate and teſtaceous; the outer margin brown; hind-thighs clavate and curved. Inhabits Europe.

NED THO'MAS's SHO'ALS, rocks in the Spaniſh Main, on the Moſquito ſhore. Lat. 14. 4. N. lon. 82. 14. W.

NE'DA, in ancient geography, a river of Arcadia, ſouth-weſt of Megalopolis. It commenced at Mount Cerauſius, and in its progreſs ſeparated the Elide from Meſſenia. Near it was a celebrated ancient temple, conſecrated to Eurynome, the pretended daughter of the Ocean: this temple was encompaſſed by cypreſs-trees: once a-year it was reſorted to for ſacrifice, but at all other times it was ſhut. The *Neda* ſtill retains its ancient name; and is now deſcribed a river of Greece, which runs into the Mediterranean three miles north of Arcadia.

NE'DA, a town of Spain, in Galicia: five miles eaſt of Ferrol.

NE'DA, or LANGARO'LA, a river of European Turkey, which runs into the ſea twenty miles north of Navarin.

NEDAMO'RE, a town of Hindooſtan, in the circar of Ellore: ſixteen miles eaſt of Ellore.

NEDDAGOO'NTA, a town of Hindooſtan, in the Carnatic: ſix miles ſouth of Pullumnaire.

NEDDEE'K, a mountainous tract of Africa, narrow and ſteep; about ſeventy miles weſt of Augela, in the road to Mourzouk.

NED'DER, *ſ.* An adder: a word yet uſed in Derbyſhire: [from *nadr*, Goth. neððeꞃ, Sax.]—Anon the *nedders* gan her for to ſting. *Chaucer's Leg. of Good Women.*

NE'DE, a town of France, in the department of the Upper Vienne: eighteen miles ſouth-eaſt of St. Leonard.

NED'EBE, a lake of Egypt, on the borders of Libya, abounding in natron: ſixty miles north-weſt of Cairo.

NE'DEL-AM'BEL, *ſ.* in botany. See MENYANTHES.

NEDE'NES, a town of Norway, in the dioceſe of Chriſtianſand: twenty-four miles north-eaſt of Chriſtianſand.

NEDERBRA'KAL, a town of France, in the department of the Scheldt, and chief place of a canton, in the diſtrict of Audenarde. The place contains 3145, and the canton 12,439, inhabitants.

NEDERCRU'CHTEN, a town of France, in the department of the Lower Meuſe, and chief place of a canton, in the diſtrict of Ruremonde. The place contains 3522, and the canton 6614, inhabitants.

NEDIQUI', a town of Hindooſtan, in Viſiapour: thirty miles ſouth of Calberga.

NEDOSTRELO'VA, a town of Ruſſia, in the government of Irkutſk: thirty-two miles north-north-eaſt of Vitimſkoi.

NEDRIGAI'LO, a town of Ruſſia, in the government of Charkov: eighty miles north-weſt of Charkov. Lat. 50. 54. N. lon. 34. 20. E.

NEDRO'MA, a town of Algiers, ſituated near a ſmall river, at the foot of a hill, in a charming country, ſurrounded with magnificent ruins. It was anciently called *Celamè*, or *Celamium.* It is fifty miles weſt-ſouth-weſt of Oran.

NEDS'JED, a province of Arabia. This province is of vaſt extent, comprehending all the interior parts of Arabia; bounded on the north by the deſert of Syria, on the eaſt by Lachſa, on the ſouth by Hadramaut and Yemen, and on the weſt by Hedsjas. The ſoil is various; among the hills fertile, and bearing abundance of fruits, eſpecially dates; but, being bounded by arid tracts of country, its rivers are only ſhort ſtreams, which, after paſſing through the valleys, have their waters abſorbed in the ſandy plains, before they can reach the ocean. Upon this account, the inhabitants are in many places obliged to dig deep wells; and cultivation is there difficult, or almoſt impoſſible. The Bedouins inhabit a great part of this province. The remainder is mountainous, full of cities and villages, and parcelled out among ſo many petty ſovereigns, that almoſt every little town has its own ſhiek. Formerly, when the power of the ſherifs was at its height, many of theſe ſhieks, who were ſituated in the vicinity of Hedsjas, were obliged to pay tribute to the ſherif of Mecca; at preſent they pay nothing. The inhabitants of this vaſt country reſemble the other Arabs in their moral qualities; they are at once robbers and hoſpitable. As thoſe petty ſovereigns are ſo numerous in Nedsjed, it is impoſſible for any traveller to paſs ſafely through this country: the firſt ſhiek whoſe territories he enters, will be ſure to rob him, if it were only to prevent a neighbour, with whom he is at war, from profiting by this act of rapacity if he himſelf ſhould abſtain from it. The caravan, indeed, travels ſafe between Oman and Mecca, becauſe it conſiſts of beggars, from whom nothing is to be gained. But the ſhieks of Nedsjed levy a contribution upon the caravan from Bagdad on its way to Mecca, in the ſame manner as the ſhieks of Hedsjas levy contributions upon thoſe from Syria and Egypt. The people appear to be of a very warlike character, and are almoſt conſtantly in arms. It is ſaid, that none of their young men are ſuffered to marry till after they have performed ſome gallant action; that is, ſome robbery.

Nedsjed is divided into two diſtricts; El Arab, which joins Oman; and El Kherdsje, which ſtretches to the confines of Yemen. In the latter diſtrict, extending northwards from Hedsjas to the deſert, is the city of Imam, famous, even before the days of Mahomet, for being the native city of Moſeilama, who aſſumed the character of a prophet. This diſtrict contains alſo many other cities. North from Nedsjed, and about ten days' journey from Bagdad, is the famous mountain of Schamer, conſiderable both in extent and fertility. Between this mountain and Syria is a hilly tract of country, denominated Dsjof al Sirhan, which is populous and cultivated. This province contains Sabæans, or Chriſtians of St. John, and a few Jews; its other inhabitants are all Mahometans, who were once rigid Sunnites.

At a late period a new religion ſprung up in the diſtrict of El Arad, which has already produced a revolution in the government of Arabia. Its founder was one Abd al Wahkeb, a native of Aijæne, a town in El Arad. In his youth he ſtudied thoſe ſciences which are chiefly cultivated in Arabia; and he afterwards ſpent ſome time at Baſra, and made ſeveral journeys to Bagdad, and through Perſia. After his return to his native place, he began to propagate his opinions among his countrymen, and, having converted ſeveral independent ſhieks, their ſubjects became followers of this new prophet. The ſhieks who had been engaged in inteſtine conteſts, were reconciled to one another by the mediation of Abd al Wahkeb, and mutually ſtipulated to undertake no future enterpriſe without conſulting their apoſtle. By this aſſociation the balance of power in Nedsjed was deſtroyed; the wars became more frequent, and religion blended itſelf with other diſputes. The new prophet reduced a conſiderable part of El Arad, and defeated the ſhiek of Lachſa, to whom the vanquiſhed ſhieks of El Arad applied for aſſiſtance. The ſhiek Mecrami of Nedsjeran, whoſe principles reſembled thoſe of Abd al Wahkeb, joined the latter, or rather his ſon Mahomet, who ſucceeded his father, in order to reduce the Sunnite ſhieks. After the death of Abd al Wahkeb, his ſon retained the ſame authority and proſecuted his views. He ſuſtained the ſupreme eccleſiaſtical character in El Arad, and became ſovereign of the whole diſtrict, the hereditary ſhieks of the ſmall independent ſtates retaining only a nominal authority. The Sunnites have complained of his perſecutions; and thoſe inhabitants of Nedsjed who were unwilling to embrace the new religion, have retired to other parts of the country; and theſe refugees have peopled the ancient Baſra, now called Zobayer, ſo that, from being a decayed hamlet, it is become a large town. From the information obtained by Niebuhr from an intelligent Bedouin ſhiek, he has given the following account of this new religion: Abd al Wahkeb taught, that God is the only proper object of worſhip, as the creator and governor of the world. He forbade the invocation of ſaints, and the mention of Mahomet or any other prophet in prayer, as practices ſavouring of idolatry. He conſidered Mahomet, Jeſus Chriſt, Moſes, and many others, reſpected by the Sunnites in the character of prophets, as merely great men, whoſe hiſtory might be read with improvement; denying, at the ſame time, that any book had ever been written by divine inſpiration, or brought down from heaven by the angel Gabriel. He prohibited, as a crime againſt Providence, the making of vows, in the manner of the Sunnites, to obtain deliverance from danger. This new religion is regarded as a reformation of Mahometaniſm, by which it is reduced to its original ſimplicity. He has probably gone farther than ſome other reformers; and it remains to be ſeen, whether a religion ſtripped of every thing that is adapted to ſtrike the ſenſes, can maintain its ground among a people ſo rude and ignorant as the Arabs.

NEDS'JERA, a town of Arabia, in the province of Yemen: fourteen miles north-weſt of Sana.

NEDSJERAN', a principality of Arabia, in the country of Yemen, three days' journey north-eaſt from Saade; founded, in the middle of the laſt century, by a ſhiek named Mecrami. This narrow territory is fertile in corn and fruits, eſpecially in dates. It affords excellent paſturage; and its horſes and camels are in high requeſt through all Arabia.

The capital of this ſmall kingdom is *Nedsjeran*, an ancient city, famous in Arabian hiſtory. The other towns in it are places of little conſequence.

NEDWES'TA, a town of Bohemia, in the circle of Boleſlaw: ſixteen miles weſt-north-weſt of Jung Buntzel.

NEDWI'ETITZ, a town of Moravia, in the circle of Brunn: twenty miles north-weſt of Brunn.

NEED, *ſ.* [neod, Sax.] Exigency; preſſing difficulty; neceſſity.—The very ſtream of his life, and the buſineſs he hath helmed, muſt, upon a warranted *need*, give him a better proclamation. *Shakeſpeare's Meaſure for Meaſure.*

In thy native innocence proceed,
And ſummon all thy reaſon at thy *need*. *Dryden.*

Want; diſtreſsful poverty.—Defer not to give to him that is in *need*. *Ecclus.* iv. 3.—God ſometimes calls upon thee to relieve the *needs* of thy brother, ſometimes the neceſſities of thy country, and ſometimes the urgent wants of thy prince. *South.*

Famine is in thy cheeks;
Need and oppreſſion ſtare within thine eyes,
Contempt and beggary hang upon thy back. *Shakeſpeare.*

Want; lack of any thing for uſe.—God grant we never may have *need* of you. *Shakeſpeare.*—God, who ſees all things intuitively, neither ſtands in *need* of logick, nor uſes it. *Baker.*

To NEED, *v. a.* To want; to lack; to be in want of; to require.—To aſk whether the will has freedom? is to aſk, whether one power has another? A queſtion too abſurd to *need* an anſwer. *Locke.*

Allow not nature more than nature *needs*.
Man's life is cheap as beaſt's. *Shakeſpeare K. Lear.*

To NEED, *v. n.* To be wanted; to be neceſſary.—When we have done it, we have done all that is in our power, and all that *needs*. *Locke.*

More ample ſpirit than hitherto was wont
Here *needs* me, whiles the famous anceſtors
Of my moſt dreadful ſovereign I recount. *Spenſer.*

To have neceſſity of any thing; to be in want of any thing.—We have inſtances of perception whilſt we are aſleep: but how incoherent and how little conformable to the perfection of a rational being, thoſe who are acquainted with dreams *need* not be told. *Locke.*

NEE'DER, *ſ.* One that wants any thing:

If the time thruſt forth
A cauſe for thy repeal, we ſhall not ſend
O'er the vaſt world, to ſeek a ſingle man;
And loſe advantage, which doth ever cool
In th' abſence of the *needer*. *Shakeſpeare's Coriolanus.*

NEE'DFUL, *adj.* Diſtreſſed; in want.—Why ſtandeſt thou ſo far off, O Lord, and hideſt thy face in the *needful* time of trouble. *Pſalm* x. 1. *Common Prayer.*—Neceſſary; indiſpenſably requiſite.—Give us all things that be *needful*, both for our ſouls and bodies. *Common Prayer.*

A lonely deſart and an empty land,
Shall ſcarce afford, for *needful* hours of reſt,
A ſingle houſe to their benighted gueſt. *Addiſon on Italy.*

NEE'DFULLY, *adv.* Neceſſarily:

They, who
Dare for theſe poems yet both aſk and read,
And like them too, muſt *needfully*, though few,
Be of the beſt. *B. Jonſon.*

NEE'DFULNESS, *ſ.* Neceſſity.

NEE'DHAM, a townſhip of America, in Norfolk county, Maſſachuſetts: eleven miles from Boſton; about nine miles long, and five broad, almoſt encompaſſed by Charles river, which at a fall of twenty feet between Newton and Needham, divides Middleſex from Norfolk county. It was incorporated in 1711, and contains 1072 inhabitants.

NEE'DHAM (Marchamont), a political writer, was born at Burford in Oxfordſhire in 1620. His father dying while he was an infant, his mother married again to Mr. Glynn, vicar of Burford, and maſter of the free-ſchool, under whom he received his early education. At the age of fourteen, he was ſent to All-Souls college in Oxford, where he continued till he took the degree of B.A. and then removed to St. Mary's Hall. He afterwards became an uſher in Merchant-Taylor's ſchool, which occupation he quitted on the breaking out of the civil war, for that of writer to an attorney in Gray's Inn. In 1643 he commenced a weekly paper of intelligence on the ſide of the parliament, under the title of "Mercurius Britannicus," and was conſidered as a uſeful partiſan in that cauſe. About the ſame time he turned his ſtudies to phyſic, and began to practiſe in it in 1645. Upon ſome occaſion of diſguſt he quitted his party; and, repairing to the king at Hampton Court, obtained his pardon and favour, and began a new weekly paper, entitled "Mercurius Pragmaticus. In this he was as ſatirical and jocular againſt the preſbyterians, as in the former he had been againſt the royaliſts. This freedom, however, could not be permitted; he was therefore lodged in Newgate; and his life would have been endangered had he not been favoured by Lenthal and Bradſhaw. Being enlarged, he was perſuaded to take up his pen for the independents, now the prevalent party; and in their ſervice he publiſhed a third weekly paper, "entitled "Mercurius Politicus," commenced in 1649. It contained many diſcourſes againſt monarchy, and in favour of a republic, and was continued till 1660, when it was ſuppreſſed by order of the council of ſtate. After the reſtoration he lay concealed till he had obtained a pardon under the great ſeal, upon which he reſumed the practice of phyſic with conſiderable encouragement among the diſſenters, till his death in 1678. He is deſcribed as being a man of quick parts, humorous and ſatirical. The verſatility of his principles is apparent from the preceding ſketch of his life.

Beſides the Mercuries above mentioned, he was the author of a great number of fugitive and temporary political tracts, which it is now ſuperfluous to enumerate. One work of his, however, has eſcaped oblivion. Its title is, "A Diſcourſe on the Excellency of a Free State above Kingly Government," firſt inſerted in the Mercurius Politicus, then printed ſeparately in 1650, and reprinted ſo lately as 1767. It is a learned and methodical work, full of illuſtrations from Greek and Roman hiſtory, often unneceſſarily repeated. Its foundation is the natural ſovereignty of the people, which principle is ably ſupported and vindicated. This piece was thought worthy of a French tranſlation in the year 1791. Another of his political works which may be noticed, was a tranſlation of Selden's Mare Clauſum, printed in 1652, with "Additional Evidences" in favour of the ſovereignty of the Engliſh kings on the ſea. This was corrected and reprinted in 1662 by James Howell. Our author likewiſe diſplayed his free principles in his own profeſſion, by a work entitled "Medela Medicinæ," in which he attempted to prove that every man ought to be allowed to undertake the practice of medicine without previous ſtudy in ſchools, or the examination of colleges. This medical hereſy was refuted by two fellows of the College of Phyſicians. *Wood's Athen. Oxon. Monthly Rev.*

NEE'DHAM (Walter), a phyſician and anatomiſt, probably received his education at Cambridge, where he mentions his having made anatomical obſervations in Trinity College about 1654, and afterwards at Queen's College. In 1659 he was invited to practiſe phyſic at Shrewſbury. Some time after, the fame of the anatomical ſchool at Oxford drew him thither, and he attended the diſſections of Lower, Willis, and Millington, occaſionally taking the knife himſelf, and demonſtrating what he had before diſcovered at Cambridge. He removed to London, where he was made phyſician to the Charter-houſe. In 1667 he was admitted into the Royal Society; and in that year, at the inſtigation of the Hon. Robert Boyle, drew up his treatiſe "De Formato Fœtu," which is dedicated to that eminent perſon. He died in 1691. The above-mentioned work of this writer ranks among the valuable anatomical writings of the time. Although, in common with the other Engliſh anatomiſts of that period, he enjoyed few opportunities of human diſſection, and was obliged to draw his remarks chiefly from brutes, he has corrected various errors then current concerning the courſe of the lymph, the mode of nutrition in the fœtus, the admiſſion of air into the blood, &c. and has given various facts from original obſervation. This work was reprinted at Amſterdam, and in the collection of Maagetus. He has an anatomical paper in the Philoſophical Tranſactions; and Birch, in his Hiſtory of the Royal Society, gives a diſſertation of his, of ſome length, relative to the blood, bile, lymph, and other animal fluids. *Halleri Bibl. Anat.*

NEE'DHAM (J. Turberville), an ingenious phyſiologiſt, was born at London in 1713. He was deſcended from a younger branch of the noble family of Kilmorey, and was brought up at Douay in the Roman-catholic religion, in which he took prieſt's orders. For ſome time he was a profeſſor in that univerſity; and he afterwards paſſed ſeveral years as a travelling-tutor to Engliſh and Iriſh noblemen. He reſided at different times both in London and Paris; in the latter capital occupying an apartment in the Engliſh ſeminary. His philoſophical reputation cauſed him to be elected a fellow of the Royal Society in London, and he is ſaid to have been the firſt catholic prieſt who had this honour. The French Academy of Sciences alſo choſe him a correſpondent member. In 1769 he was invited by the government of the Low Countries to aſſiſt in the formation of a literary ſociety. This was the Academy of Sciences and Belles Lettres of Bruſſels, of which he was rector at the time of his death in that city, in 1781.

Mr. Needham diſtinguiſhed himſelf by his experimental labours and his ſpeculations concerning the formation of organized bodies. 1. In the Philoſophical Tranſactions, Nº 411, he publiſhed an account of certain moving fibres, reſembling eels, generated from ſmutty wheat. 2. In 1745 he publiſhed Microſcopical Diſcoveries, containing Obſervations on the Calamary and its Milt-veſſels, &c. &c. Lond. 8vo. tranſlated into French in 1747. Many curious particulars relative to the ſtructure and production of minute animals are deſcribed in this work. 3. It was followed by Nouvelles Obſervations Microſcopiques; avec des Decouvertes intereſſantes ſur la Compoſition et la Decompoſition des Corps organiſés; Paris, 1750, 12mo. Of this publication the firſt part is the preceding work, with ſome notes by the tranſlator; the ſecond part (publiſhed alſo in the Phil. Tranſ.) contains many ideas in common with Buffon, oppoſing the doctrine of evolution, and ſupporting that of ſpontaneous generation by organical particles. 4. He purſued theſe ſpeculations further in his Nouvelles Recherches ſur les Decouvertes Microſcopiques de Spallanzani, avec des Notes, des Recherches Phyſiques et Metaphyſiques ſur la Nature, &c. 2 vols. 8vo. Par. 1769. 5. Finding that the author of the Syſteme de la Nature, Voltaire, and others, had repreſented his opinions as favourable to materialiſm, he thought proper to publiſh, in 1776, "Idée ſommaire, ou vue generale du Syſteme Phyſique et Metaphyſique de M. Needham ſur la Generation des Corps Organiſés;" Bruſſels, 8vo. 6. A tract which he publiſhed in 1763, De Inſcriptione quondam Ægyptiaca Taurini inventa, &c. ſupported the notion which had been advanced by ſome academicians, and ridiculed by Voltaire, that the Chineſe were deſcended from the Egyptians. It was replied to by Edward Wortley Montague, who expoſed the credulity of Mr. Needham with reſpect to the inſcription in queſtion. The ſtyle of our author in his philoſophical works is ſomewhat obſcure, and his ideas, though profound, not remarkably lucid; but Haller ſpeaks of him as one who has contributed much that is worthy of attention to phyſiological ſcience. *Gen. Biog. Monthly Rev.*

NEE'DHAM-MAR'KET, a ſmall market-town in the county of Suffolk, ſeven miles north-weſt from Ipſwich, on the road to Bury St. Edmund's, and ſeventy-three miles from London. It is ſaid to have been, in former times, a place of conſiderable manufacturing importance; but now ſcarcely any trade is carried on in it. Indeed, ſo ſunk was this place at the commencement of the laſt century, that the author of the Magna Britannia ſays, its poverty had become proverbial. The principal ſupport of the town, at preſent, riſes from agriculture, and the number of genteel families either reſident within it, or in its neighbourhood. The market-day is Saturday; and there are three fairs during the year; which privileges were obtained by the biſhop of Ely in the reign of Henry III. The petty-ſeſſions for the hundred are held here. According to the parliamentary returns of 1801, this town contained 258 houſes, and 1348 inhabitants; and in thoſe of 1811, the former are ſtated to have been 284, and the latter 1301 in number, i. e. 26 more houſes, and 47 fewer inhabitants, a circumſtance that ſeems to indicate ſome miſtake in one of the reports.

About two miles from Needham are the villages of Creeting-All-Saints and Creeting-Olaves. The church of the former, which was anciently a cell to the abbey of Greiſtein, in Normandy, is a very curious old building; as is likewiſe that of Olaves, which was a cell to the abbey of Bernay. *Magna Britannia.*

NEE'DHAM's PO'INT, a cape on the weſt coaſt of Barbadoes, to the ſouth of Carliſle Bay.

NEEDHA'MIA, *ſ.* [ſo named by Mr. Brown, in commemoration of J. Turberville Needham.] In botany, a genus of the claſs pentandria, order monogynia, natural order epacrideæ. Generic characters—Calyx: perianthium inferior, of five linear-awl-ſhaped equal, ſomewhat membranous, coloured leaves, with a pair of oblong, coriaceous, external ones, of the ſame length. Corolla: of one petal, ſalver-ſhaped; tube twice the length of the calyx; limb in five beardleſs equal ſegments, plaited in the bud, their ſinuſes elevated; nectary cup-like, ſurrounding the baſe of the germen. Stamina: filaments five, thread-ſhaped, inſerted into the tube; antheræ oblong, included within the tube. Piſtillum: germen ſuperior, roundiſh, of two cells; ſtyle ſhort, columnar; ſtigma obtuſe. Pericarpium: drupe dry. Seed: nut of one or two cells?—*Eſſential Character.* Outer calyx of two leaves; corolla ſalver-ſhaped; its limb five-cleft, beardleſs, with elevated ſinuſes; plaited in the bud; ſtamens included in the tube; drupe dry, of one or two cells.

Needhamia pumilio, or dwarf needhamia; the only known ſpecies. Gathered by Mr. Brown, in the ſouth part of New Holland, and by Mr. Menzies at King George's Sound. The ſtem is ſhrubby, three or four inches high, divided from the very baſe into numerous, ſpreading, roundiſh, notched, leafy, compound branches, hoary when young. Leaves minute, oppoſite; ſomewhat imbricated, in two rows croſſing each other alternately, ſeſſile on the notches of the branches, triangular, obtuſe, keeled, entire, concave, ſmooth; the upper ones finely fringed, and ſomewhat more dilated, or ovate. Flowers axillary, ſeſſile, ſolitary, from ſeveral of the upper and broader leaves, beyond which, after flowering, the branch is ſubſequently extended, and clothed with the ordinary leaves, till it bloſſoms again higher up. Calyx fringed, reddiſh. Corolla white, turning reddiſh-brown in drying, about a quarter of an inch long. *Brown. Prodr. Nov. Hall.*

NEE'DILY, *adv.* In poverty; poorly.

NEE'DINESS, *ſ.* Want; poverty.—Whereas men have many reaſons to perſuade; to uſe them all at once, weakeneth them. For it argueth a *neediness* in every of the reaſons, as if one did not truſt to any of them, but fled from one to another. *Bacon.*

NEE'DLE, *ſ.* [*nethal*, Goth. neꝺl, Sax. *nael*, Icel. from the Teut. *neten*, to ſow. *Wachter and Serenius.*] A ſmall inſtrument pointed at one end to pierce cloth; and perforated at the other to receive the thread, uſed in ſewing.—The moſt curious works of art, the ſharpeſt fineſt *needle*, doth appear, when ſeen through a microſcope, as a blunt rough bar of iron coming from the furnace of the forge. *Wilkins.*

For him you waſte in tears your widow'd hours,
For him your curious *needle* paints the flowers. *Dryden.*

The ſmall ſteel bar which in the mariner's compaſs ſtands regularly north and ſouth.—The uſe of the loadſtone and the mariner's *needle* was not then known. *Burnet.*

Go bid the *needle* its dear north forſake,
To which with trembling reverence it doth bend. *Cowley.*

NEE'DLE-FISH, *ſ.* A kind of ſea-fiſh; the SYNGNATHUS acus.—One rhomboidal bony ſcale of the *needle-fiſh.* *Woodward.*

NEE'DLE-MAKER, *ſ.* One who makes needles.

NEE'DLE-MAKING, *ſ.* The proceſs of manufacturing needles of various kinds and ſizes.

Needles were firſt made in England by a native of India, in 1545, but the art was loſt at his death; it was, however, recovered by Chriſtopher Greening in 1560, who was ſettled with his three children, Elizabeth, John, and Thomas, by Mr. Damer, anceſtor of the late lord Milton (which title became extinct in 1808), at Long Crendon, Bucks, where the manufactory has been carried on from that time to the preſent day. *Ency. Britannica.*

Needles at this time make a very conſiderable article in commerce; and the conſumption of them is almoſt incredible. The ſizes are from Nº 1, the largeſt, to Nº 25, the ſmalleſt. There is ſcarcely any commodity cheaper than needles; which will appear ſomething extraordinary to the reader, after he has been ſhown the great number of operations they undergo, before they are brought to perfection.

German and Hungarian ſteel is of moſt repute for needles. The firſt thing is to paſs it through a coal-fire, and under a hammer, and to bring it out of its ſquare figure into a cylindrical one: this done, it is drawn through a large hole of a wire-drawing iron, returned into the fire, and drawn through a ſecond hole of the iron, ſmaller than the firſt; and thus ſucceſſively from hole to hole, till it has acquired the degree of fineneſs required for that ſpecies of needles; obſerving, every time it is to be drawn, that it be greaſed over with lard to render it the more manageable. The ſteel, thus reduced into a fine wire, is cut in pieces of the length of the needles intended. Theſe pieces are flattened at one end, on the anvil, in order to form the head and eye; they are then put into the fire to ſoften them farther; and thence taken out and pierced at each extreme of the flat part, on the anvil, by the force of a puncheon of well-tempered ſteel, and laid on a leaden block, to bring out, with another puncheon, the little piece of ſteel remaining in the eye. The corners are then filed off the ſquare of the heads, and a little cavity filed on each ſide the flat of the head. This done, the point is formed with a file; and the whole filed over.

They are then laid to heat red-hot, on a long flat narrow iron, crooked at one end, in a charcoal-fire; and, when taken out thence, are thrown into a baſon of cold water to harden. On this operation a good deal depends; too much heat burns them, and too little leaves them ſoft; the medium is only to be learnt by experience. When they are thus hardened, they are laid in an iron ſhovel, on a fire, more or leſs briſk, in proportion to the thickneſs of the needles; taking care to move them from time to time. This ſerves to temper them, and take off their brittleneſs; great care, here too, muſt be taken of the degree of heat. They are then ſtraightened, one after another, with the hammer; the coldneſs of the water, uſed in hardening them, having twiſted the greateſt part of them.

The next proceſs is the *poliſhing*. To do this, they take twelve or fifteen thouſand needles, and range them in little heaps againſt each other, on a piece of new buckram ſprinkled with emery. The needles thus diſpoſed, emery-duſt is thrown over them, which is again ſprinkled with oil of olives; at laſt, the whole is made up into a roll, well bound at both ends. The roll is then laid on a poliſhing-table, and over it a thick plank, loaded with ſtones, which two men work backwards and forwards a day and a half or two days ſucceſſively; by which means, the roll thus continually agitated by the weight and motion

tion of the plank over it, the needles withinſide, being rubbed againſt each other with oil and emery, are inſenſibly poliſhed. In Germany, inſtead of hands, they poliſh with water-mills.

After poliſhing, they are taken out, and the filth waſhed off them with hot water and ſoap: they are then wiped in hot bran, a little moiſtened, placed with the needles in a round box, ſuſpended in the air by a cord, which is kept ſtirring till the bran and needles be dry. The needles, thus wiped in two or three different brans, are taken out, and put in wooden veſſels, to have the good ſeparated from thoſe whoſe points or eyes have been broken, either in poliſhing or wiping: the points are then all turned the ſame way, and ſmoothed with an emery-ſtone, turned by a wheel. This operation finiſhes them; and there remains nothing but to make them into packets of two hundred and fifty each.

Surgeons' needles are generally made crooked, and their points triangular; however, they are of different forms and ſizes, and bear different names, according to the purpoſes they are uſed for. The largeſt are for amputation; the next, for wounds; the fineſt, for ſutures. They have others, very ſhort and flat, for tendons; others, ſtill ſhorter, and the eye placed in the middle, for tying together of veſſels, &c. Needles for couching cataracts are of various kinds; all of which have a ſmall, broad, and ſharp, point or tongue; and ſome with the ſulcus at the point. Surgeons have ſometimes uſed two needles in this operation, one with a ſharp point for perforating the coats of the eye, and another, with a more obtuſe point, for depreſſing or couching the opaque cryſtalline lens; but care ſhould be taken in the uſe of any of theſe, that they be firſt well poliſhed, with cloth or leather, before they are applied. It is to be obſerved, that needles of ſilver pierce more eaſily, in ſtitching arteries after an amputation, than thoſe made of ſteel.

The above is the uſual method of manufacturing needles; but the mode varies in different workſhops. In the year 1795, Mr. Bell, of Walſall, Staffordſhire, propoſed a method of caſting the metal for needles, &c. and he took out a patent, (Sept. 8, in the ſame year,) of which the following is a ſpecification: "I, the ſaid William Bell, do hereby declare, that the method by which I make needles, bodkins, fiſh-hooks, knitting-pins, netting-needles, and ſail-needles, is by caſting them with ſteel or common fuſible iron, called pig or caſt-iron, into moulds or flaſks made with fine ſand. Or otherwiſe I make ſtocks or moulds of iron or ſteel, or any other compoſition capable of being made into moulds; on which ſtocks or moulds I ſink, engrave, or ſtamp, impreſſions of the ſaid articles. Into theſe I pour my melted iron or ſteel, (I prefer, for my purpoſe, ſand-caſting,) and prepare my iron or ſteel as follows: I melt it in a pot or crucible, in ſmall quantities, about the weight of twelve pounds, (and upwards to twenty pounds,) the more conveniently to diveſt it of its heterogeneous particles, and to purify it from its earthy or ſulphureous qualities. When the iron has attained a proper heat, I take charcoal-duſt, mixed with lime, or common ſalt, which I throw into the pot of melted iron; and, by frequently ſtirring it with an iron rod, I bring to the ſurface of the iron a ſcoria, which I frequently ſkim off, and thus bring my iron into a refined ſtate. I then pour it into the mould before deſcribed. The articles, being thus formed, are capable of being ſoftened, hardened, or tempered, in the uſual way by which needles, bodkins, fiſh-hooks, knitting-pins, netting-needles, and ſail-needles, have heretofore been manufactured; therefore, the principal merit of my invention is in *caſting them,* inſtead of making them in the uſual way."

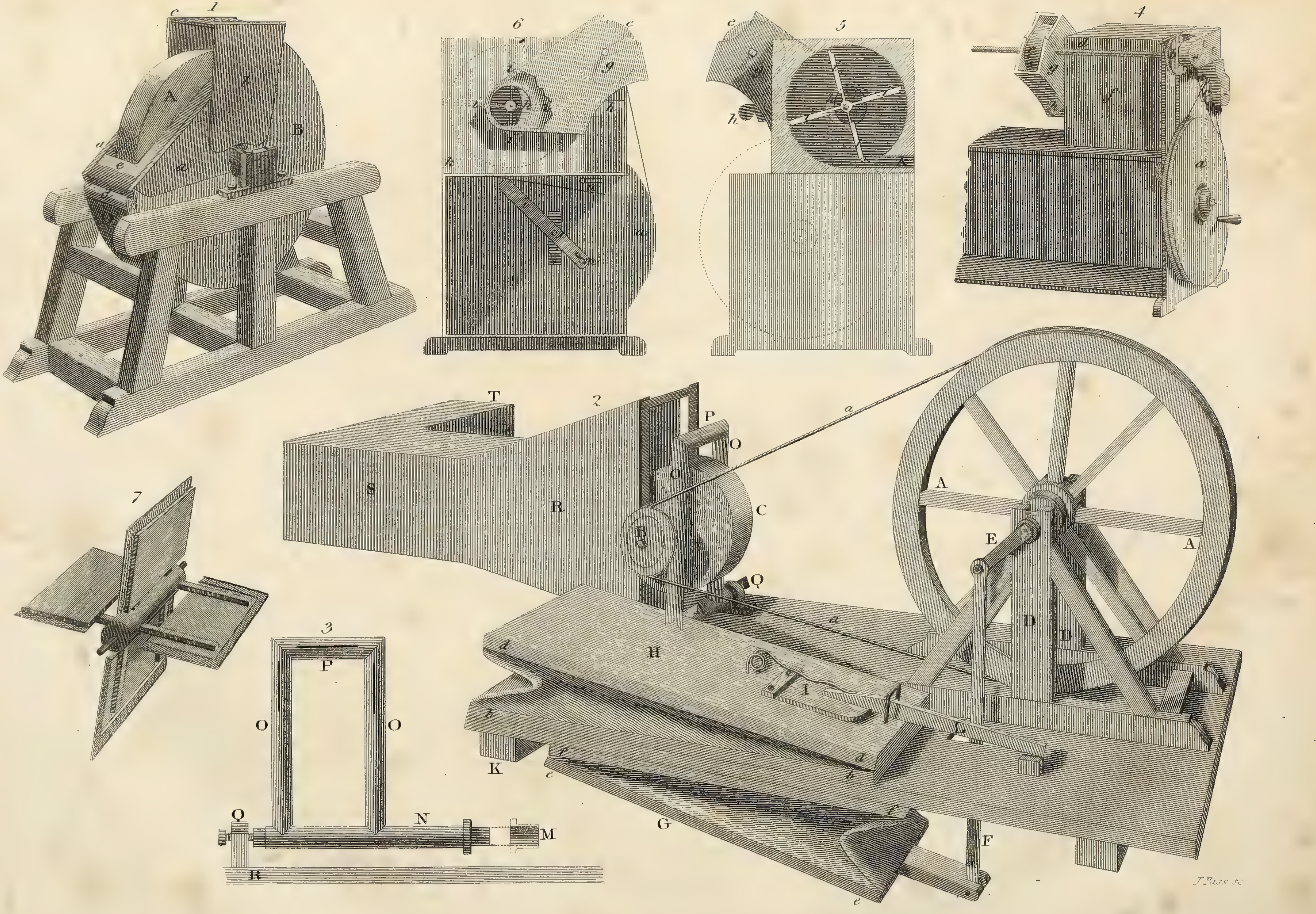
The mortality and diſeaſe attendant on thoſe employed in pointing needles, ariſing partly from accidents but principally from inhalation of the fine duſt produced in this part of the proceſs, had long engaged the attention of the Society of Arts. They have granted three ſeparate rewards for the invention of machines deſigned to obviate the ſacrifice of human life in this neceſſary manufacture.

1. In the year 1811, the ſilver medal of the ſociety was voted to Mr. Thomas Wood, of Great Berkhamſtead, Herts, for his invention of an improved grindſtone for pointing needles. This grindſtone is encloſed in a caſe of wood or metal, and hath a hood wherein a ſquare of glaſs is inſerted, deſigned to admit light on the articles under operation. The particular advantages attending a grindſtone ſuſpended in this manner, with a hood and a damp cloth, are, that the ſtream or current of air, formed by the motion of the ſtone on its axis, is confined by the caſe under the hood of which it enters, and carries with it the fine particles of ſteel and ſand, which it depoſits on the lower part of the inſide of the wet cloth, which forms the connexion between the ſides of the caſe, by theſe means rendering the operation of pointing needles leſs pernicious to the health of the operator. The ſtone may be worked by hand, by water, or machinery. Fig. 1, on the annexed Plate, repreſents the grindſtone A, encloſed in a box or caſe, formed of two circles of wood, one marked B, and another on the oppoſite ſide, which cannot be ſeen in this view; *aa* are two thin iron plates placed ſo near to the ſtone, as to be as cloſe to it as poſſible without touching it; two other plates *b*, ſupport a pane of glaſs *c*, which, at the ſame time that it prevents the duſt from being thrown over the ſtone into the air, admits light to that part of the ſtone where the needles are applied; the remaining ſpace between the edges of the two circular boards B, is filled up by a coarſe cloth D, which encompaſſes about three quarters of the edge of the ſtone, and is then hooked up to the iron plates *a*, by means of two bent pieces of plate-iron, to which the cloth is ſewed, one of which is ſeen at *d*; and theſe are hooked upon other bent pieces, which form part of the plate *aa*. The cloth is wetted when put on, and will then catch the duſt which is produced by the grinding; and, when it has accumulated much, by unhooking the cloth it may be ſhook out, and the cloth, being wetted, is hooked on again. As the ſtone wears down, the piece of plate-iron *e*, ſituated in a groove formed by the edges of the plate *a*, is ſlided forwards to follow up the reduced edge of the ſtone, and other plates are put into the groove after *e*, when they are required. The caſe B is ſupported by a croſs-bar of the frame in which the ſtone revolves, and which may be made in this or in any other form; the ſtone is turned in the uſual manner of grinding-mills for needles, by a ſtrap paſſing round a rigger, fixed on the end of its ſpindle; but this cannot be ſeen in this view, it being hidden behind the ſtone.

2. The apparatus of Mr. George Prior, jun. of Otley in Yorkſhire, for the ſame purpoſe, obtained a premium of twenty-five guineas from the ſociety in the ſeſſion 1813. This method of taking away the particles of duſt and ſteel which float in the air by pointing needles on the dry grindſtone, and which are ſo prejudicial to the health of the workmen, is effected by cauſing a current of air to paſs the top, ſides, and bottom, of the grindſtone, by a tube incloſing them, which tube is ſlit lengthways on the ſides, top, and bottom, oppoſite the workman; one end of the tube having a communication with a pair of bellows worked by a crank at the end of the axis of the wheel which turns the grindſtone, and the air eſcaping through the ſlits or openings in the tube, as it paſſes the grindſtone, forces along with it the duſt (which would otherwiſe float in the room, and be inhaled by the operator) into the receiver which incloſes the other ſide of the grindſtone, from which a funnel or hollow tube muſt be extended into a chimney, or through the external wall, ſo as to convey them from the apartment where the operator is at work. It is not neceſſary to remove the large particles of ſand, &c. which are heavy enough to fall to the ground, but only thoſe which are ſo light as to float in the air, and which, in the act of breathing, are in the common

mode

NEEDLE-MAKING.



Improved Apparatus for Pointing of Needles.

Engraved for the Encyclopædia Londinensis 1818 mode drawn into the lungs, producing many diſorders, and in very few years prove fatal to the operators. In grinding the needles, the points muſt be laid on the grindſtone, as nearly under that part of the tube which goes over the top of the ſtone as convenient, for which purpoſe the tube is made to move backwards or forwards, ſo as to ſuit the moſt convenient part of the grindſtone employed by the workman. There is a great advantage ariſing from blowing the air out of the room, as any ſtagnation of air is thus prevented; and, the whole quantity being blown out in a very few minutes, there will always be a renewal of freſh air, which will be very ſalutary to the workmen, particularly if confined in a ſmall apartment.

This contrivance conſiſts of a conical box or caſe, incloſing nearly one-half of the grindſtone, to receive the duſt of ſteel and ſtone, made in the operation of grinding, which is cauſed to enter the box by a current of air produced by a pair of bellows. The needle-grinding mills are generally very extenſive buildings, with numerous apartments, each containing many grindſtones for pointing needles, all which are driven by one powerful water-wheel, or other firſt mover. And the bellows, which are employed in Mr. Prior's plan to carry off the duſt, might be made large enough to ſupply all the grindſtones contained in one room, or even one wing of the mill. A A, fig. 2, repreſents a large wheel, giving motion to the grindſtone by a band *a* paſſing round a pulley B, fixed on the axis or ſpindle of the grindſtone C, (which is ſupported in the uſual manner, though not here ſhown.) The great wheel is repreſented in the drawing as if mounted in a frame D D, to be turned by a handle, on the oppoſite end of the ſpindle, in the ſame manner as the wheels uſed for turning lathes or cutlers' grindſtones; but, in the needle-mills, this large wheel is part of the mill, and is generally ſituated beneath the floor of the room in which the grindſtones are placed, being fixed on a long horizontal ſhaft, which carries ſeveral ſuch wheels, each giving motion to one grindſtone. Upon the end or any other convenient part of this ſhaft a crank E is fixed, which, by means of a rod F, gives motion to a pair of double bellows G, conſtructed and acting in the ſame manner as thoſe uſed for organs, being contrived to keep up a conſtant and regular ſupply of air. They conſiſt of two diſtinct parts, G and H. The lower one is the feeder, and throws the air into the upper one H, which is the regulator, to equalize the current of air, and make it conſtant. The feeder G conſiſts of two boards; the upper one, *ff*, fixed, and the lower one, *ee*, moveable on hinges at its joint, by means of the rod F, as before deſcribed. It is connected with the upper board by leather, ſurrounding all its ſides, and neatly folded. In the lower board *e e* is an aperture, covered by a valve (called by the organ-builders a pallet), opening inwards to permit the entrance of the air, but to prevent its return: through the upper board *ff* is another opening, with a valve ſhutting downwards; through this the air paſſes into the regulator H, which is alſo made with two boards connected by hinges and leather, in the ſame manner as the feeder; from the regulator the air paſſes off to the grindſtones by a trunk K, extending along the whole length of the mill immediately beneath the floor. When the lower board *e e* of the feeder is depreſſed by the motion of the crank E and the rod F, the chamber of the feeder is enlarged, and the external air opening the valve in the board *ee*, fills the cavity. When the board is lifted up, this valve cloſes, and the contained air is forced through the valve in the board *f* into the regulator, the repetition of which motion keeps a conſtant ſupply of air in the regulator. The top board *dd* of this is loaded with weights, which, reſting upon the included air, forces it out from the regulator, in an equable ſtream, through the trunk K, and from that to every grindſtone in the mill. N O O P is an aſſemblage of tin pipes, which ſurround the grindſtone, and have openings in the fronts of them, through which the air iſſues, to carry off the duſt. This is ſhown ſeparately at fig. 3, where M repreſents a braſs ſocket, which is ſuppoſed to be fixed to the floor, and by means of a ſmall pipe communicates with the wind-trunk K; into this the end of the pipe N is fitted, and, the other end of it being ſupported by the point of a ſcrew Q, it turns on this as a centre; the two pipes O O are ſoldered into this at right angles, and are united at the top by the ſhort pipe P: in theſe pipes ſmall ſlits or crevices are made, as ſhown by the dark lines, through which the air iſſues, and, blowing towards the grindſtone, carries off the particles of duſt into the trunk R, fig. 2, which may be continued forward at S, through the wall of the building, into the open air; or, if it is turned ſideways, as at T, all the trunks R of the other grindſtones may be carried into it, which will ſucceed better, becauſe the whole body of air, being thus carried through one common trunk, and being thrown out into the open air in one place, will have the greater force to carry the duſt with it. I is a ſafety-valve, covering an opening in the top of the upper board *dd* of the regulator: it is kept ſhut by a wire ſpring, and has a wooden handle or tail L, by which it may be lifted up. When the board of the regulator riſes as high as is intended, this tail comes in contact with a piece of wood, and thus opens the valve, permitting the air to eſcape; by which means there is no danger of the bellows being burſt, for this valve is always opened when the regulator becomes full, ſo as to be in any danger of a rupture. The pipes O O P, as before mentioned, turning on a centre, can be moved nearer to the grindſtone at pleaſure, as it becomes reduced in diameter by wearing away.

3. Mr. Thomas Roberts, of Dumfries, propoſes to obviate this inconvenience by removing the noxious duſt by means of a fly-wheel, or ventilator. His invention was rewarded by a preſent of ten guineas in the ſeſſion of 1815. The model which was ſent to the ſociety is deſcribed as having its fans, each four inches long, in a direction parallel to the axes, and one inch and a quarter broad. Though the cylinder where the fans move is four inches in diameter, a cylinder in the middle is left open for a continual ſupply of air. When the wheel is turned eighty times in a minute, fixteen and a half cubic feet of air would be diſcharged, admitting that part of the cylinder containing the fans to be ventilated each turning. A machine, having the fan-box fixteen inches cube, would ventilate at the rate of nearly 1100 cubit feet in one hour.

Fig. 4 repreſents the machine in perſpective: *a*, the great wheel giving motion to the whole, which, on being made to revolve, (by means of the connecting bands,) turns the ſmaller wheels, *b* and *c*; *b* is a ſmall wheel attached to the arbor or axle, *d*; upon this arbor is the grindſtone, *e*; *c*, is a ſmall wheel upon the axle of a fan wheel, ſhut up within the box, *f*. Figs. 5 and 6 are ſections of the ſame, ſhowing the interior of the fan-box, with the paſſages for conducting and diſcharging the duſt. The grindſtone being in action, as repreſented by fig. 4, ſmall particles of ſteel or duſt will paſs down the funnel, *g*, in which the grindſtone hangs, and thence through the circular aperture into the fan-box, (part of the funnel being removed in fig. 6, to ſhow this,) which aperture may be contracted by the ſliding ſhutters, *h*, *h*. Fig. 7, the fan-wheel, marked *i*, *i*, *i*, *i*, in figs. 5 and 6, which, being turned with conſiderable velocity, by the wheel and band (ſeen at *c*, fig. 4), impels the wind and duſt out through the opening, *k*, at the back of the fan-box. Fig. 6 likewiſe exhibits a method of tightening the bands by ſhifting the centre of the great wheel which hangs in the ſlider, *l*; this ſlider, moving upon the pivot, *m*, can be raiſed or lowered, and with it the great wheel by the wedge, *n*, being drawn backward or forward.

June 2, 1812, a patent was granted to Mr. John Scambler of Sheffield, for gilding of needles. It ſoon appeared, however, that a gilt needle would not work ſo well as a well-poliſhed ſteel needle not gilt. The patentee then confined his gilding to the head and eye, which he pretended

tended made the needle leſs liable to cut the thread; but, as the merely gilding a piece of ſteel could not be called a new invention, the patent was revoked in the court of King's Bench on the 27th of July, 1813.

NEEDLE ROCK', a rock in the Mergui Archipelago, about half a mile north-weſt of Cat Iſland.

NEE'DLE-WORK, ſ. The buſineſs of a ſempſtreſs. Embroidery by the needle.—In a curious brede of *needle-work,* one colour falls away by ſuch juſt degrees, and another riſes ſo inſenſibly, that we ſee the variety without being able to diſtinguiſh the total vaniſhing of the one from the firſt appearance of the other. *Addiſon.*

NEE'DLEFUL, ſ. As much thread as is generally put at one time in the needle.

NEE'DLES (The), rocks in the Engliſh Channel, near the weſtern extremity of the Iſle of Wight. There were formerly three of theſe rocks; but, towards the end of the eighteenth century, the talleſt of them, called *Lot's Wife,* which roſe 120 feet above low-water mark, and in its ſhape reſembling a needle, being undermined by the conſtant efforts of the waves, overſet, and totally diſappeared. Lat. 50. 44. N. lon. 1. 33. N.

NEE'DLESS, *adj.* Unneceſſary; not requiſite.—Would not theſe be great and *needleſs* abatements of their happineſs, if it were confined within the compaſs of this life only? *Atterbury.*

This ſudden ſtab of rancour I miſdoubt;
Pray God, I ſay, I prove a *needleſs* coward.
Shakeſpeare, Rich. III.

Not wanting. *Out of uſe.*

For his weeping in the *needleſs* ſtream,
Poor dear, quoth he, thou mak'ſt a teſtament
As worldlings do, giving thy ſum of more
To that which had too much. *Shakeſp. As you like it.*

NEE'DLESSLY, *adv.* Unneceſſarily; without need.—The conſequences whereof have been to render languages more difficult to be learnt, and *needleſsly* to advance orthography into a troubleſome and laborious art. *Holder's Elem. of Speech.*

NEE'DLESSNESS, ſ. Unneceſſarineſs. To explain St. Paul's Epiſtles, after ſo great a train of expoſitors, might ſeem cenſurable for its *needleſſneſs,* did not daily examples of pious and learned men juſtify it. *Locke.*

NEE'DMENT, ſ. Something neceſſary:

Behind
His ſcrip did hang, in which his *needments* he did bind.
Spenſer, F. Q.

NEEDS, *adv.* [neꝺeꞅ, Saxon, unwilling. *Johnſon.*—It is merely *need is,* uſed parenthetically. *H. Tooke.*] Neceſſarily; by compulſion; indiſpenſably.—Another being elected, and his ambaſſadours returned, he would *needs* know the cauſe of his repulſe. *Davies.*—To ſay the principles of nature muſt *needs* be ſuch as philoſophy makes them, is to ſet bounds to Omnipotence. *Glanville.*—I muſt *needs* after him, madam, with my letter. *Shakeſpeare.*

I perceive
Thy mortal ſight to fail: objects divine
Muſt *needs* impair, and weary, human ſenſe. *Milton, P.L.*

I have affairs below,
Which I muſt *needs* diſpatch before I go. *Dryden.*

NEEDSO'RE POINT, a cape of England, on the coaſt of Hampſhire: four miles weſt-north-weſt of Cowes.

NEEDUMARAN', a town of Hindooſtan, in the Carnatic: fifteen miles north-eaſt of Nattam.

NEE'DWOOD FOR'EST, an extenſive diſtrict of wood-land, in the county of Stafford. It anciently formed a portion of the property of the dukes of Lancaſter, in whoſe right it has belonged to the Engliſh monarchs for ſeveral centuries. It is divided into the four wards of Marchington, Yoxall, Barton, and Tutbury, each of them containing about five miles in compaſs, excluſive of Uttoxeter-wood, Boughay, &c. The aſpect of this foreſt is finely varied with hill and dale; and, more particularly towards its northern parts, exhibits a ſeries of deep glens, incloſed by ſteep and rugged precipices, covered with a profuſion of trees. According to a ſurvey made in 1765, this foreſt extends from the confines of Hanbury to Yoxall, about a mile to the north of the river Trent, and compriſes 9920 acres of land, of which about 1000 acres contain oak-trees of full growth and ſize. Among theſe is the Swilcar oak, perhaps the moſt majeſtic tree in England, which is ſuppoſed to have ſtood upwards of ſix hundred years. There were formerly eight parks empaled within the ring of this foreſt. The officers are a lieutenant and chief ranger, aſſiſted by a deputy, four lieutenants, four keepers, and an axe-bearer. A court is ſtill held every year by the king's ſteward of the honour of Tutbury, in which Needwood is included, when a jury of twenty-four perſons, reſident within the juriſdiction, preſent and amerce all perſons guilty of "encroaching on the foreſt, or committing offences in vert or veniſon." Some part of the foreſt has been lately incloſed for cultivation.

NEE'DY, *adj.* Poor; neceſſitous; diſtreſſed by poverty.—We bring into the world a poor *needy* uncertain life, ſhort at the longeſt, and unquiet at the beſt. *Temple.*—To relieve the *needy,* and comfort the afflicted, are duties that fall in our way every day. *Addiſon.*

In his *needy* ſhop a tortoiſe hung,
An alligator ſtuff'd, and other ſkins
Of ill-ſhap'd fiſhes. *Shakeſpeare's Rom. and Jul.*

Nuptials of form, of intereſt, or of ſtate,
Thoſe ſeeds of pride are fruitful in debate:
Let happy men for generous love declare,
And chooſe the *needy* virgin, chaſte and fair. *Granville.*

NEEFS (Peter), a painter of ſingular eminence in one particular branch of the art, was born at Antwerp, probably about 1570, and was a ſcholar of Henry Steenwyck, who excelled as an architectural painter. Imitating the manner of his maſter, Neefs repreſented the inſides of churches and convents, eſpecially thoſe in the Gothic ſtyle, with ſuch minute and laborious exactneſs of detail, and ſuch truth of perſpective, neatneſs of finiſhing, and judicious diſpoſition of lights, that his pieces were the objects of univerſal admiration, and are ſtill unrivalled. The beſt of them have a bright and clear colouring, in which reſpect they excel the works of his maſter, which are too much upon the dark-brown tint. He drew figures but indifferently, and frequently borrowed the pencil of Breughel and Teniers for that purpoſe, which gave his pictures an additional value. He died in 1651.

His ſon, *Peter Neefs the Young,* was an artiſt in the ſame line, but of much inferior excellence. *Pilkington.*

NEEFS (James), a Dutch engraver, was born at Antwerp in 1630, and was probably related to the preceding. He worked principally with the graver, and handled it with great facility. He drew the human figure with ſome degree of correctneſs, but in a mannered ſtyle. The characters which he has given to the heads of his figures, eſpecially when they required alſo an animated expreſſion, is often exaggerated. He engraved both portrait and hiſtory; and his beſt works, though faulty in the above reſpects, have much merit on the whole.

NEEHEEHOW, or ONEEHOW, one of the Sandwich Iſlands, in the North Pacific Ocean, containing about 10,000 inhabitants: fifteen miles weſt of Atooi. The anchoring-place is laid down in lat. 21. 50. N. lon. 160. 15. W.

NEEKAL'LA, a town of Hindooſtan, in Baglana: ten miles eaſt of Naderbar.

NEEL, ſ. [*nael,* Icel. *naael,* Dan.] A needle. Written alſo *neeld* and *neld.*

Theſe and ill lucke together
Have ſtacke away my dear *neele.* *Gamm. Gurton's Needle.*

She with her *neele* compoſes
Nature's own ſhape, of bud, bird, branch, or berry.
Shakeſpeare.

Their thimbles into armed gauntlets change,
Their *neelds* to lances. *Shakeſpeare's K. John.*

For thee fit weapons were
Thy *neld* and ſpindle, not a ſword and ſpear. *Fairfax.*

NEELAG'HERY, a fort of the Myſore, deſtroyed by the Britiſh in 1791: four miles from Oodeadurgam.

NEELGUR', a town of Hindooſtan, in Oriſſa: nine miles weſt-ſouth-weſt of Balaſore.

NEELGUR', a town of Hindooſtan, in Golconda: twenty-four miles ſouth-weſt of Combamet.

NEELS (Nicholas), a learned dominican monk, was a native of Campenhout in Brabant, where he was born in the year 1540. He embraced the monaſtic life in the year 1558; and, after he had finiſhed his preſcribed courſe of academic ſtudies, taught divinity in the ſeminaries belonging to his order, and officiated as a preacher with great reputation. He was a good Greek and Hebrew ſcholar, and poſſeſſed an intimate acquaintance with the Scriptures, which he is ſaid to have diſplayed with advantage in various diſputes with the Calviniſts. The ſuperiority of his acquirements in theſe branches of learning, occaſioned his being ſent to Ghent in 1577, to oppoſe the progreſs of proteſtantiſm in that city; and for that purpoſe he preached every day, alternately endeavouring to defend ſome leading point in the catholic creed, and to impugn ſome principal tenet of the reformed church. But, the proteſtant party having acquired an aſcendancy in that city, he and his fellow-labourers in the popiſh cauſe were baniſhed from it during the following year. In 1584, he was appointed provincial of Lower Germany; and occupied that poſt till his death in 1600, when he was ſixty years of age. He was the author of Commentaries, in the Latin language, on the book of Geneſis, the Song of Songs, the Epiſtles of St. Paul, and the Apocalypſe, &c. *Moreri.*

NEEM ASTEEN', *ſ.* [Hindooſtanee.] An upper robe with half-ſleeves, commonly made of gold or ſilver tiſſue.

NEEMCUR', a town of Hindooſtan, in Oude: fifteen miles ſouth-ſouth-weſt of Kairabad. Lat. 27. 20. lon. 81. E.

NEEMDAR', a town of Hindooſtan, in Agra: thirteen miles eaſt of Kerowly.

NEE'MLA, a town of Candahar, on the Kameh: fifty miles ſouth-eaſt of Cabul.

NEEM'TUK KER'M, [Indian.] Occaſional worſhip for holydays in Hindooſtan; and the performance of the dan and of the ſeradeh, during the eclipſes of the ſun and moon. *Roberts's Ind. Gloſſ.*

NEENEE'VA, one of the ſmaller Friendly Iſlands: twenty-eight miles north-north-eaſt of Annamooka. Lat. 19. 47. S. lon. 185. 22. E.

NEE'NY, a town of Algiers: ten miles eaſt-ſouth-eaſt of Baggai.

NEE'PO, a town on the weſt coaſt of the iſle of Celebes. Lat. 3. 50. S. lon. 120. E.

NEER, a river of Brabant, which runs into the Meuſe ſix miles below Ruremond.

NEER (Arnold Vander), a landſcape painter, who was born at Amſterdam in 1619. His ſubjects are generally choſen from among the ſcenes of the Low Countries. A village, or a few houſes upon the banks of a canal or river; ſuch a collection of forms as the eye of taſte alone can combine agreeably, by a beautiful diſtribution of ſky, of light and dark clouds, and reflections in the water; Vander Neer never failed to preſent with a pleaſing aſpect: and he executed his works, which are generally very ſmall, with great brilliancy and neatneſs of pencilling. Very frequently his effects are choſen by moonlight; whoſe partial gleams, breaking the formality of the canals, he imitated moſt beautifully. Owing to the ſimplicity of his manner, and his painting very thin, his pictures are now ſeldom found uninjured; when they are pure and well choſen, they are very valuable. He died at the age of ſixty-four, and left a ſon, *Eglon Hendrick Vander Neer*, who practiſed the art of painting in various branches with conſiderable ſucceſs. His portrait, painted by himſelf, is among thoſe that adorn the gallery of Florence. He lived till the year 1703, dying at the age of ſixty.

NE'ER, [for *never.*]

It appears I am no horſe,
That I can argue and diſcourſe;
Have but two legs, and *ne'er* a tail. *Hudibras.*

NEERBUD'DA. See NERBUDDAH.

NEERCAS'SEL (John de), a celebrated Dutch catholic prelate, was born at Gorcum, in the year 1626. He became a member of the Congregation of the Oratory at Paris; and, after diſtinguiſhing himſelf for ſeveral years by his lectures on philoſophy and divinity in their ſeminaries, was promoted to the archdeaconry of Utrecht, and appointed apoſtolic provincial in Holland and the other united provinces. In the year 1662, the chapter of Utrecht having loſt their archbiſhop, elected Neercaſſel to that dignity; but pope Alexander VII. intimated his pleaſure that the vacant ſee ſhould be filled by the abbé Catz, dean of the chapter of Haarlem. The two competitors, being alike friends to peace, agreed to compromiſe the matter, by dividing the epiſcopal labours; and that Catz ſhould govern the dioceſe of Haarlem, under the title of Archbiſhop of Philippi, while Neercaſſel ſhould preſide over the dioceſe of Utrecht, with the title of Biſhop of Caſtoria. This arrangement met with the approbation of the papal nuncio; and, after the death of Catz, Neercaſſel remained ſole biſhop of all the Dutch catholics during the remainder of his life. His zeal and aſſiduity in diſcharging the functions of this poſt were unwearied; and he fell a ſacrifice to the fatigue occaſioned by his exertions at Zwol, in 1686, when he was at the age of ſixty. The recollection of the faithful paſtoral labours, and of the exemplary virtues of this prelate, was long fondly cheriſhed by the catholics of Holland. He was the author of three treatiſes in Latin, which are held in high eſteem by the members of his communion. 1. Tractatus de Lectione Scripturarum, in quo Proteſtantium eas Legendi praxis refellitur, Catholicorum vero ſtabilitur; 1677, 12mo. accompanied with a diſſertation De Interprete Scripturarum. 2. On the Worſhip of the Saints, and particularly of the Holy Virgin, in a large octavo volume. Both theſe pieces were tranſlated into French, by M. le Roy, abbé de Haute-Fontaine, and met with a very favourable reception among the French catholics. 3. Amor Pœnitens, &c. a diſcourſe on love to God, as exerciſed in the ſacrament of penance; the moſt complete edition of which was publiſhed by him in 1684, in 2 vols. 12mo. It was cenſured by pope Alexander VII. and prohibited by a decree of the ſacred congregation. The Jeſuits alſo endeavoured, though without ſucceſs, to obtain a formal condemnation of it from Innocent XI. A French verſion of this work made its appearance in 1741, in 3 vols. 12mo. 4. The author likewiſe publiſhed ſome Paſtoral Letters. *Moreri.*

NEER'DA. See NAARDA, p. 498.

NEERMUL', a town of Hindooſtan, in Dowlatabad: ſeventy miles north of Warangole, and thirty-five ſouth-eaſt of Mahur. Lat. 19. 5. N. lon. 79. 5. E.

NEER'SEN, a town of France, in the department of the Roer, and chief place of a canton, in the diſtrict of Creveldt. The place contains 608, and the canton 21,661, inhabitants.

NEERWIN'DE, or NEERWINDEN, a village of Brabant: ſixteen miles eaſt of Louvain.

NEE'SDON, a village in Middleſex, three miles ſouth-eaſt of Harrow on the Hill.

To NEESE, *v. n.* [nıeꞅen, Sax. from næꞅe, the noſe.] To ſneeſe; to diſcharge flatulencies by the noſe. Uſed in Scotland, and in the north of England.—He went up and ſtretched himſelf upon him; and the child *neeſed* ſeven times; and opened his eyes. 2 *Kings*, iv. 35.—How apt our nature is to catch and propagate the infection of a ſuperſtitious tradition, may appear from that ancient and modern uſage of praying for a perſon upon *neezing*, the vulgar preſages conſequent to the approach of any ſtrange fiſh to our ſhore, the regarding of any caſual ſtops and breaches in any known rivers, any odd noiſes, &c. *Spencer on Prodigies.*

The whole quire hold their hips, and loffe;
And waxen in their mirth, and *neeze*, and ſwear
A merrier hour was never waſted there. *Shakeſpeare.*

NEE'SE-WORT, or SNEEZE-WORT. See ACHILLÆA.

NEE'SING, *ſ.* The act of ſneezing; ſternutation.—By his *neeſings* a light doth ſhine, and his eyes are like the eye-lids of the morning. *Job*, xli. 18.

You ſummer *neezings* when the ſun is ſet,
That fill the air with a quick fading fire,
Ceaſe from your flaſhings! *More's Philos. Poems* 1647.

NEESO'LY, a town of Hindooſtan, in Oude: four miles north-north-eaſt of Gooracpour.

NEE'TA, a town of Iſtria: twelve miles eaſt of Pedena.

NEETAMUN'DY, a town of Bengal: ſixteen miles weſt of Buyhar.

NEE'VAL, a town of Hindooſtan, in the Carnatic: thirty miles ſouth-weſt of Madras, and twenty-eight eaſt of Arcot.

NEF, *ſ.* [old French; from *nave.*] The body of a church; the nave.—The church of St. Juſtina, by Palladio, is the moſt handſome, luminous, diſincumbered, building in Italy. The long *nef* conſiſts of a row of five cupolas, the croſs one has on each ſide a ſingle cupola deeper than the others. *Addiſon.*

NEFAN'D, or NEFAN'DOUS, *adj.* [*nefandus*, Lat.] Not to be named; abominable.—Knowing what *nefand* abominations are practiſed. *Sheldon, Mirr. of Antichriſt*, 1616.

The preſs reſtrain'd! *nefandous* thought!
In vain our ſires have nobly fought.
Green's Poem of the Spleen, 1754.

NEFAN'DOUSNESS, *ſ.* Wickedneſs beyond what is fit to be uttered. *Scott.*

NEFA'RIOUS, *adj.* [*nefarius*, Latin.] Wicked; abominable.—The moſt *nefarious* baſtards are they whom the law ſtiles inceſtuous baſtards, which are begotten between aſcendants and deſcendants, and between collaterals, as far as the divine prohibition extends. *Ayliffe's Parergon.*

NEFA'RIOUSLY, *adv.* Abominably; wickedly.—That unhallowed villany *nefariouſly* attempted upon the perſon of our agent. *Milton's Letters of State.*

NEFAS'TUS, *adj.* [Lat. unlucky or inauſpicious.] The Romans uſed the term *nefaſti dies* for thoſe days whereon it was not allowed to adminiſter juſtice, or hold courts. They were ſo called becauſe, *non fari licebat*, the prætor was not allowed to pronounce the three ſolemn words or formulas of the law, *Do, dico, addico;* I give, I appoint, I adjudge. Theſe days were diſtinguiſhed in the calendar by the letter N. for *Nefaſtus;* or N. P. *Nefaſtus Primo*, when the day was only *nefaſtus* in the forenoon, or firſt part. Theſe days of a mixed kind were called *interciſi.*

NEF'ERN. See NEVERN.

NEF'TA, a town of Africa, in Biledulgerid, on the Lake of Marks, anciently called Negota: ſixty miles ſouth of Gafsa. Lat. 33. 30. N. lon. 8. E.

NE'FUS MUS'CA, a town of Abyſſinia: ninety miles ſouth-ſouth-eaſt of Gondar.

NEGA'DA. See ANAGADA, vol. i.

NEGANOO'R, a town of Hindooſtan, in the country of Coimbetore: twenty miles ſouth-eaſt of Coimbetore.

NEGAPATAM', a ſea-port town of Hindooſtan, in the kingdom of Tanjore, on the coaſt of Coromandel. This, in the language of the natives, ſignifies the City of Serpents; ſo called, not only becauſe the country behind it is very full of ſerpents, but likewiſe on account of a kind of religious reſpect that is paid them by the natives, who look upon it as a ſort of impiety to kill them. When the Portugueſe came into the Indies, this was very little better than a ſtraggling village, or at moſt but an open town; but they, quickly perceiving the uſes that might be made of it, and more eſpecially how conducive it would be to the ſecurity of their trade in the gulf of Bengal, not only erected walls, but improved it in other reſpects to ſuch a degree, that it became a fair and beautiful city, adorned with ſeveral fine churches, and a ſuperb college belonging to the Jeſuits. They held it till they loſt the iſland of Ceylon; and it then became a place of ſuch conſequence to the Dutch, that they practiſed upon the rajah or prince of Tanjore, to abandon his old allies the Portugueſe, and by his aſſiſtance became maſters of it. The Portugueſe knew the value of it too well to part with it eaſily, or to forget the loſs of it ſoon; and therefore they made a great effort to recover it, in which they ſucceeded; but did not keep it long, for the Dutch were now grown ſo ſtrong in the Indies, and had diſpoſſeſſed the Portugueſe of ſo many places, that it was impoſſible for them to relieve it when beſieged: this was the reaſon that the Dutch became maſters of it again. The Dutch fortified it, and kept it till the year 1782, when it was taken from them by the Engliſh, and was confirmed to them by the peace of 1783. The ſtreets are broad, and the houſes convenient, but ancient; the churches are handſome, and in the environs are a great number of pagodas, ſome of which are ornamented with taſte, and rich; others mean and dirty. It is at this time a place of very great trade, though the port is not extraordinary, and almoſt all the different nations in the Indies, Moors, Indians, and Armenians, are here ſettled, and trade, under the protection of the fort: 42 miles eaſt of Tanjore, and 150 ſouth of Madras. Lat. 10. 46. N. lon. 79. 55. E.

NEGAPAT'LA, a town of Hindooſtan, in the Carnatic: thirty miles north-north-weſt of Bomrauzepollam.

NE'GAR PAR'KAR, a town of Hindooſtan, in Cutch: ninety-three miles weſt of Radunpour.

NEGA'RA, a town of the iſland of Borneo, and capital of the kingdom of Banjar Maſſim, ſituated on the eaſt ſide of a large river, which runs into the ſea: a hundred miles from the ſea, and ſixty north from the town of Banjar Maſſim.

NEGA'TION, *ſ.* [*negatio*, Lat.] Denial; the contrary to *affirmation.*—Our aſſertions and *negations* ſhould be yea and nay, for whatſoever is more than theſe is ſin. *Rogers.*—Deſcription by denial, or excluſion, or exception.—*Negation* is the abſence of that which does not naturally belong to the thing we are ſpeaking of, or which has no right, obligation, or neceſſity, to be preſent with it; as when we ſay a ſtone is inanimate, or blind, or deaf. *Watts's Logick.*—Chance ſignifies, that all events called caſual, among inanimate bodies, are mechanically and naturally produced according to the determinate figures, textures, and motions, of thoſe bodies; with this only *negation*, that thoſe inanimate bodies are not conſcious of their own operations. *Bentley.*—Argument drawn from denial.—It may be proved in the way of *negation*, that they came not from Europe, as having no remainder of the arts, learning, and civilities, of it. *Heylin.*

NEG'ATIVE, *adj.* [*negatif*, Fr. *negativus*, Lat.] Denying; contrary to *affirmative:*

If thou wilt confeſs,
Or elſe be impudently *negative*,
To have nor eyes, nor ears, nor thought. *Shakeſpeare.*

Implying only the abſence of ſomething; not poſitive; privative.—There is another way of denying Chriſt with our mouths, which is *negative*, when we do not acknowledge and confeſs him. *South.*—Conſider the neceſſary connection that is between the *negative* and poſitive part of our duty. *Tillotſon.*—Having the power to withhold, though not to compel.—Denying me any power of a *negative* voice as king, they are not aſhamed to ſeek to deprive me of the liberty of uſing my reaſon with a good conſcience. *King Charles.*

NEG'ATIVE, *ſ.* A propoſition by which ſomething is denied.—Of *negatives* we have the leaſt certainty; they are uſually hardeſt, and many times impoſſible, to be proved. *Tillotſon.*—A particle of denial; as, *not:*

A purer ſubſtance is defin'd
But by an heap of *negatives* combin'd;
Aſk what a ſpirit is, you'll hear them cry,
It hath no matter, no mortality. *Cleaveland.*

To NEG'ATIVE, *v. a.* To diſmiſs by negation.—The propoſal was *negatived* by a ſmall majority. *Andrews's Anecd.*

NEG'ATIVELY, *adv.* With denial; in the form of denial; not affirmatively.—When I aſked him whether he had not drunk at all? he anſwered *negatively. Boyle.*—In form of ſpeech implying the abſence of ſomething.—The fathers draw arguments from the Scripture *negatively* in reproof of that which is evil; Scriptures teach it not, avoid it therefore. *Hooker.*—To this I ſhall ſuggeſt ſomething by way of anſwer, both *negatively* and poſitively. *Wilkins.*—I ſhall ſhew what this image of God in man is, *negatively*, by ſhewing wherein it does not conſiſt; and poſitively, by ſhewing wherein it does. *South.*

NE'GATORY, *adj.* [*negatoire,* Fr.] Belonging to negation. *Cotgrave, and Sherwood.*

NEGAU', a town of the duchy of Stiria: four miles ſouth-ſouth-weſt of Rackeſburg.

NE'GELSTADT, a town of Saxony, in Thuringia: ten miles ſouth-eaſt of Muhlhauſen.

NE'GEM, a town of Arabia, in the province of Hedsjas: thirty miles weſt of Gioraſh.

NEGESABAD', a town of Perſia, in the province of Irak: twenty miles north-weſt of Iſpahan.

NEG'GADE. See NEKKADE.

NEG'ILA, a tolerably well-built town, or rather village, of Egypt, on the eaſt bank of the Nile, within one mile of Zaira.

NEG'INOTH, *ſ.* A Hebrew word which occurs in the titles of ſome of the Pſalms, as Pſ. lxvii. It ſignifies "ſtringed inſtruments of muſic, to be played on by the fingers of women muſicians;" and the titles of theſe pſalms, where this word is found, may be thus tranſlated, "A Pſalm of David to the maſter of muſic who preſides over the ſtringed inſtruments." *Brown's Dict. of the Bible.*

NEG'KO, the name of a claſs of iſlands in the Eaſtern Pacific Ocean, between Kamtſchatka and America, containing the ſixteen that are called *Andreanoſskie Iſlands;* which in a general view may be regarded as the ſame with the Fox Iſlands, being the weſtern part of the ſame range; or the Andrenovian Iſles, in a more limited ſenſe, may be conſidered as forming a group of ſixteen or more iſles, about 500 miles to the ſouth-eaſt of Beering's Iſland. Theſe, in both reſpects, are a kind of elongation of the American promontory of Alaſka; and in the moſt recent maps of Ruſſia they are comprehended under one general name of Aleutian iſles.

NEGOIES'ZTI, a town of Walachia, on the Artiſch: twenty-five miles ſouth-eaſt of Buchareſt.

To NEGLEC'T, *v. a.* [*neglectus,* Lat.] To omit by careleſſneſs.—Where honour due and reverence none *neglects. Milton's P. L.*—To treat with ſcornful heedleſſneſs.—If he *neglect* to hear them, tell it unto the church. *St. Matthew.*

This my long ſuffering, and my day of grace,
Thoſe who *neglect* and ſcorn ſhall never taſte. *Milton.*

To poſtpone;

I have been long a ſleeper; but I truſt
My abſence doth *neglect* no great deſign,
Which by my preſence might have been concluded.
Shakeſpeare.

NEGLEC'T, *ſ.* [*neglectus,* Lat.] Inſtance of inattention. Careleſs treatment; ſcornful inattention.—I have perceived a moſt faint *neglect* of late, which I have rather blamed as my own jealous curioſity, than as a very pretence or purpoſe of unkindneſs. *Shakeſpeare's K. Lear.*—Negligence; frequency of neglect:

Age breeds *neglect* in all, and actions
Remote in time, like things remote in place,
Are not beheld at half their greatneſs. *Denham.*

State of being unregarded:

Reſcue my poor remains from vile *neglect,*
With virgin honours let my herſe be deck't. *Prior.*

NEGLEC'TER, *ſ.* One who neglects.—Chriſtianity has backed all its precepts with eternal life, and eternal death, to the performers or *neglecters* of them. *South.*

NEGLECT'FUL, *adj.* Heedleſs; careleſs; inattentive: with *of.*—Though the Romans had no great genius for trade, yet they were not entirely *neglectful of* it. *Arbuthnot on Coins.*—Treating with indifference.—If the father careſs them when they do well, ſhew a cold and *neglectful* countenance to them upon doing ill, it will make them ſenſible of the difference. *Locke on Education.*

NEGLECT'FULLY, *adv.* With heedleſs inattention; careleſs indifference. *Not uſed.*

NEGLECT'INGLY, *adv.* Careleſsly; inattentively:

I then, all ſmarting with my wounds, being cold,
Out of my grief and my impatience
To be ſo peſter'd with a popinjay,
Anſwer'd *neglectingly,* I know not what. *Shakeſpeare.*

NEGLEC'TION, *ſ.* The ſtate of being negligent:

Sleeping *neglection* doth betray to loſs
The conqueſts of our ſcarce-cold conqueror. *Shakeſpeare.*

NEGLEC'TIVE, *adj.* Inattentive to; regardleſs of.—An abſolute forbearance, and *neglective* forgetfulneſs of all earthly comforts. *Bp. Hall's Remains.*—It is a wonder they ſhould be ſo *neglective* of their own children. *Fuller's Holy War,* p. 202.—I wanted not probabilities ſufficient to raiſe jealouſies in any king's heart, not wholly ſtupid, and *neglective* of the publick peace. *King Charles.*

NEGLIGE'E, *ſ.* [French.] A ſort of faſhionable gown, which the ladies continued to wear in the early part of the preſent reign.—He fancied twenty Cupids prepared for execution in every folding of her white *negligee. Goldſmith's Eſſays.*—The ſtory is an antique ſtatue painted white and red, fringed and dreſſed in a *negligee* made by a Yorkſhire mantua-maker. *Gray's Letters.*

NEG'LIGENCE, *ſ.* [Fr. from *negligentia,* Latin.] Habit of omitting by heedleſſneſs, or of acting careleſsly.—By a thorough contempt of little excellencies, he is perfectly maſter of them. This temper of mind leaves him under no neceſſity of ſtudying his air; and he has this peculiar diſtinction, that his *negligence* is unaffected. *Spectator.*—Inſtance of neglect:

She let it drop by *negligence;*
And, to the advantage, I being here, took't up. *Shakeſp.*

NEG'LIGENT, *adj.* Careleſs; heedleſs; habitually inattentive.—My ſons, be not now *negligent;* for the Lord hath choſen you to ſtand before him. 2 *Chron.* xxix. 11.—Careleſs of any particular: with *of* before a noun.—Her daughters ſee her great zeal for religion; but then they ſee an equal earneſtneſs for all ſorts of finery. They ſee ſhe is not *negligent of* her devotion; but then they ſee her more careful to preſerve her complexion. *Law.*—We have been *negligent* in not hearing his voice. *Baruch,* i. 19.—Scornfully regardleſs:

Let ſtubborn pride poſſeſs thee long,
And be thou *negligent* of fame;
With ev'ry muſe to grace thy ſong,
May'ſt thou deſpiſe a poet's name. *Swift's Miſcel.*

NEG'LIGENTLY, *adv.* Careleſsly; heedleſsly; without exactneſs.—Inſects have voluntary motion, and therefore imagination; and, whereas ſome of the ancients have ſaid that their motion is indeterminate, and their imagination indefinite, it is *negligently* obſerved; for ants go right forwards to their hills, and bees know the way to their hives. *Bacon's Nat. Hiſt.*

Of all our elder plays,
This and Philaſter have the loudeſt fame;
Great are their faults, and glorious is their flame.
In both our Engliſh genius is expreſt,
Lofty and bold, but *negligently* dreſt. *Waller.*

With ſcornful inattention.

NEGO'CE, *ſ.* [French, from *negotium*, Lat.] Buſineſs; trade; management of affairs. *Scott.*

NEGO'CIABLE, &c. See Negotiable, &c.

NEGOM'BO, or Nigumbo, the largeſt village in the iſland of Ceylon, and containing, for its ſize, the greateſt number of inhabitants; built by the Portugueſe, and taken from them by the Dutch. It is ſituated on the ſea-coaſt in a highly-pictureſque ſpot, accounted one of the healthieſt in the iſland; twenty-four miles north of Columbo. Many Dutch reſide in this place, on account of the pleaſantneſs and ſalubrity of its ſituation; and warehouſes and gardens are ſcattered up and down in delightful groves of cocoa-nut and other trees. The Dutch built a fort here for the protection of the cinnamon-cutters, as a conſiderable quantity of that ſpice grows in the adjacent diſtrict. Store-houſes are alſo erected in the fort, where the cinnamon, after being dried, is lodged, till an opportunity is offered for conveying it to Columbo. This cinnamon is reckoned equal in quality to any in the iſland. The fort is not ſtrong, but is well defended; and within it are three long rows of buildings, which ſerve for barracks to the troops, and for ſtorehouſes to the cinnamon. The command is given to a field-officer, who acts as preſident of the *Landraed*, or civil court, appointed to hear and determine differences among the natives, and take cognizance of the crimes committed within this diſtrict. Theſe civil courts exiſted under the Dutch, and have been eſtabliſhed by governor North at all the military poſts and commands round the iſland.

Negombo is very advantageouſly ſituated for carrying on inland trade, particularly with Columbo and its neighbourhood, as a branch of the Mulivaddy here runs into the ſea. At the mouth of it is a ſmall harbour, where ſloops and other ſmall veſſels often put in and land their cargoes, which are afterwards conveyed up the Mulivaddy, and then, by canals which communicate with it, to the lake which ſkirts the town of Columbo. One of the principal articles exported by the inland communications conſiſts of fiſh: this trade is conſidered as the property of government, and is annually farmed out for ſeveral thouſand rupees. A Moor, or Malabar, is uſually the farmer, who is allowed to diſpoſe of the fiſh caught here; and he employs all the boats belonging to the place. The people employed are compelled, by the authority of government, to fiſh every day, when the weather permits, Sundays and particular feſtivals excepted. The fiſh, as ſoon as caught, are put into boats, conveyed by the rivers and canals during the night, and ſold in the bazaars next morning. The fiſhermen go into the water up to the middle of the thighs, carrying in their hands a round baſket, of a conical form, reſembling our wire rat-traps without the bottom. This they plunge down into the water as far as the mud. They ſoon find whether they have caught a fiſh by its beating againſt the ſides of the baſket; and, when this is the caſe, they thruſt down their arm through the hole at the top and take hold of it. They ſtring the fiſh, as they catch them, on a piece of rattan or bamboo, which is faſtened round their waiſt. While the operation of plunging the baſket is continued, other perſons are employed in ſplaſhing the water all around, in order to make the fiſh go towards the baſket. Beſides the produce of the fiſheries, other ſorts of traffic are carried on at Negombo to a conſiderable amount. The inhabitants conſiſt of Moors, Malabars, and Indian-Portugueſe. The Engliſh landed at Negombo in February 1796, and made themſelves maſters of it without oppoſition; and the whole iſland of Ceylon was confirmed to us by the peace of Amiens. Lat. 7. 12. N. lon. 79. 48. E.

NEGO'TIABLE, *adj.* [*negotium*, Lat.] Capable of being negotiated.

NEGO'TIANT, *ſ.* [from *negotiate.*] A negotiator; one employed to treat with others.—Ambaſſadours, *negotiants*, and generally all other miniſters of mean fortune, in converſation with princes and ſuperiours muſt uſe great reſpect. *Raleigh's Arts of Emp.*

To NEGO'TIATE, *v. n.* [*negocier*, Fr. from *negotium*, Lat.] To have intercourſe or buſineſs; to traffic; to treat; whether of public affairs, or private matters.—Have you any commiſſion from your lord to *negotiate* with my face? *Shakeſpeare's Twelfth Night.*—She was a buſy *negotiating* woman, and in her withdrawing-chamber had the fortunate conſpiracy for the king againſt king Richard been hatched. *Bacon's Hen.* VII.—They that received the talents to *negotiate* with, did all of them, except one, make profit of them. *Hammond.*—A ſteward to embezzle thoſe goods he undertakes to manage; an embaſſador to betray his prince for whom he ſhould *negotiate;* are crimes that double their malignity from the quality of the actors. *Decay of Chr. Piety.*

To NEGO'TIATE, *v. a.* To manage; to conclude by treaty or agreement.—Lady ——— is gone into the country with her lord, to *negotiate*, at leiſure, their intended ſeparation. *Ld. Cheſterfield.*

NEGO'TIATING, *ſ.* The act of treating about public affairs.—It is a common error in *negotiating;* that, whereas men have many reaſons to perſuade, they ſtrive to uſe them all at once, which weakeneth them. *Bacon.*

NEGOTIA'TION, *ſ.* Treaty of buſineſs, whether public or private.—Oil is ſlow, ſmooth, and ſolid; ſo are Spaniards obſerved to be in their motion; though it be a queſtion yet unreſolved, whether their affected gravity and ſlowneſs in their *negotiations* have tended more to their prejudice or advantage. *Howard.*

NEGO'TIATOR, *ſ.* One employed to treat with others.—Thoſe who have defended the proceedings of our *negotiators* at Gertruydenberg, dwell much upon their zeal in endeavouring to work the French up to their demands; but ſay nothing to juſtify thoſe demands. *Swift.*

NEGO'TIATORY, *adj.* Uſed in buſineſs; appertaining to trade.

NEGO'TIATRIX, *ſ.* A female manager; a female who treats upon any buſineſs. *Aſh.*

NEGO'TIOUS, *adj.* Full of buſineſs. *Bailey.*

NEGRAI'S, an iſland near the ſouth-eaſt coaſt of Ava, in the mouth of the river Perſaim, belonging to the Birman empire, which includes the kingdoms of Ava and Pegu. The Engliſh had a factory in this iſland, chiefly for the purchaſe of teak-timber. This iſland was taken poſſeſſion of by the Engliſh, and a ſurvey made of it by a perſon named Weldon, in the year 1687; and in this iſland the government of Fort St. George eſtabliſhed a ſettlement. But it does not appear that much benefit was derived from the acquiſition. At a much later period, viz. about the year 1751, the Engliſh again took poſſeſſion of the Negrais; but their affairs were not conducted with prudence, and the ſettlement continued in a ſtate of wavering ferment. The truth is, that the Engliſh ſettlers repeatedly took part againſt the Birmans in their conteſt with the rebellious Peguers. In 1757, Negrais was neglected, though not abandoned. An Engliſh deputy from this iſland was admitted into the royal preſence; and, though the Birman monarch upbraided this deputy with the conduct of his countrymen in giving encouragement and protection to the diſaffected Peguers, he referred him to the Portugueſe interpreter and the

Birman governor of Perſaim for a ratification and final adjuſtment of the treaty. After ſome delay, an inſtrument was formally executed, conſiſting of nine articles. Some valuable commercial immunities were by theſe ceded to the India Company; the iſland of Negrais was granted to them in perpetuity, together with a piece of ground oppoſite to the old town of Perſaim, for the purpoſe of erecting a factory; in return for which, the company engaged to pay an annual tribute, conſiſting of ordnance and military ſtores. The king ſanctioned this agreement. Negrais was, conſequently, continued in the poſſeſſion of the Engliſh, and the allotted portion of ground was actually meaſured. During the abſence of Alompea, the Birman ſovereign, upon a military expedition, the Peguers made an inſurrection, and the Engliſh at Negrais were ſuſpected of having been inſtrumental in producing it. Prejudices, of courſe, were excited againſt them, and they were repreſented to the Birman monarch as perfidious, hoſtile to his government, and conſpiring to effect its overthrow. The affairs of the Britiſh government in India did not allow the neceſſary ſupplies for the ſupport of the ſettlement at Negrais; and on the 14th of May, captain Newton, who was recalled, reached Bengal with 35 Europeans and 70 natives; having left a few perſons to take care of the teak-timber and materials for ſhip-building, that could not be conveniently removed, and to preſerve the right of poſſeſſion, if it ſhould be determined at any future time to re-eſtabliſh the ſettlement. Soon after this event, a deputy was ſent from Bengal to execute the buſineſs above mentioned, and to take up his reſidence. But, ſoon after this, under the pretext of a letter from the king, ſome Birmans entered the factory, aſſaſſinated Mr. Sotheby the reſident, Mr. Hops, and Mr. Briggs, with about 100 others attached to the ſettlement; and it was with ſome difficulty that two veſſels lying in the river eſcaped. Lat. 16. N. lon. 95. 32. E.

NEGRA'RO, a town of Italy, in the Veroneſe: ſix miles north of Verona.

NEGREPELIS'SE, a town of France, in the department of the Lot, on the Aveiron; formerly fortified by the proteſtants; but in 1621 the fortifications were deſtroyed. It is ſeven miles north-eaſt of Montauban, and twenty-one ſouth of Cahors. Lat. 44. 4. N. lon. 1. 36. E.

NE'GRIL HAR'BOUR (North), a bay on the weſt coaſt of Jamaica. Lat. 18. 22. N. lon. 78. 21. W.

NE'GRIL PO'INT (North), a cape on the weſt ſide of Orange Bay, in the iſland of Jamaica. Lat. 18. 23. N. lon. 78. 21. W.

NE'GRIL PO'INT (South), a cape on the weſt coaſt of Jamaica. Lat. 18. 17. N. lon. 78. 23. W.

NEGRIL'LOS, a cluſter of ſmall iſlands in the Pacific Ocean, near the coaſt of Peru. Lat. 4. 40. S.

NE'GRO, ſ. [Span. *negre*, Fr.] A blackmoor.—*Negroes*, tranſplanted into cold and flegmatic habitations, continue their hue in themſelves and their generations. *Brown.*

The origin of the negroes, and the cauſe of their remarkable difference from the reſt of the human ſpecies, has much perplexed the naturaliſts. Mr. Boyle has obſerved, that it cannot be produced by the heat of the climate; for, though the heat of the ſun may darken the colour of the ſkin, yet experience does not ſhow that it is ſufficient to produce blackneſs like that of the negroes.

In Africa itſelf, many nations of Ethiopia are not black; nor were there any blacks originally in the Weſt Indies. In many parts of Aſia under the ſame parallel with the African region inhabited by the blacks, the people are but tawny. He adds, that there are negroes in Africa beyond the ſouthern tropic; and that a river ſometimes parts nations, one of which is black, and the other only tawny. Dr. Barriere alleges that the gall of negroes is black, and, being mixed with their blood, is depoſited between the ſkin and ſcarf-ſkin. However, Dr. Mitchel of Virginia, in the Philoſophical Tranſactions, N° 476. has endeavoured by many learned arguments to prove, that the influence of the ſun in hot countries, and the manner of life of their inhabitants, are the remote cauſes of the colour of the Negroes, Indians, &c. Lord Kames, on the other hand, and ſuch philoſophers as he, whoſe genius and imagination are too lively to ſubmit to a dry and painful inveſtigation of facts, have contended that no phyſical cauſe is ſufficient to change the colour, and what we call the regular features, of white men, to the dark hue and deformity of the woolly-headed Negro. Their arguments have been examined with much acuteneſs and ingenuity by Dr. Stanhope Smith of New Jerſey, Dr. Hunter, and profeſſor Zimmerman, who have made it in a high degree probable, that the action of the ſun is the original and chief cauſe of the black colour, as well as diſtorted features, of the negro. See the article COMPLEXION, vol. iv.

True negroes are found in no quarter of the globe where the heat of the climate is not very great. They exiſt no-where but in the torrid zone, and only in three regions ſituated in that zone, viz. in Senegal, in Guinea, and on the weſtern ſhores of Africa, in Nubia, and the Papous-land, or what is called *New Guinea.* In all theſe regions the atmoſphere is ſcorching, and the heat exceſſive. The inhabitants of the north are whiteſt; and as we advance ſouthwards towards the line, and thoſe countries on which the ſun's rays fall more perpendicularly, the complexion gradually aſſumes a darker ſhade. And we believe that the reader, who ſhall candidly weigh in his own mind what we have ſaid under the article COMPLEXION, will agree with us, that the black colour in the torrid zone, the ſparſe criſp hair of the negroes, and the peculiarities of their features and form, proceed from cauſes altogether extrinſic; that they depend on local temperature and the ſtate of ſociety; and that they are as accidental as the various ſhades of colour which characteriſe the different nations of Europe. If the whites be conſidered as the ſtock whence all others have ſprung, it is eaſy to conceive how they have degenerated into negroes. Some have conjectured that the complete change may have taken place at the end of three centuries, whilſt others have thought that it could not be effected in leſs than double that period. Such conjectures can be formed from no certain data; and a much greater length of time is undoubtedly neceſſary before negroes, when tranſplanted into our temperate countries, can entirely loſe their black colour. By croſſing the breed with whites, every taint of the negro colour may be expelled, we believe, from the fifth generation; according to the following ſcale: 1. A white man with a negro woman, or a negro man with a white woman, produce a *mulatto*, half white and half black, or of a yellow-blackiſh colour, with black ſhort frizzled hair. 2. A white man with a mulatto woman, or a negro with a mulatto woman, produce a *quadroon*, three-fourths white and one-fourth black, or three-fourths black and one fourth white, or of a lighter yellow than the former: in America they give the name of *cabres* to thoſe who are deſcended from a black man and a mulatto woman, or a mulatto man and a black woman, who are three-fourths black and one-fourth white, and who are not ſo black as a negro, but blacker than a mulatto. 3. A white man with a quadroon woman, or a negro with a quadroon woman, produce a *meſtizo*, ſeven-eighths white and one-eighth black, or ſeven-eighths black and one-eighth white. 4. A white man with a meſtizo woman, or a negro with a meſtizo woman, produce, the one almoſt a perfect white, the other almoſt a perfect black, called a *quinteroon.* This is the laſt gradation, there being no viſible difference between the fair quinteroon and the whites; and the children of a white and a quinteroon conſider themſelves as free from all taint of the negro race.

But, without this intermixture of colours, we are aſſured, by travellers of undoubted credit, that the varieties among the blacks are equally numerous as thoſe among the whites. The blacks, as well as the whites, have their Tartars and Circaſſians. The natives of Guinea are extremely ugly, and have an inſufferable odour; thoſe of Sofala and of Moſambique are handſome, and have no bad ſmell. It is therefore neceſſary to divide the blacks into different races; and, we think, they may be reduced to three principal ones, that of the Negroes, that of the Caffres, and that of the Moors. Under the firſt we comprehend the blacks of Nubia, of Senegal, of Cape Verd, of Gambia, of Sierra Leona, of the Teeth and Gold Coaſts, of that of Juda, Benin, Loango, Congo, Angola, and of Benguela, as far as Cape Negro. Under the ſecond we may include all the nations from Cape Negro to the point of Africa where they aſſume the name of Hottentots, and all thoſe on the eaſtern coaſt, within the ſame latitude, as the territories of Natal, of Sofala, of Monomotapa, of Moſambique, of Melinda: the blacks of Madagaſcar, and of the neighbouring iſlands, are likewiſe Caffres, and not Negroes. Theſe two races of men have a greater reſemblance to each other in colour, than in their features, hair, ſkin, or ſmell: their manners and natural diſpoſitions are likewiſe very different. But the differences of colour are produced by the climate; while the peculiarities in features depend much upon the cuſtoms which take place among different nations; ſuch as flattening the noſe, pulling the hair off the eye-brows, lengthening the ears, thickening the lips, making the face broad, &c. Nothing can be a ſtronger proof of the influence of climate upon colour, than to find, under the ſame latitude, and diſtant from each other more than a thouſand leagues, people ſo ſimilar as the Nubians and natives of Senegal; and to find that the Hottentots, who muſt have originated from a black race, are the whiteſt people in Africa, for no other reaſon but becauſe their country is the coldeſt.

The Hottentots are well known, and deſcribed by almoſt every voyager. They are not properly Negroes, but Caffres; and would be of a tawny colour only, if they did not blacken their ſkin with greaſe and paint. Kolbe, who has given a very accurate deſcription of theſe people, regards them, however, as Negroes. He aſſures us, that they have all ſhort, black, frizzled, woolly, hair; and that he never ſaw a ſingle Hottentot with long hair. But this circumſtance is not ſufficient to make us conſider them as general negroes. In the firſt place, their colour is totally different; for Kolbe tells us, that they are olive, and never black, though they employ every method to darken the ſkin. In the next place it ſeems to be equally difficult to pronounce concerning their hair; for they never either comb or waſh it, but daily rub on their heads vaſt quantities of greaſe, ſoot, and duſt, which make their hair reſemble a fleece of wool ſtuffed with dirt. Beſides, their diſpoſitions are different from thoſe of the Negroes. The latter are ſedentary, love cleanlineſs, and are eaſily reconciled to ſervitude. The Hottentots, on the contrary, are a wandering independent people, extremely naſty, and jealous of their liberty. Theſe differences are more than ſufficient to convince us that the Hottentots are not of the ſame race with the Negroes. Gama, who firſt doubled the Cape of Good Hope, deſcribes the inhabitants as being black, of ſmall ſtature, and having a very diſagreeable aſpect; but he ſays not that they were naturally black like the negroes; and, doubtleſs, they only ſeemed black to him by the greaſe and ſoot with which they are perpetually covered. This voyager adds, that the ſound of their voice reſembled ſighing; that they were clothed in the ſkins of beaſts; and that their arms were bludgeons hardened with the fire, and pointed with the horn of ſome animal. It is apparent, therefore, that the Hottentots practiſe no arts in common with the Negroes. We are informed by the Dutch voyagers, that the ſavages to the north of the Cape are ſmaller than the Europeans; that their colour is a reddiſh brown; that they are extremely ugly, and endeavour to increaſe their blackneſs with paint; and that their hair reſembles that of a man who has hung long on a gibbet. In another place they tell us, that the Hottentots are of the colour of Mulattoes. Father Tachard ſays, that though, in general, their hair be woolly, like that of the Negroes, yet many of them have long hair, which floats upon their ſhoulders. He even adds, that ſome of them are almoſt as white as Europeans, but that they blacken their ſkin with greaſe, and the powder of a certain black ſtone; and that their women are naturally fair; but, to pleaſe their huſbands, they paint themſelves black. Ovington tells us, that the Hottentots are more tawny than the other Indians; that no people reſemble the Negroes more in colour and features, but that they are not ſo black; and their hair is not ſo criſped, nor their noſe ſo flat. From all theſe teſtimonies, it is plain that the Hottentots are not true Negroes, but blacks beginning to approach towards whiteneſs, as the Moors are whites approaching to blackneſs.

On a cloſer examination of the different people of which each of theſe races conſiſt, we ſhall find as many varieties among the blacks as among the whites, and an equal number of ſhades from brown to black, as we have found from brown to white in the other race.

We ſhall begin with the countries to the north of Senegal, and, proceeding along the coaſts, we ſhall conſider the different nations which have been recogniſed and deſcribed by travellers. In the firſt place, it is certain, that the natives of the Canary Iſlands are not Negroes; for we are aſſured by voyagers, that the ancient inhabitants of theſe iſlands were tall and well-made; that the women were handſome, and had fine hair; and that the inhabitants of the ſouthern parts of each iſland were more olive-coloured than thoſe on the northern parts. Duret, in the hiſtory of his voyage to Lima, informs us, that the ancient inhabitants of the iſland of Teneriffe were tall and robuſt, but meagre and tawny, and that moſt of them had flat noſes. Theſe people, we ſee, had nothing in common with the Negroes, except the flat noſe.

The natives of Africa, in the ſame latitude with theſe iſlands, are *Moors*, and very tawny; but, like the iſlanders, they evidently belong to the race of whites. The inhabitants of Cape Blanc are Moors, and follow the religion of Mahomet. Like the Arabs, they wander about from place to place, paſturing their horſes, camels, oxen, goats, and ſheep. They trade with the Negroes, who give them eight or ten ſlaves for a horſe, and two or three for a camel. It is from theſe Moors that we have the gum-arabic, which they diſſolve among their milk. They ſeldom eat fleſh, and never kill their cattle but when they are about to die of old age or diſeaſe.

The Moors are ſeparated from the Negroes by the river Senegal. They are only tawny; and live on the north ſide of this river; but the Negroes who inhabit the ſouth ſide of it are abſolutely black. The Moors lead a paſtoral life, and wander through the country; but the Negroes are ſedentary, and dwell in villages. The former are free and independent; the latter are the ſlaves of tyrants, who oppreſs them. The Moors are ſmall, meagre, and have a puſillanimous aſpect; but they are ſly and ingenious. The Negroes, on the contrary, are large, plump, and well-made; but they are ſimple and ſtupid. In fine, the country inhabited by the Moors conſiſts of barren ſands, where verdure appears only in very few places. But the Negro-country is rich, fertile in paſture, and produces millet, and trees which are always green, but few of them bear fruit fit for food.

In ſome places, both on the north and ſouth of the river Senegal, there is a ſpecies of men called Foulies, who ſeem to form the ſhade between the Moors and Negroes, and who are perhaps Mulattoes produced by a mixture of the two nations. Theſe Foulies are not entirely black like the Negroes; but they are much browner than the Moors, and hold the middle rank between the two. They are likewiſe more advanced in civilization than the Negroes; they follow the religion of Mahomet, and are hoſpitable to ſtrangers. See FOULAH, vol. vii.

The Cape-de-Verd iſlands are peopled with Mulattoes, ſprung from the Portugueſe who firſt ſettled there and the Negroes whom they found on theſe iſlands. They are called Copper-coloured Negroes, becauſe, though they reſemble the Negroes in their features, they are leſs black, or rather yellowiſh. They are handſome and ingenious, but extremely indolent and idle. They live chiefly by hunting and fiſhing. They train their dogs to kill the wild goats with which the iſlands abound.

The firſt genuine Negroes we meet with are thoſe on the ſouthern banks of the Senegal. Theſe people, as well as thoſe who inhabit the country comprehended between this river and that of Gambia, call themſelves JALOFFS. See vol. x. p. 675.

It is a general practice among the Negro women, when travelling, to carry their children on their backs. Some have aſcribed the flat noſe and big bellies of the Negroes to this cauſe: the mother, in raiſing the child by ſudden jerks, makes the child's noſe ſtrike againſt her back; and the child, to avoid theſe frequent blows, keeps its head as far back as poſſible, by puſhing its belly forward. Their hair is black and criſped, like curled wool. It is by the hair and the colour that they chiefly differ from other men; for their features are not, perhaps, ſo different from thoſe of the Europeans as the Tartarian viſage differs from that of a Frenchmen. Father du Tertre affirms, that, if moſt of the Negroes are flat-noſed, it is owing to a general practice of the mothers, who depreſs the noſes of their children as ſoon as they come into the world, and ſqueeze their lips to make them thick; and that thoſe children, who chance to eſcape theſe operations, have elevated noſes, thin lips, and as fine features as the Europeans. This remark, however, is only applicable to the Negroes of Senegal, who are the moſt handſome and beſt-formed of all the race. Among all the other Negroes, flat noſes and thick lips ſeem to be features beſtowed on them by nature; theſe, inſtead of deformities, are regarded as marks of beauty, and ſupplied by art when they happen to be denied by nature.

The Negroes of the iſland of Goree, like thoſe on the banks of the Senegal, are well made and extremely black. They are ſo fond of a black ſhining complexion, that they deſpiſe ſuch as want this perfection, in the ſame manner as tawny men are deſpiſed by the Europeans. Though ſtrong and robuſt, they are extremely indolent, and cultivate neither corn, wines, nor fruits. Fiſh and millet are their chief articles of food; and they ſeldom eat fleſh. They compare the Europeans to horſes, becauſe they eat herbs. They believe their country to be the fineſt in the univerſe; and that they are the handſomeſt men in the world, becauſe they are the blackeſt.

In the interior part of the ſouth ſide of Senegal, the country is rich and fertile, but the climate is ſo extremely hot, that the warmeſt ſummers in Europe are colder than the winters in Senegal. Here the inhabitants lead a paſtoral life, and are ſtill found in their native ſimplicity. They are the darkeſt and beſt-formed Negroes in the world. The males go ſtark naked; but the females wear a ſhort apron made of the bark of trees, cut into a kind of ornamental net-work, and tied round their middle. The better ſort alſo wear a ſkin deſcending from the waiſt. They are upon the whole a fine race of people, tall, and well-proportioned, with regular handſome features. Their hair is black, and finely frizzled; their eyes large, very black, and ſparkling; their teeth beautifully white, and their average ſtature above five feet ten inches high. The women in general are much ſmaller, but are extremely well made, of a pleaſing aſpect, familiar, and extremely amorous. Their form is altogether ſo round, regular, and pleaſing, that in Europe they would be conſidered perfect beauties, could their colour be converted to as delicate a white, as it is now a fine, ſmooth, ſoft, ſhining, jet black. The weapon principally uſed by the men, is a *maſſue*, or a ſhort javelin, which they throw with amazing force, and with ſuch expertneſs and accuracy as to be certain of killing an animal, though in full ſpeed, at the diſtance of fifty or ſixty yards. The figures of the Senegal Negro, male and female, on the annexed Plate, are taken from correct drawings made on the ſpot, and they exhibit a juſt delineation of the blackeſt and handſomeſt Negroes in the univerſe.

Though the Negroes of Sierra Leone are not altogether ſo black as thoſe of Senegal, they are not, however, as Struys alleges, of a reddiſh or tawny colour. Like the Guinea Negroes, they are of a black leſs deep than the natives of Senegal. The general cuſtom among the Negroes of Guinea and Sierra Leone, of painting their bodies with red and other colours, might deceive Struys. They likewiſe paint a ring round their eyes with white, yellow, or red, and make rays of different colours upon their faces; and, many of them cut, upon their ſkins, figures of plants and of animals. Both men and women keep their heads uncovered: and they ſhave or cut their hair, which is very ſhort, in various modes. They wear ear-rings made of teeth, ſhells, horns, bits of wood, &c. which weigh three or four ounces. Some of them pierce their noſtrils or their upper lip, for the purpoſe of ſuſpending ſimilar ornaments. Their garments conſiſt of a kind of apron made of the bark of a tree, covered with apes' ſkins; and to theſe ſkins they fix ſmall bells. They ſleep upon bullruſh mats: they eat fiſh, or fleſh when they can procure it; but yams and bananas are their principal food. They have no paſſion but for their women, and no inclination to activity or labour. Their houſes are wretched huts. They often continue to live in wild and barren places, though in the neighbourhood of rich valleys, hills covered with trees, green and fertile fields, interſected in the moſt delightful manner with rivers and brooks. But their indolence makes them inſenſible to every pleaſure of this nature.

Though the Guinea Negroes enjoy good health, and have vigorous conſtitutions, they ſeldom reach old age. A Negro of fifty years is a very old man. Their premature commerce with the women is, perhaps, the cauſe of the ſhortneſs of their lives.

The iſlands of St. Thomas, of Annobona, &c. are inhabited by Negroes ſimilar to thoſe on the neighbouring continent; but their numbers are few; becauſe the Europeans have chaſed them off, and retained only ſuch as they reduced to ſlavery. Both men and women go naked, except a ſmall apron round their middle. Mandelſlo alleges, that the Europeans, who ſettled in the iſland of St. Thomas, which is but a degree and a half from the equator, preſerve their whiteneſs till the third generation; and he ſeems to inſinuate that they turn black after that period. But it is not probable that this change can be ſo ſuddenly effected.

The Negroes on the coaſts of Juda and Arada are leſs black than thoſe of Senegal, Guinea, and Congo. They prefer the fleſh of dogs to all other meat, a roaſted dog being generally the firſt diſh preſented at their feaſts. This taſte is not peculiar to the Negroes; the ſavages of North America, and ſome Tartarian nations, are equally fond of dogs' fleſh. The Tartars are even ſaid to caſtrate dogs, in order to fatten them and improve their fleſh.

Pigafetta, and Drake who ſeems to copy him verbatim, inform us, that the Negroes of Congo are black, but leſs ſo than thoſe of Senegal. Their hair is generally black and criſped, though in ſome it is red: the men are of a middle ſtature; in ſome, the eyes are brown; in others they are of a ſea-green colour: their lips are not ſo thick as thoſe of other Negroes; and their features very much reſemble thoſe of the Europeans.

The Negroes of Senegal, of Gambia, of Cape-de-Verd, of Angola, and of Congo, are of a finer black than thoſe of the coaſts of Juda, Iſſigni, Arada, and the adjacent provinces. When in health, they are all black; but, when ſick, they become yellowiſh, or copper-coloured. In the French iſlands, the Negroes of Angola are preferred, for their ſtrength, to thoſe of Cape-de-Verd; but, when heated, they ſmell ſo rank, that the places they paſs through are infected with the ſtench for more than a quarter of an hour. The Cape-de-Verd Negroes do not ſmell ſo ſtrong as thoſe of Angola; they have alſo a finer and blacker ſkin; they are better made; their features are ſofter, and their diſpoſitions are more gentle. The Negroes of Guinea are very proper for cultivating the ground, and other laborious offices. Thoſe of Senegal are not ſo ſtrong; but they are more ingenious, and better adapted for domeſtic ſervices. Father Charlevoix tells us, that the Senegal Negroes are the moſt handſome, moſt docile, and beſt ſuited for domeſtic uſes; that the Bambarras are larger, but that the Aradas are beſt acquainted with the culture of the earth; that the Congos are the ſmalleſt in ſize, and excellent fiſhers, but that they are much addicted to deſertion; and that the Creole Negroes, from whatever nations they derive their origin, retain nothing of their parents but the colour; they are more ingenious, rational, and dexterous, but more ſlothful and debauched, than the African Negroes.

It appears, then, that the exiſtence of negroes is confined to thoſe parts of the earth where all the neceſſary circumſtances concur in producing a conſtant and exceſſive heat. This heat is ſo neceſſary, not only to the production, but even to the preſervation, of negroes, that it has been remarked in our Weſt-India iſlands, where the heat, though great, is not comparable to that of Senegal, that the negro-infants are ſo liable to be affected by impreſſions from the air, that the proprietors are obliged to keep them, for the firſt nine days after birth, in cloſe warm chambers. If theſe precautions be neglected, and the children expoſed to the air immediately after birth, they are likely to be affected with a tetanus, or locked-jaw, which proves fatal, becauſe it deprives them of the power of taking nouriſhment. This precaution is, however, too often neglected, as a vaſt number of infant-negroes ſtill periſh yearly in the Weſt-India iſlands of a locked-jaw.

When we conſider that the majority of negroes groan under the cruelleſt ſlavery, both in their own country and in every other where they are to be found in conſiderable numbers, it can excite no ſurpriſe that they are in general accuſed of being treacherous, cruel, and vindictive. Such are the caprices of their tyrants at home, that they could not preſerve their own lives, or the lives of their families for any length of time, but by a perpetual vigilance, which muſt neceſſarily degenerate, firſt into cunning, afterwards into treachery; and it is not conceivable that habits formed in Africa ſhould be inſtantly thrown off in the Weſt-Indies, where they are the property of men whom ſome of them muſt conſider as a different race of beings.

But the truth is, that the ill qualities of the negroes have been greatly exaggerated. Mr. Edwards, in his valuable Hiſtory of the Weſt-Indies, aſſures us that the Mandingo negroes diſplay ſuch gentleneſs of diſpoſition and demeanour, as would ſeem the reſult of early education and diſcipline, were it not that, generally ſpeaking, they are more prone to theft than any of the African tribes. It has been ſuppoſed that this propenſity, among other vices, is natural to a ſtate of ſlavery, which degrades and corrupts the human mind in a deplorable manner; but why the Mandingoes ſhould have become more vicious in this reſpect than the reſt of the natives of Africa in the ſame condition of life, is a queſtion he cannot anſwer. Mr. Park has given his teſtimony to the amiable character of the Mandingo Negroes; ſee the article Africa, vol. i. p. 181. and further under the word Mandingo, vol. iv. We ſhall proceed to mention the characteriſtic peculiarities of ſome other varieties of Negroes which are met with in the Weſt-Indies, taking Mr. Bryan Edwards as our guide.

The circumſtances which diſtinguiſh the Koromantyn or Gold-Coaſt Negroes from all others, are firmneſs both of body and mind; a ferocіouſneſs of diſpoſition; but withal, activity, courage, and a ſtubbornneſs, or what an ancient Roman would have deemed an elevation of ſoul, which prompts them to enterpriſes of difficulty and danger, and enables them to meet death, in its moſt horrid ſhape, with fortitude or indifference. They ſometimes take to labour with great promptitude and alacrity, and have conſtitutions well adapted for it; for many of them have undoubtedly been ſlaves in Africa. But, as the Gold-Coaſt is inhabited by various tribes which are engaged in perpetual warfare and hoſtility with each other, there cannot be a doubt that many of the captives taken in battle, and ſold in the European ſettlements, were of free condition in their native country, and perhaps the owners of ſlaves themſelves. It is not wonderful that ſuch men ſhould endeavour, even by means the moſt deſperate, to regain the freedom of which they have been deprived. One cannot ſurely but lament, that a people thus naturally intrepid, ſhould be ſunk into ſo deplorable a ſtate of barbarity and ſuperſtition; and that their ſpirits ſhould ever be broken down by the yoke of ſlavery. Whatever may be alleged concerning their ferociouſneſs and implacability in their preſent notions of right and wrong, they poſſeſs qualities which are capable of, and well deſerve, cultivation and improvement.

Very different from the Koromantyns, are the negroes imported from the Bight of Benin, and known in the Weſt-Indies by the name of Eboes. So great is their conſtitutional timidity and deſpondency of mind, as to occaſion them very frequently to ſeek, in a voluntary death, a refuge from their own melancholy reflections. They require therefore the gentleſt and mildeſt treatment to reconcile them to their ſituation; but, if their confidence be once obtained, they manifeſt as great fidelity, affection, and gratitude, as can reaſonably be expected from men in a ſtate of ſlavery. The females of this nation are better labourers than the men, probably from having been more hardly treated in Africa.

The natives of Whidah, who, in the Weſt-Indies, are generally called *Papaws*, are unqueſtionably the moſt docile and beſt-diſpoſed ſlaves that are imported from any part of Africa. Without the fierce and ſavage manners of the Koromantyn negroes, they are alſo happily exempt from the timid and deſponding temper of the Eboes. The cheerful acquieſcence with which theſe people apply to the labours of the field, and their conſtitutional aptitude for ſuch employment, ariſe, without doubt, from the great attention paid to agriculture in their native country. Boſman ſpeaks with rapture of the improved ſtate of the ſoil, the number of villages, and the induſtry, riches, and obliging manners, of the natives. He obſerves, however, that they are much greater thieves than thoſe of the Gold-Coaſt; and very unlike them in another reſpect, namely, in the dread of pain, and the apprehenſion of death. They are, ſays he, ſo very apprehenſive of death, that they are unwilling to hear it mentioned, for fear *that* alone ſhould haſten their end; and no man dares to ſpeak of death in the preſence of the king, or any great man, under the penalty of ſuffering it himſelf, as a puniſhment for his preſumption. He relates, further, that they are addicted to gaming beyond any people of Africa. All theſe propenſities are obſervable in the character of the Papaws in a ſtate of ſlavery in the Weſt-Indies. That puniſhment which excites the Koromantyn to rebel, and drives the Ebo to ſuicide, is received by the Papaws as the chaſtiſement of legal authority, to which it is their duty to ſubmit patiently. The caſe ſeems to be, that the generality of theſe people are in a ſtate of abſolute ſlavery in Africa, and, having been habituated to a life of labour, they ſubmit to a change of ſituation with little reluctance.

Having recited ſuch obſervations as occurred to him on contemplating the various tribes of negroes from each other, Mr. Edwards thus eſtimates their general character, influenced as they are by circumſtances which ſoon efface the native and original impreſſions which diſtinguiſh one nation from another when newly imported into the Weſt Indies. "Notwithſtanding what has been related of the firmneſs and courage of the natives of the Gold-Coaſt, it is certain that the negroes in general in our iſlands (ſuch of them at leaſt as have been any length of time in a ſtate of ſervitude) are of a diſtruſtful and cowardly diſpoſition. So degrading is the nature of ſlavery, that fortitude of mind is loſt as free agency is reſtrained. To the ſame cauſe probably muſt be imputed their propenſity to conceal or violate the truth; which is ſo general, that the vice of falſehood is one of the moſt prominent features in their character. If a negro is aſked even an indifferent queſtion by his maſter, he ſeldom gives an immediate reply; but, affecting not to underſtand what is ſaid, compels a repetition of the queſtion, that he may have time to conſider, not what is the true anſwer, but what is the moſt politic one for him to give. The proneneſs obſervable in many of them to the vice of theft has already been noticed; and I am afraid that evil communication makes it almoſt general. It is no eaſy matter, I confeſs, to diſcriminate thoſe circumſtances which are the reſult of proximate cauſes, from thoſe which are the effects of national cuſtoms and early habits in ſavage life; but I am afraid that cowardice and diſſimulation have been the properties of ſlavery in all ages, and will continue to be ſo till the end of the world. It is a ſituation that neceſſarily ſuppreſſes many of the beſt affections of the human heart. If it calls forth any latent virtues, they are thoſe of ſympathy and compaſſion towards perſons in the ſame condition of life; and accordingly we find that the negroes in general are ſtrongly attached to their countrymen, but, above all, to ſuch of their companions as came in the ſame ſhip with them from Africa. This is a ſtriking circumſtance: the term *ſhipmate* is underſtood among them as ſignifying a relationſhip of the moſt endearing nature; perhaps as recalling the time when the ſufferers were cut off together from their common country and kindred, and awakening reciprocal ſympathy from the remembrance of mutual affliction. But their benevolence, with a very few exceptions, extends no further. The ſofter virtues are ſeldom found in the boſom of the enſlaved African. Give him ſufficient authority, and he becomes the moſt remorſeleſs of tyrants. Of all the degrees of wretchedneſs endured by the ſons of men, the greateſt, aſſuredly, is the miſery which is felt by thoſe who are unhappily doomed to be the ſlaves of ſlaves; a moſt unnatural relation, which ſometimes takes place in the ſugar-plantations. The ſame obſervation may be made concerning their conduct towards the animal creation. Their treatment of cattle under their direction is brutal beyond belief: even the uſeful and ſocial qualities of the dog ſecure to him no kind uſage from an African maſter. One of the moſt pleaſing traits in their character is the reſpect and attention which they pay to their aged countrymen. The whole body of negroes on a plantation muſt be reduced to a deplorable ſtate of wretchedneſs, if, at any time, they ſuffer their aged companions to want the common neceſſaries of life, or even many of its comforts, as far as they can procure them. They ſeem to be actuated on theſe occaſions by a kind of involuntary impulſe, operating as a primitive law of nature, which ſcorns to wait the cold dictates of reaſon: among them, it is the exerciſe of a common duty, which courts no obſervation, and looks for no applauſe."

As the colour, and features, and moral qualities, of the negroes may be thus eaſily accounted for by the influence of climate and the modes of ſavage life, ſo there is good reaſon to believe that their intellectual endowments are equal to thoſe of the whites who have been found in the ſame circumſtances. Of thoſe imitative arts in which perfection can be attained only in an improved ſtate of ſociety, it is natural to ſuppoſe that they have but little knowledge; but the fabric and colours of the Guinea cloths are a proof of their native ingenuity. In the Weſt Indies many of them are expert carpenters, ſome watchmakers, and one or two have ſucceſsfully practiſed phyſic; whilſt others have figured both in Latin and in Engliſh poetry; ſo that we cannot doubt but that "God, who, made the world, hath made of one blood all nations of men," and animated them with minds equally rational.

Seeing, then, that we are all derived from one common parent, is it not barbarous and inhuman to make perpetual ſlaves of our fellow-creatures, merely becauſe they differ from us in colour, and are leſs informed in the arts and ſubtilties of life? To thoſe foreign nations who ſtill perſiſt in the unnatural trade of bargaining for human fleſh, and conſigning their innocent but unfortunate brethren to eternal ſervitude and miſery, we may addreſs the words of a fine writer: "Let avarice defend it as it may, there is an honeſt reluctance in humanity, which will ever revolt againſt buying and ſelling our own ſpecies, and regarding them as our cattle, or our wealth and poſſeſſions." Happy are we to ſay, that this commerce was interdicted to Britiſh ſubjects from the 1ſt of May, 1807. and our brethren of America aboliſhed it from and after the 1ſt of January, 1808.

By the treaty of Paris, (May 30, 1814.) upon the abdication of the emperor Napoleon, the ſlave-trade was to ceaſe in France within five years. Napoleon, upon his return in March following, ordered it immediately to ceaſe; and the king, upon his return to power, was obliged to confirm this decree, though it was not made an article in the treaty of Nov. 20, 1815.

Ferdinand VII. king of Spain, ſigned a treaty with Great Britain on the 23d of September, 1817, whereby, in conſideration of the ſum of 400,000l. he agreed to aboliſh the ſlave-trade from and after the 30th of May, 1820. The money has been paid by Great Britain; and it remains to be ſeen if the treaty will be fulfilled.

William king of the Netherlands has engaged, by a treaty ſigned May 4, 1818, to aboliſh the ſlave-trade within eight months from that date.

Portugal has ſigned a convention with the Britiſh government for the abolition of the ſlave-trade north of the equator; and the king has publiſhed a royal *alvara*, or law, dated Rio Janeiro, May 6, 1818, to enforce the articles of that convention. The following are ſome of its proviſions: "All perſons, of whatſoever quality or condition, who ſhall proceed to fit out or prepare veſſels for the traffic in ſlaves in any part of the coaſt of Africa lying north of the equator, ſhall incur the penalty of the loſs of the ſlaves, who ſhall be *declared free*, with a deſtination herein afterwards mentioned. The veſſels engaged in the traffic ſhall be confiſcated, with all their tackle and appurtenances, together with the cargo, of whatever it conſiſt, which ſhall be on-board on account of the owners or freighters of ſuch veſſel, and the owners of ſuch ſlaves. The officers of ſuch veſſel, to wit, the captain or maſter, the pilot and ſupercargo, ſhall be baniſhed for five years to Moſambique; and each ſhall pay a fine equivalent to the pay or other intereſts which he was to gain by the adventure. Policies of inſurance cannot be made on ſuch veſſels, or their cargoes; and, if they are made, the aſſurers who ſhall knowingly make them ſhall be condemned in triple the amount of the ſtipulated premium. The ſlaves declared free by the above article, ſhall be delivered up to the judge of the diſtrict before whom the condemnation ſhall take place, *to ſerve, as freed men, for fourteen years*, in any public ſervice of the navy, the fortreſſes, agriculture, or public offices, as may be thought moſt convenient, being for that purpoſe enrolled in the reſpective ſtations; or ſhall be hired out to individuals of known property and probity, who ſhall be bound to ſupport, clothe, and inſtruct, them, teaching them ſome handicraft or labour that may be agreed upon, during the ſtipulated period. The time of ſervitude may be ſhortened by two or more years, according as the good conduct of theſe perſons may entitle them to the enjoyment of full freedom; &c."

Some laudable but partial attempts have been made to aboliſh ſlavery itſelf; but this muſt be a work of time, and can hardly be expected to be accompliſhed during the preſent generation. The Quakers ſet the example, and throughout the continent of America ſince 1787 they employ no ſlaves, but keep free blacks in their pay. In the year 1795, Mr. David Barclay, of London, a Quaker we ſuppoſe, emancipated twenty-eight ſlaves which had accidentally come into his poſſeſſion, and ſent them to Philadelphia to learn trades; (ſee Monthly Mag. for Nov. 1814.)—Slavery was prohibited at Madras, by an act of the governor and council, ſo early as the year 1802; and, in the beginning of 1805, the marquis of Welleſley aboliſhed ſlavery throughout Britiſh India.—The Dutch planters of Ceylon have adopted ſome judicious regulations for the gradual abolition of ſlavery; all children born of ſlaves, after the 12th of Auguſt, 1816, are to be conſidered free, but to remain in their maſter's houſe, and ſerve him for board, lodging, and clothing; the males till they are fourteen, and the females till twelve; after which, to be fully emancipated.

Accidental Varieties among Negroes.—We have ſpoken of the permanent varieties among the blacks, as the proper Negroes, the Caffres, the Hottentots, and the Moors. The Albinos, or white negroes, have alſo been deſcribed and repreſented in our firſt volume. It remains to notice a few occaſional or accidental varieties, ſports of nature as it were; which we ſhall collect from the volumes of the Philoſophical Tranſactions.

The firſt is of a negro-boy who was dappled in ſeveral parts of his body with white ſpots. This boy was about eleven years of age when the account was taken: he was born in the upper parts of Rappahanock-river, in Virginia. His father and mother were both perfect negroes; and the boy himſelf, till he became to be three years old, was in all reſpects like other black children; and then, without any diſtemper, he began to have ſeveral little white ſpecks on his neck and breaſt, which increaſed with his age, both in number and ſize; "ſo that now, from the upper part of the neck, where ſome of his wool is become white, down to his knees, he is every-where dappled with white ſpots, ſome of which are broader than the palm of a man's hand. They are very white, at leaſt equal to the ſkin of the faireſt lady; but of a paler white, and do not ſhow fleſh and blood ſo lively through them as the ſkin of white people; the reaſon of which may be, that the ſkin of a negro is much thicker. His face, arms, and legs, are perfectly black." Phil. Tranſ. for 1697.

The next caſe we ſhall ſelect is that of a remarkable alteration of colour in a negro-woman. "A cook-maid in Col. Barnes's family, a native of Virginia, about forty years of age, remarkably healthy, of a ſtrong and robuſt conſtitution, had her ſkin originally as dark as that of the moſt ſwarthy African; but, about fifteen years before, that membrane in the parts next adjoining to the finger-nails became white. Her mouth ſoon underwent the ſame change, and the phenomenon had ſince continued gradually to extend itſelf over the whole body; ſo that every part of its ſurface became more or leſs the ſubject of this ſurpriſing alteration. At the above date, (1759.) four parts in five of the ſkin were white, ſmooth, and tranſparent, as in a fair European, elegantly ſhowing the ramifications of the ſubjacent blood-veſſels: the parts remaining ſooty, daily loſt their blackneſs, and in ſome meaſure partook of the prevailing colour; ſo that a very few years would, in all probability, induce a total change. The neck and back, along the courſe of the vertebræ, maintained their priſtine hue the moſt, and in ſome ſpots proclaimed their original ſtate: the head, face, and breaſt, with belly, legs, arms, and thighs, were almoſt wholly white; the axillæ party-coloured; the ſkin of theſe parts, as far as white, being covered with white hair; where dark, with black. Her face and breaſt, as often as the paſſions anger, ſhame, &c. had been excited in her, had been immediately obſerved to glow with bluſhes; as alſo when, in purſuance of her buſineſs, ſhe had been expoſed to the action of the fire on theſe parts, ſome freckles had made their appearance. The woman declared, that, excepting about ſeventeen years before, when ſhe was delivered of a child, ſhe had never been afflicted by any complaint of twenty-four hours continuance; and that ſhe had never been ſubject to any cutaneous diſorder, nor made uſe of any external application, by which this phenomenon might be produced." Tranſmitted by Mr. James Bate, ſurgeon in Maryland; and printed in the Phil. Tranſ. vol. li.

In the year 1765, a white negro-boy was exhibited before the Royal Society; and the report was written by James Parſons, M. D. F. R. S. It appeared that the parents of this boy were brought, among many others, above 300 miles from an inland country, to the Gold Coaſt in Africa, and put on-board a ſhip bound to Virginia, where they arrived in the year 1755. They became the property of Col. Benj. Chambers, of Cumberland-county, Pennſylvania; and were then employed on an eſtate of the colonel's in Virginia; but the colonel lived with his family in Pennſylvania, where he ſold the boy to his then maſter; of which fact, Dr. P. ſaw the bill of ſale that paſſed between the colonel and him. The parents were perfectly black, and both very young when landed; and the woman, being aſked how far ſhe was gone with child, anſwered, ſo as to be underſtood to mean, that ſhe was with child ſomething more than ſix moons, and that this was her firſt pregnancy. They alſo declared, that they had never ſeen a white perſon before they came to the ſhore where Europeans where employed in buying black ſlaves. The owner of this boy was Mr. James Hill Clark, whom Dr. P. informed of what had paſſed between Dr. Franklin and himſelf on this ſubject; for he paid him a viſit, and in the courſe of converſation he informed him, that, while he was in England before, he received a letter from his lady, in which was ſome of the wool of a white negro-child's head, by way of curioſity; and when he mentioned it to Mr. Clark, he aſſured him that this very boy was ſhown in Pennſylvania as a great rarity: and that, to his knowledge, the wool ſent in the letter was taken from this child's head. He was born about ſix or ſeven weeks after his parents landed in Virginia, in the year 1755; and was purchaſed by Mr. Hill Clark of Col. Chambers in 1764, ſo that he appeared not to be quite ten years old; and his mother had had two children after, who were both as black as the parents.

Now, though this deviation of colour in the child, from the contrary hue of both parents, was very ſingular, and ſomething preternatural, yet inſtances of the ſame kind had happened before. There was one about four years before in London, which was a white girl, ſomething younger than this boy, but exactly ſimilar in colour, wool, &c. and was ſaid, by the perſon who made a ſhow of her, to have been the offspring of a black father and mother. Dr. P. did not go to ſee her; but he read an advertiſement concerning her, ſeveral times in the public papers, wherein ſhe was called a white-negro-girl; and was informed by thoſe that ſaw her, that ſhe anſwered the deſcription in the advertiſement very truly. She was ſhown in town for ſome months every day.

To this caſe he ſubjoins two others, one of which he ſaw himſelf, and the other was given him by a gentleman of undoubted veracity; which, though they differ in ſome circumſtances from the above, yet have ſo much relation to each other, as will prevent their being cenſured as digreſſions from the ſubject. The firſt was of a black man who married a white woman in York ſeveral years ago; of which he had an account from an eye-witneſs. She ſoon proved with child, and in due time brought forth one entirely black, and in every particular of colour and features reſembling the father, without the leaſt participation from the mother. This was thought a very ſingular caſe, becauſe people naturally expect the iſſue of ſuch a marriage would be tawny; which indeed is the uſual effect produced by the congreſs of black and white perſons. The ſecond caſe was of a black man, ſervant to a gentleman who lived in the neighbourhood of Gray's Inn. He married a white woman, who lived in the ſame family; and, when ſhe proved with child, took a lodging for her in Gray's-Inn-lane; when ſhe was at her full time, the maſter had buſineſs out of town, and took his man with him, and did not return till ten or twelve days after this woman was delivered of a girl, which was as fair a child to look at as any born of white parents, and her features exactly like the mother's. The black at his return was much diſturbed at the appearance of the child, and ſwore it was not his: but the nurſe who attended the lying-in woman ſoon ſatisfied him: for ſhe undreſſed the infant, and ſhowed him the right buttock and thigh, which were as black as the father, and reconciled him immediately to both mother and child. Dr. P. was informed of the fact, and went to the place, where he examined the child, and found it true; this was in the ſpring of the year 1747, as his notes ſpecified which he took on the ſpot.

Wiſhing to add as much as poſſible to this account, he took an opportunity of inquiring about matters of this ſort, in a family who came to live in Red Lion-ſquare not many months before, and had lived in Virginia ſeveral years in a conſpicuous light; and was informed by the lady of the family of the following curious particulars: About nineteen years previous, in a ſmall plantation near to that of this family, which belonged to a widow, two of her ſlaves, both black, were married; one of them brought forth a white girl, which this lady ſaw very often. When the poor woman was told the child was like the children of white people, ſhe was in great dread of her huſband, declaring, at the ſame time, that ſhe never had any thing to do with a white man in her life; and therefore begged they would keep the place dark, that he might not ſee it. When he came to aſk her how ſhe did, he wanted to ſee the child, and wondered why the room was ſhut up, as it was not uſual; the woman's fears increaſed when he had it brought into the light; but while he looked at it he ſeemed highly pleaſed, returned the child, and behaved with extraordinary tenderneſs. She imagined he diſſembled his reſentment till ſhe ſhould be able to go about, and that then he would leave her; but in a few days he ſaid to her, "You are afraid of me, and therefore keep the room dark, becauſe my child is white; but I love it the better for that: for my own father was a white man, though my grandfather and grandmother were as black as you and myſelf; and, although we came from a place where no white people ever were ſeen, yet there was always a white child in every family that was related to us."

NE'GRO PO'INT lies on the eaſt coaſt of Braſil, three leagues ſouth-ſouth-eaſt from the Rio Grande, and fourteen from Cape St. Rocque.

NE'GRO RIV'ER. See Rio Negro.

NE'GROES (Iſland of), or Buglas, one of the Philippine Iſlands, in the Eaſtern Indian Sea; about 240 miles in circumference. It is fruitful in rice, in which the inhabitants pay tribute; and it ſupplies Sebu, and other adjacent parts. The mountains are inhabited by blacks with curled hair; who, by reaſon of their numbers, gave their name to the iſland, and who live in a kind of brutal liberty, like their forefathers. The land is divided among them, ſome living on the tops of mountains, others on the ſide; but they fight fiercely among themſelves, if one party attempts to invade the territory of the other. This happens very often; for it is their cuſtom, that thoſe above can have but one wife, and her they muſt take by force from thoſe below; and ſo on the contrary, thoſe below from thoſe above; conſequently every day there is bloodſhed, and ſome perſons killed, commonly with poiſoned arrows: theſe are headed either with iron, flint, bone, or wood hardened in the fire. At the mouths of the river dwell a third ſort of blacks, who have no commerce with the other two, and are ſuch enemies to the Spaniards, that they give them no quarter; nevertheleſs, if the iſland happens to be invaded by pirates, they run with their arms to defend it; and, this ſervice being performed, they retire: they behave in this manner, as looking upon themſelves to be the old lords of the iſland. The Biſays, it is true, as an acknowledgment for having been permitted by them to ſettle there, ſupply them with rice; and the blacks requite them with wax. Theſe Biſays live in the plain, and they are moſt numerous on the weſt ſide, under the direction of the fathers of the ſociety. In the iſland there are about 3000 that pay tribute, governed by a corregidore, and a military commander. Here grows a great deal of cacao, originally brought to the Philippines from New Spain, as alſo much rice, which the mountains produce without watering. Lat. 10. 10. N. lon. 122. 30. E.

NE'GROLAND, or Nigrit'ia, a name given to a vaſt extent of country, in the interior parts of Africa, and comprehending many great and populous kingdoms, extending from the 7th degree of weſt longitude to the 27th eaſt, and from the 10th to the 25th north latitude; being bounded on the north by Sahara and the mountains which ſeparate it from the ſtates of Barbary, on the eaſt by Nubia and Abyſſinia, on the ſouth by Guinea and countries unknown, and on the weſt by Guinea. The country to which the geographers of Europe have given the name Nigritia is called by the Arabs *Soudân*, and by the natives *Aafnou;* two words of ſimilar import, that, like the European appellation, expreſs the Land of Blacks, and like that too are applied to a part only of the region to which their meaning ſo obviouſly belongs; yet, even in this limited ſenſe, the word Soudân is often variouſly employed: for, while ſome of the Africans reſtrict it to the empire of Caſhna, which is ſituated to the north of the Niger; others extend it, with indefinite comprehenſion, to the negro-ſtates on the ſouth of the river. Of this vaſt country, little is known more than the names of ſome of the towns and kingdoms of which it is compoſed. Some parts, particularly on the river Niger, are repreſented as exceedingly fertile; other parts are repreſented as ſandy and deſert. That it is exceedingly populous, is evident, from the great ſupply of ſlaves it has ſo long afforded to the European traders.

NE'GROPONT, an iſland in the Grecian Archipelago: ninety-ſix miles long, and from eight to ſixteen broad. This iſland was anciently called *Eubœa;* afterwards, from its capital, *Egrippos*, whence the word Negropont ſeems to be derived. In the moſt ancient times, it was called *Chalcodotis*, or *Calus Macra*, or *Macris*. It is divided from the continent by a ſtrait, formerly called *Euripus*, but now ſo narrow at the capital, that a galley can hardly paſs through; and it is joined to the continent by a bridge, being thought to have been once ſo by an iſthmus. The Euripus was anciently much celebrated for the ſtated irregularities of its motions. The learned jeſuit Babin obſerves, that in the firſt eight days of the month, and from the 14th to the 20th, incluſively, and alſo in the three laſt days, it is regular both in its ebb and flood; but, on the other days of the lunar month, very irregular; the ebb and flood returning ſometimes 11, 12, 13, and 14, times, within 24 or 25 hours. This irregularity, which has baffled the reſearches both of ancients and moderns, gave riſe to a proverb among the Greeks. Such is the fertility of the level parts of this iſland, that it abounds in a very extraordinary manner in grain, wine, oil, and all kinds of excellent fruits. It has alſo ſeveral mountains, which, for a conſiderable part of the year, are covered with ſnow: of theſe, the higheſt is Oche. Among the capes, the moſt remarkable are Capo d'Oro, called Capo Chimi, Capo Figara, the ancient name of which was Caphareus, and Capo Liter, formerly Cenæum. In the firſt ages, when navigation was in its infancy, ſailing round the firſt of theſe capes was reckoned dangerous, from the many rocks and whirlpools along the coaſt. This iſland had formerly many conſiderable cities; but the only places now worth notice are Negropont and Caſtel Roſſo. It was taken from the Venetians in 1740, by Mahomet II. Lat. 38. to 39. 10. lon. 23. 10. to 24. 44. E.

NE'GROPONT, or Egripo, a ſeaport town on the weſt coaſt of the iſland of the ſame name, probably ſituated on the ruins of Chalcis, the ancient capital of the iſland. The admiral of Turkey, who is alſo governor of the iſland and the adjacent parts of Greece, reſides here; and the harbour is ſeldom without a fleet of galleys. It is alſo the ſee of a Greek biſhop. Lat. 38. 30. N. lon. 23. 54. E.

NEGUA'DA. See Nekkade'.

NEGUN'DO, ſ. in botany. See Vitex.

NE'GUS, ſ. A mixture of wine, water, ſugar, lemon, and nutmeg.—The mixture now called *negus* was invented in queen Anne's time by colonel Negus. *Malone's Life of Dryden.*

NEHALE'NIA, a goddeſs mentioned in Keyſler's Travels, "Diſſertatio de Dea Nehalenia, numine Walachrorum topico." Her qualities or attributes are not clearly made out. Gibſon on Camden's Britannia ſays ſhe was the goddeſs of chalk-workers.

NEHAVEN'D, a town of Perſia, in the province of Irak, celebrated for a battle between the caliph Omar and Jezdegird king of Perſia, in the year 638, in which the latter loſt his life and kingdom. Some ſuppoſe this town to have been built by Noah, and that it was firſt called *Nohavend:* ſixty miles ſouth of Hamadan, and 200 north-weſt of Iſpahan.

NE'HEIM, a town of Weſtphalia: ſeven miles north-north-weſt of Arenſberg, and forty-eight north-eaſt of Cologne.

NE'HEIM, or Ne'me, a town of Weſtphalia, in the biſhopric of Paderborn: twelve miles north-eaſt of Paderborn.

NEHEL'AMITE, [Heb. a dreamer.] The cognomen of Shemaiah the falſe prophet. *Jer.*

NEHEMI'AH, [Heb. conſolation,] an eminent and pious Jew, governor of Judah and Jeruſalem under Artaxerxes Longimanus, was born in the land of captivity, where he was promoted to the honourable poſt of cup-bearer to the king of Perſia. In that book of the Hebrew Scriptures which bears his name, and is generally allowed to have been written by him, (though it is ſometimes called the Second Book of Ezra,) we are told that he was the ſon of Hachaliah, but without any mention of the tribe to which he belonged. In Dr. Rees's Cyclopædia, he is called "the ſon of Helkiah of the tribe of Levi," but we know not upon what authority. Many are of opinion, that he was a deſcendant from a branch of the royal family of Judah; which hypotheſis is rendered probable from his high and confidential ſtation at the Perſian court. While he was in attendance upon the king at the palace of Shuſhan, B. C. 445, he received intelligence, by one of his nation who had lately come from Jeruſalem, of the ruinous and defenceleſs condition in which that city ſtill remained, notwithſtanding the many favours which the monarch had beſtowed upon Ezra, and the other Jews who had been permitted to return to the land of their forefathers; in conſequence of which they were expoſed to the predatory incurſions of their enemies, as well as to the contempt and reproach of their jealous neighbours. This account filled him with the deepeſt affliction, the marks of which were diſcernible on his countenance when his office next called him into the royal preſence. Upon the king's inquiring into the cauſe of his grief, Nehemiah took the opportunity of laying before him the diſtreſſed condition of his country, and humbly petitioned that he might be ſent with a royal commiſſion to remedy the evil. As the ſacred text informs us that queen Eſther was then ſitting with the king, it is moſt probable that ſhe ſupported this requeſt; which the monarch was pleaſed to grant. Accordingly, a royal decree was iſſued for re-building the walls and gates of Jeruſalem; and Nehemiah was empowered, with the commiſſion of governor of the province of Judea, to carry it into execution. At the ſame time orders were ſent to Sanballat, governor of Samaria, and to others of the king's officers on this ſide of the Euphrates, to furniſh him with what aſſiſtance he might require out of the royal treaſury, and all other neceſſary materials for his undertaking. The king alſo honoured Nehemiah with an eſcort of troops, to conduct him in ſafety to the country he was to govern. Theſe he appears to have diſmiſſed at ſome diſtance from Jeruſalem: for he entered that city in a private manner, and continued in it three days before he made public the appointment which he had received. During this interval, he privately took a ſurvey of the city and its walls; and, finding that their ruinous condition correſponded with the account which had been given him at Shuſhan, he ſummoned the heads of the people to meet him, to whom he opened his commiſſion, and declared his determination to put it in force without delay. Having received aſſurances of their willingneſs zealouſly to co-operate with him in his great deſign, he divided the whole body of the people into ſeveral companies, aſſigning to each the quarter where they were to work, but reſerving to himſelf the ſuperintendence and direction of the whole.

While Nehemiah was proceeding with this deſign, he had many obſtacles to encounter from the ſecret machinations of Sanballat, as well as the Moabites and Ammonites, to impede the work; to which they were excited, not only by their ancient enmity to the Jewiſh nation, but by the proſpect of being obliged to reſtore thoſe eſtates of the Jews which they had ſeized on during their captivity. They even went ſo far as to hire ſome treacherous Jews to diſcourage both the governor and people, with the ſpecious pretence that they were ſent from God to put a ſtop to the enterpriſe. This impoſture Nehemiah ſoon detected; but, ſuſpecting that thoſe enemies might reſort to forcible meaſures, when they found that their inſidious practices were of no avail, he ordered the people to arm themſelves, even while they were at work, placing guards at particular places for their defence, and trumpeters at convenient diſtances from each other to ſummon them to any ſpot where a hoſtile attack might be made.

One of the greateſt difficulties, however, which he had to remove, aroſe from the impoveriſhed and miſerable condition of the lower claſſes of the people, who were to bear the greateſt ſhare of the labour, but were by their circumſtances rendered unable, as well as indiſpoſed, to devote themſelves to the work. To this condition they had been reduced by the avarice of their richer brethren, who, taking advantage of their diſtreſſes on their return from captivity, had lent them money at exorbitant intereſt, and reduced them to the neceſſity of mortgaging their lands, and ſelling their ſons and daughters into ſervitude, in order to procure ſubſiſtence for themſelves and families. Nehemiah, when he became appriſed of this ſtate of things, called a general aſſembly of the people, in which he ſeverely reproached the wealthy Jews on account of the cruelty and illegality of their conduct; and, partly by perſuaſion, and partly by his own authority, obliged them to reſtore their ill-gotten property to the poor owners. Encouraged by this relief from oppreſſion, and the care which was taken of their neceſſary ſuſtenance, the people applied themſelves with ſuch zeal and ſpirit to their aſſigned taſks, that in fifty-two days the repair of the wall and gates of the city was completely finiſhed; after which a public dedication of them was celebrated with great ſolemnity, by the prieſts and levites, and all the people.

Having thus executed the principal buſineſs for which he obtained the king's permiſſion to proceed to Jeruſalem, Nehemiah appointed his brothers Hanani and Hananiah to be governors of the city, and returned, as is reaſonably ſuppoſed, into Perſia, to ſolicit a new and more extenſive commiſſion. His abſence, however, appears to have been but of ſhort duration; and, after reſuming the government, one of the firſt objects of his attention was the increaſe of the population of the city. With this view, he prevailed on the nobler and richer Jews to build houſes in it for their own reſidence; which encouraged many others voluntarily to follow their example. Of the reſt of the people every tenth family was taken by lot, till the city became ſo far rebuilt and inhabited, that it began to reſume ſomething of its former luſtre; and Herodotus, who ſaw it ſoon after this time, compares it, in the third book of his hiſtory, to Sardis, the metropolis of Aſia Minor. Nehemiah, likewiſe, had the genealogies of the people well examined into and clearly ſtated, not only for the ſake of their civil rights, that by knowing their tribes and families they might be directed where to take their poſſeſſions; but alſo for the ſake of the ſanctuary, that none might be admitted to officiate who were not of the tribe of Levi or family of Aaron.

While Nehemiah was thus occupied in civil matters, Ezra had completed his collection of the ſacred books, and was preparing himſelf and ſome other prieſts to read and explain them to the people at the approaching feaſt of trumpets. See the article Ezra. Nehemiah now returned a ſecond time to Shuſhan, after having enjoyed his government twelve years, during which he ſupported the dignity of his office with a very expenſive and hoſpitable magnificence, which he defrayed out of his own private-purſe, generouſly relinquiſhing the allowance from the province which had been granted to other governors. After ſpending five years at the Perſian court, the king nominated him once more to the government of Judah and Jeruſalem, with very extenſive powers. As ſoon as he came to Jeruſalem, he found that a number of flagrant abuſes had crept into the Jewiſh church and commonwealth during his abſence. The temple had been profaned; the ſabbath had become totally diſregarded; and divine worſhip had ceaſed, either in conſequence of the tithes and other dues for the maintenance of it being embezzled by the high-prieſt, or withheld through the avarice of the people. And what aggravated the criminality of the Jews was, that they had at that time among them the prophets Zechariah, Haggai, and Malachi, who rebuked them ſeverely for their miſconduct, and warned them of the dreadful puniſhments which it would bring upon them. All theſe abuſes Nehemiah employed himſelf in correcting, with zeal and vigour; and, to prevent the people from falling into them in future, either through ignorance or forgetfulneſs of the moſaic law, he made proviſion for the frequent reading and expoſition of it, not only in Jeruſalem, but alſo in all other cities and places in Judea, as had been formerly done with good ſucceſs by ſome of the pious princes of Judah. About the ſame time the Chaldee paraphraſes were introduced, in order to facilitate the knowledge of the moſaic law, and the other ſacred books, among thoſe who were unacquainted with the original Hebrew. How long Nehemiah lived after this reformation, which was finiſhed about the year 409 B. C. and whether he died in Judæa or in Perſia, we are not informed either in the Hebrew Scriptures or by Joſephus; only the latter ſays, that he died at an advanced age: and we may add, that, at the period when his book terminates, he muſt have been at leaſt ſeventy years old. *Book of Nehemiah. Joſeph. Ant. Jud.* lib. xi. *Prideaux's Connect.* book vi.

NEHENK', a river of Perſia, which unites with the Makſhid to form the Mend.

NEHERPOU'R, a town of Hindooſtan, in Oude: thirty-four miles north-eaſt of Manickpour.

NE'HILOTH, *ſ.* [Heb. to lead.] A kind of muſical inſtrument.

NEH'KON, a principality of Yemen, in Arabia, which is a ſmall diſtrict between Dsjof and Haſchid-u-Bekil. The ſheik is an independent prince, who poſſeſſes a few ſmall inconſiderable towns, with a fertile mountain, on which are many villages.

NEH'LA, a town of Hindooſtan, in the circar of Jyenagur: ten miles north of Jyenagur.

NEHOGATOOAN'NAH, a river of America, which runs into the Miſſiſſippi in lat. 44. 24. N. lon. 93. 5. W.

NEHOT'MAN, a town of Cochinchina, ſituated on a river which runs into the Chineſe Sea, forming a bay at its mouth. Lat. 12. 55. N. lon. 109. 9. E.

NEHOW'. See Oneehow.

NEHRIN'GEN, a town of Anterior Pomerania: five miles ſouth-ſouth-eaſt of Tribſee.

NEHRWA'LEH, a town of Hindooſtan, in Guzerat: twelve miles ſouth-eaſt of Puttan.

NEHUSH'TA, [Heb. a ſnake.] The name of a woman.

NEHUSH'TAN, *ſ.* [Hebrew.] The brazen ſerpent which Moſes lifted up in the wilderneſs, ſo called in contempt. 2 *Kings*.

NE'HWISCHDORF, a town of Bohemia, in the circle of Kaurzim: fourteen miles eaſt of Prague.

NEI'A, a town of Naples, in Calabria Citra: eight miles ſouth-weſt of Biſignano.

NEI'DA, a town of the duchy of Stiria: nine miles ſouth-eaſt of Hardeburg.

NEIDEGG', a town of Auſtria: eight miles weſt-ſouth-weſt of Sonneberg.

NEIDEK', a town of Bohemia in the circle of Elnbogen: eight miles ſouth of Joachimſtal.

NEI'DENAU, a town of Wurtemberg, on the Jaxt: nine miles north of Heilbronn, and twenty-three eaſt-ſouth-eaſt of Heidelberg.

NEI'DENBURG, a town of Pruſſia, in the province of Oberland: eighty miles ſouth of Königſberg, ſeventy-five eaſt of Culm. Lat. 53. 12. N. lon. 20. 23. E.

NEI'DENSTEIN, a town of Germany, in the principality of Heſſe: nine miles ſouth-weſt of Caſſel, and ſix eaſt of Naumburg. Lat. 51. 12. N. lon. 9. 15. E.

NEI'DERBRONN, a town of France, in the department of the Lower Rhine: ten miles ſouth-weſt of Weiſſemburg.

NEIF, *ſ.* [*nefi*, Icel. *naeve*, Dan. *neive* or *nieve*, Scottiſh; and ſo in the north of England.] Fiſt. It is likewiſe written *neaf*.—Sweet knight, I kiſs thy *neif*. *Shakeſpeare's Hen.* IV.—Reach me thy *neif*. *B. Jonſon's Poetaſter.*

NEIFE, *ſ.* [law Fr.] A woman born in villenage.—*Neife* is a woman that is bound, or a villain woman: but, if ſhe marry a freeman, ſhe is thereby made free. *Termes de la Ley.*

NEIFEL'DN, a town of Auſtria: ten miles ſouth-ſouth-eaſt of Aigen.

NEI'FFEN, or Neuffen, a town of Wurtemberg: ſeventeen miles ſouth-ſouth-eaſt of Stuttgart, and thirty eaſt of Altenſtaig. Lat. 48. 32. N. lon. 9. 25. E.

To NEIGH, *v. n.* [hnægan, Sax. *hinnio*, Lat.] To utter the voice of a horſe or mare.—They were as fed horſes, every one *neighed*. *Jer.* v. 8.

Note a wild and wanton herd,
Or race of youthful and unhandled colts,
Fetching mad bounds, bellowing and *neighing* loud.
Shakeſpeare.

NEIGH, *ſ.* The voice of a horſe.—It is the prince of palfreys; his *neigh* is like the bidding of a monarch, and his countenance enforces homage. *Shakeſpeare.*

NEIGH'BOUR, *ſ.* [nehȝebuꞃ, nehbuꞃ, Sax. from neh, nigh, and ȝebuꞃ, an inhabitant.] One who lives near to another:

A kid ſometimes for feſtivals he ſlew:
The choicer part was his ſick *neighbour's* due. *Harte.*

One who lives in familiarity with another; a word of civility:

Maſters, my good friends, mine honeſt *neighbours*,
Will you undo yourſelves? *Shakeſpeare's Macbeth.*

Intimate; confident:

The deep-revolving witty Buckingham
No more ſhall be the *neighbour* to my counſels. *Shakeſp.*

[In divinity.] One partaking of the ſame nature, and therefore entitled to good offices.—Sins againſt men are injuries; hurts, loſſes and damages, whereby our *neighbour*

bour is in his dignity, life, chaſtity, wealth, good name, or any way, juſtly offended, or by us hindred. *Perkins.*—The goſpel allows no ſuch term as a ſtranger; makes every man my *neighbour*. *Sprat's Serm.*

NEIGH'BOUR, *adj.* Near to another; adjoining; next; neighbouring.—I long'd the *neighbour* town to ſee. *Spenſer's Shep. Cal. Jan.*—God overthrew Sodom and Gomorrah, and the *neighbour* cities thereof. *Jer.* i. 40.—He ſent ſuch an addition of foot, as he could draw out of Oxford and the *neighbour* garriſons. *Clarendon.*

To NEIGH'BOUR, *v. a.* To adjoin to; to confine on. Theſe grow on the leiſurely-aſcending hills that *neighbour* the ſhore. *Sandys's Journey.*

Wholeſome berries thrive and ripen beſt,
Neighbour'd by fruit of baſer quality. *Shakeſp. Hen.* V.

To acquaint with; to make near to:

That being of ſo young days brought up with him,
And ſince ſo *neighbour'd* to his youth and haviour.
Shakeſpeare.

To NEIGH'BOUR, *v. n.* To inhabit the vicinity:

As a king's daughter, being in perſon ſought
Of divers princes who do *neighbour* near,
On none of them can fix a conſtant thought. *Davies.*

NEIGH'BOURHOOD, *ſ.* Place adjoining. One in the *neighbourhood* mortally ſick of the ſmall-pox, deſiring the doctor to come to him. *Fell.*

I could not bear
To leave thee in the *neighbourhood* of death,
But flew in all the haſte of love to find thee. *Addiſon.*

State of being near each other.—Conſider ſeveral ſtates in a *neighbourhood*; in order to preſerve peace between theſe ſtates, it is neceſſary they ſhould be formed into a balance. *Swift.*—Thoſe that live within reach of communication:

How ill mean *neighbourhood* your genius ſuits?
To live like Adam midſt an herd of brutes! *Harte.*

NEIGH'BOURING, *adj.* Near; within view:

Juſt as he ſpoke, I ſaw young Hodge
Come o'er a *neighb'ring* gate:
He ſeiz'd my hand, and cry'd, Dear girl,
I fear I've made you wait. *Vauxhall Song.*

NEIGH'BOURLINESS, *ſ.* State or quality of being neighbourly. *Scott.*

NEIGH'BOURLY, *adj.* Becoming a neighbour; kind; civil.—He ſteals my cuſtomers; twelve he has under bonds never to return; judge if this be *neighbourly* dealing. *Arbuthnot.*

The Woodberry ſo nigh and *neighbourly* doth live
With Abberley his friend. *Drayton.*

NEIGH'BOURLY, *adv.* With ſocial civility.—Being *neighbourly* admitted, by the courteſy of England, to hold poſſeſſions in our province, a country better than their own. *Milton's Obſerv. on the Articles of Peace.*

NEIGH'BOURSHIP, *ſ.* State of being near each other:

How happy are the dead, who quietly reſt
Beneath theſe ſtones! each by his kindred laid,
Still in a hallow'd *neighbourſhip* with thoſe
Who when alive his ſocial converſe ſhar'd.
Miſs Baillie's Series of Plays on the Paſſions.

NEIGH'ING, *ſ.* The voice of a horſe or mare.—The ſnorting of his horſes was heard from Dan: the whole land trembled at the ſound of the *neighing* of his ſtrong ones. *Jer.* viii. 16.

NEILD (James), an Engliſh gentleman, well known for his active benevolence in viſiting priſons, and doing every thing in his power to alleviate the diſtreſſes of their wretched inhabitants. A Memoir of his Life, written by himſelf, has been publiſhed with the Memoirs of Dr. Lettſom; and we ſhall copy ſuch parts of it as are neceſſary to convey a proper idea of the career of this follower of the benevolent Howard.

"I was born May 24, 1744, at Knutsford in Cheſhire, in the neighbourhood of which my family poſſeſſed ſome good eſtates. My father died when I was too young to retain the ſlighteſt remembrance of him, leaving myſelf, three brothers, and one ſiſter, to the care of our mother, who carried on the buſineſs of a linen-draper. She was a woman of merit and piety, and devoted herſelf to the bringing up, and virtuouſly educating, her children. I paſſed through the ordinary courſe of education at the town where I was born, with tolerable ſucceſs, but quitted it before I was thirteen, and went to live with my uncle, who farmed one of his own eſtates; with him I continued about two years; but, not liking the farming buſineſs, I ſolicited my mother to put me apprentice to ſome trade or profeſſion. She at length placed me with Mr. Hemming, the king's goldſmith. After a ſhort trial, I diſliked the buſineſs; but in this connexion I was enabled to chooſe for myſelf, and ſoon agreed with a jeweller. Having a mechanical turn, I had here ample ſcope to indulge it; and in the latter part of my apprenticeſhip made many curious articles, (one of which was a man of war in full ſail, with guns on-board, which I ſet in the head of a ring,) with which I waited upon ſeveral of the nobility and gentry who patronized genius; and among others, one of the vice-preſidents of the Society of Arts. Here I had frequent opportunities of meeting men of genius and learning, and of cultivating acquaintance which was of the greateſt ſervice to me afterwards. We had an old German in our ſhop, a good chemiſt, and he took great pleaſure in communicating knowledge to me; till, in one of my experiments, I had nearly deſtroyed myſelf, and blown up the workſhop. This put an end to my chemiſtry, in which the injudicious uſe of quickſilver had likewiſe done my nerves ſome injury. To the ſtated hours of work I generally added one or two daily; ſometimes learning to engrave; ſometimes to model; ſometimes to draw. I was extremely aſſiduous in whatever I began, but wanted patience to make myſelf perfect, before a freſh purſuit engaged my attention. I learned to fence tolerably well, and was very expert with the ſingle-ſtick.

In 1762, the young man, who had been my elder apprentice, got embarraſſed, and thrown into the King's Bench for debt. As ſoon as I was acquainted with his ſituation, I viſited him. There appeared nothing of what I conceived to be a priſon except the door of admiſſion, and high walls. There was a coffee-room and a tap-room, both filled with perſons drinking, though it was Sunday; and I had never before ſeen ſuch a number of profligates and proſtitutes, unabaſhed, without fears, without bluſhes. I thought, to be ſure, all the wicked people in London had got together there. With this impreſſion I haſtened to his mother's, who lived in Denmark-ſtreet, and told her to get him out directly, or he would be loſt, he would be ruined for ever. I viſited him ſeveral times during his confinement, which was not of long duration, nor did it ſeem any puniſhment: he felt much leſs for himſelf than I felt for him. What became of him after he was liberated I know not.

"My ideas of a priſon not being at all anſwered in the King's Bench, I procured admiſſion into Newgate, as far as the preſs-yard and the room extending over the ſtreet, which had a windmill-ventilator. In this room all the priſoners were in irons, and, amongſt them, one, a very ſtout man, ſeemingly at the point of death. The tap-room was lighted by lamps, though it was noon-day, and ſtruck me with horror: the ſhocking imprecations, and the rattling of the chains, the miſerable wretches ragged and drunk, frightened me ſo, that it was ſome time before I durſt venture into another priſon. I had gone alone into the tap, without knowing any perſon for whom I could inquire, and was glad to leave a ſhilling for a gallon of beer to ſecure my perſon from inſult.

" About ſix months afterwards, going down Wood-ſtreet when a felon was being taken to gaol, I went and peeped through the apertures of the wooden-grated door, and the turnkey ſaid I might go in: 'Yes, but, ſays I, will you let me out again?' He ſaid he would; ſo in I went, and, looking down a very long flight of ſteps, a cellar ſeemed full of people in irons, drinking; this was called the tap-room, but I had been ſo frightened in Newgate, that I durſt not venture down. So, putting three-pence into the turnkey's hand, for a pot of beer, was glad when I got into the ſtreet again. I concluded that all the gaols in which felons were confined were the ſame, and my curioſity would bring me to ſome miſchief; therefore dropt the purſuit.

" In 1766, being then in my twenty-ſecond year, I had a deſire to ſee my friends in Cheſhire; but I took the ſtage only to Derby, intending to paſs one day there, to ſee if the gaol was like thoſe in town. This gaol had not been long built, and the ſituation was both airy and healthy: there was a large dungeon in it down a few ſteps, but in every reſpect it was ſo much better than Newgate or Wood-ſtreet, that it gave me courage to viſit others before my return. The conveyance by the duke of Bridgewater's canal to Warrington coſt me but ſix-pence; and for about half-a-crown more I reached Liverpool, and from thence to Cheſter for a few ſhillings. As I had never ſeen either of theſe places, I carefully concealed the motive of my viſits, particularly from my uncle, who doated upon me, and made his will during my ſtay, in which he left me almoſt the whole of his property. At Liverpool there was the ſame promiſcuous intercourſe of the ſexes, the ſame drunkenneſs going forward, which I had obſerved in London; but the dungeons were worſe, and ſo very offenſive I did not ſtay to examine into them. In the Bridewell I ſaw a *ducking-ſtool* complete, the firſt I had ever ſeen. We had two at Knutsford. But the ſtandard in each, was all that remained in my memory. I never remembered them uſed; but this at Liverpool enables me to deſcribe it. A ſtandard was fixed for a long pole, at the extremity of which was faſtened a chair; on this the woman was placed, and ſouſed three times under water till almoſt ſuffocated. At Liverpool, the ſtandard was fixed in the court, and a bath made on purpoſe for ducking; but why in a priſon this wanton and dangerous ſeverity was exerciſed on *women*, and not on *men*, I could no-where learn. This mode of puniſhment ſeems formerly to have been general, for it is in the memory of perſons now (1806) living, when a machine of this kind was in the Green Park. This, however, was not the only cruel puniſhment uſed at this Bridewell, for the women were flogged weekly at the whipping-poſt.

" In the polite city of Cheſter I expected to find better priſons: a better police I certainly did. The keeper appeared to me to be a civil humane man; but, as I went down ſteps, near ſeven yards below the court, to viſit the dungeons, I almoſt now feel the horror with which I was then ſtruck. There were ſix of them, very ſmall, and as dark as pitch; three felons ſlept in each every night; not a breath of air but what was admitted through a ſmall hole in the door. The ſame drinking and intercourſe of the ſexes as in Liverpool and London. The dungeon of the North Gate was yet worſe than thoſe of the Caſtle; it was nearly as deep, and had fourteen inches of water in it. Theſe ſubterraneous places, which are totally dark, are beyond imagination horrid and dreadful. On my return to London I do not recollect viſiting any priſons; till, in 1768, I reviſited my native county, calling at Derby as before. My uncle died ſoon after I came down, having quitted the farming buſineſs in a ſhort time after I left him in 1760.

" I was now out of my apprenticeſhip, and had taken up my freedom of the city. This year I employed myſelf in embanking ſome meadow-land to protect my tenant from again ſuffering the great loſs which the floods of a preceding year had occaſioned. The large ſum of money requiſite to ſet up as a jeweller, made me heſitate whether I ſhould go into buſineſs or not. The firſt thing I did was to pay off the legacies and incumbrances on my father's eſtate, which I did by ſelling ſome detached property. My rental then was not ſufficient to ſupport me as a gentleman, and I returned to London to conſult my friends. They were unanimouſly in favour of trade, and their opinion was deciſive. In 1770 I ſettled in St. James's-ſtreet, and immediately made it known to thoſe ladies and gentlemen who, when I was an apprentice, had promiſed me their ſupport. At this time French faſhions were prevalent, and I thought a trip to Paris would give me a ſanction and advantage. My houſe was under the care of my excellent aunt, and I left my ſhop to the care of a jeweller with whom I had been long acquainted, and ſet out, accompanied by Mr. Thomas Evans, bookſeller, of King-ſtreet, Covent Garden. This gentleman could ſpeak French fluently, and had ſeveral correſpondents at Paris. On our arrival at Calais we went to ſee the priſon, and likewiſe at St. Omer's and Dunkirk, and the city-priſon at Lille; there were, I think, no priſoners in any of them. Some days afterwards, I viſited ſir William Burnaby, bart. who reſided there; but he was not willing to accompany me to the priſon in the Citadel, and I could not gain admittance. When we arrived at Paris, I got, through the intereſt of a bookſeller, admiſſion into a priſon called Fon l'Eveque, and Petit Chatelet. The dungeons were dreadful, and, I then thought, worſe than any I had ſeen in England. There were ſeveral priſoners in both, but I think not in irons. My recollection of them is, however, very imperfect. Colonel (afterwards ſir Eyre) Coote lodged in the ſame hotel with us, and I made application to ſee the Baſtille, but was unſucceſsful. Mr. Evans ſaid he believed I was priſon-mad, and that my impertinent curioſity would perhaps ſend us both to priſon: after this reproof I was ſilent on the ſubject. He however accompanied me to many of the *hoſpitals*, which appeared to be affectionately attended by ſome female religious order: and this I obſerved in the provincial gaols, which in my ſeveral viſits to France I viſited.

" Freſh imported from Paris, from whence I had brought many curious articles, my ſhop ſoon became viſited by carriages, and I found my buſineſs increaſe beyond my capital; but I found no difficulty in borrowing 500l. which, with the frugal management of my aunt in my houſehold concerns, ſoon opened flattering proſpects. In 1772 a ſermon was preached, on behalf of perſons impriſoned for ſmall debts, at which I was preſent. A general approbation of the idea was declared, and a few of us formed ourſelves into a committee, and viſited the priſons to ſearch out proper objects. The diſtreſs and extreme wretchedneſs to which we were eye-witneſſes, determined us to lay an account before the public, who inſtantly caught the flame, and enabled us to reach out the hand of pity to a very large number of miſerable ſufferers in confinement. In May 1773, the Society for the Relief and Diſcharge of Perſons impriſoned for Small Debts, was inſtituted or formed; and, in 1774, I was unanimouſly elected the treaſurer, [in which office he continued till his death, forty years after.] At this time I viſited ſome of the priſons in and about the metropolis, and reported upon them every week. The finances of our ſociety increaſed, and my viſits and inquiries extended; ſo that in a few years I had travelled over a very conſiderable part of the kingdom.

" In 1778 I married the eldeſt daughter of John Camden, of Batterſea, eſq. by whom I had two ſons and a daughter.

" In 1779 I went through Flanders into Germany; and, getting acquainted with colonel (afterwards general) Dalton, I was, through his intereſt, permitted to viſit the Maiſon de Force, at Ghent. This was, without exception, the beſt-planned and the beſt-regulated priſon I had ſeen before, or, I think, ſince. It is ſituated near a canal; the plan octagon; ſeparate courts for men-va-grants and men-criminals: one ſide is for women, and in the middle of their court is a baſon of water for waſhing the linen of the houſe; and a large wooden horſe, to ride by way of puniſhment. Their bed-rooms uniform, and in a range, ſomething like Chelſea Hoſpital; every range opens into a gallery, or lobby, which is open to the air of the court: the priſoner has a uniform clothing, with the number of his room. The work-rooms are on the ground-floor, and there were more than one hundred priſoners, with only one perſon to ſuperintend them; he was at one end of the room, with a deſk before him, and a large book, in which were entered the names of the priſoners, the crimes for which they were committed, the time of impriſonment, from one to twenty years, according to their crimes; the day the work was begun, the day it was finiſhed, the meaſure of the piece, the taſk due per day, obſervations, ſuch as ſick, lame, &c. &c. and deficiency of taſk, puniſhment, &c. &c. &c. Though this room was ſo crowded, not a word was ſpoken by any of the priſoners during the time we inſpected it; no noiſe or confuſion, all were ſilent and attentive to their work; in ſhort, it appeared a moſt noble inſtitution. A few years after, being at Ghent, I think in 1784, having no acquaintance there, I could not gain admiſſion; but was told the manufactory was deſtroyed, and the whole in a very bad ſtate. At Bruges the priſon is on a much ſmaller ſcale; ſome were employed in making clothes, and others in making ſaddles, bridles, &c. &c. for the army.

"In 1780 I had the honour of the king's commiſſion in a corps of volunteer infantry, in which I was actively employed till there was no further occaſion for our ſervices. In 1781 I viſited Warwick gaol, and in the dungeons caught the gaol fever, or diſtemper. Mr. Roe, the keeper, was too ill to accompany me, and ſent his turnkey: he died ſoon after; but his death was, I believe, accelerated by drinking. I did not recover for ſome time. This ſickneſs, and my young family, made me more cautious of entering dungeons, which had now become leſs neceſſary, from the labours of the immortal Howard, whoſe viſits and inquiries comprehended every claſs of priſoners, whilſt mine were particularly directed to the debtors: but I did not wholly abſtain from making remarks on felons, particularly in the dungeons of the two priſons at Cheſter and Liverpool.

"The acts which paſſed in conſequence of the benevolent Howard's Reports, produced an immediate and general reform in priſon-police, by the abolition of taps. Several new gaols were built, in which ſolitary cells ſupplied the place of dungeons; and, in many priſons, women were not loaded with irons. From this period to 1791 my viſits were leſs frequent, and extended to the country, as buſineſs would permit.

"This year I loſt a moſt amiable wife; my own health was rapidly on the decline, and my buſineſs increaſed beyond my abilities or power to manage. In 1792, having only two ſons to provide for, I retired from buſineſs with a very ample fortune; and, as my health became reſtored, re-commenced my priſon viſits and inquiries, reports of which (as far as related to debtors) I made regularly, at the meetings of the committee in Craven-ſtreet. In 1800, when the exceſſive dearneſs of proviſions and the difficulties of the poorer claſſes of the people required an extraordinary relief, the neceſſity of a general viſit and inquiry into the ſtate of all the gaols ſtruck me very forcibly. The two-penny loaf in London, Auguſt 1783, weighed 21 ounces: in March 1801, the two-penny loaf in London weighed only 6 ounces.

"In 1801, I publiſhed my firſt Account of Debtors, by which it appeared there were thirty-nine priſons in England and Wales which did not furniſh the *debtor* with any allowance whatever; and in theſe there were, in the month of April 1800, 427 perſons confined to this wretched ſtate of captivity. Lord Romney, as preſident of our ſociety, did me the honour of preſenting this book to the king, and his majeſty was pleaſed moſt graciouſly to receive it. The approbation with which it was honoured by the public, together with the very conſiderable benefactions to the Society for Relief of Perſons impriſoned for Small Debts in conſequence of it, induced me to publiſh a new and more copious edition, in 1802, and likewiſe extend my viſits to Scotland and Wales.

"As I kept a diary, ſo I wrote to my benevolent friend Dr. Lettſom an account of the moſt ſtriking occurrences; and to his ſuggeſtions alone the publiſhing my priſon-remarks owe their origin. It had been my conſtant practice in my various priſon-excurſions, during a period of thirty years, to wait upon the magiſtrates, particularly of cities and boroughs, and reſpectfully to repreſent what I ſaw amiſs in their gaols. I was always received with cordiality and kindneſs; and, as they were ſtruck with compaſſion at the recital, reform was determined upon, and reſolutions entered into; but, after a lapſe of eight or ten years, gueſs my ſurpriſe, when I found nothing done! So total and general a neglect muſt be produced by ſome cauſe. I inquired into it; and found many who were magiſtrates, from local ſituations, and before they were acquainted with its duties, were out of the commiſſion; others, whoſe active ſituations in commerce denied them time; ſome, who had large families, were afraid to venture *inſide* of the priſon; and many were numbered with the dead. Under theſe diſcouraging circumſtances I had almoſt deſpaired, when Providence raiſed up a man, by whoſe labour the cloud was diſpelled; and that life, hitherto ſpent uſeleſsly, became fruitful. If Howard owed any thing to Fothergill, I am in a ten-fold degree indebted to Dr. John Coakley Lettſom. He firſt ſuggeſted, nay, requeſted permiſſion to publiſh ſome of thoſe crude remarks, which I had ſent for his peruſal, and by which communication I had found a ſenſible relief: they were begun and continued without deſign; written in the hours of fatigue, laſſitude, ſickneſs, and the buſtle of inns; little calculated to appear before the public, except in matters of fact. Theſe remarks on priſons were introduced with a preface, which cauſed a general ſenſation, and brought a degree of celebrity on the Viſitor of Priſons he neither deſired or deſerved; whilſt it enriched his funds as treaſurer to the Society for Small Debts, in the ſum of 328*l.* 2*s.* 9*d.* evidently occaſioned by the reading the Gentleman's Magazine, in which they were inſerted.

"The benevolence of my friend did not reſt here; for, as he was no ſtranger to the *inſide* of the priſon-houſe, ſo did he frequently accompany me to thoſe abodes of guilt and miſery, and ſuggeſt what his profeſſional ſkill ſo well enabled him to do, to my great advantage, and the priſoners' comforts. Many new gaols are now (1806) building; and, from the alterations and improvements which have been making theſe four years, and are now daily making, the particulars of which my 'State of Priſons' will notice, my viſits will become leſs neceſſary. As ſoon as this work is publiſhed, and I can provide for my neceſſary abſence, I propoſe viſiting Ireland: and happy will the ſhort remaining period of my life be ſpent, if I can ſuggeſt to a brave and generous people any improvements in their priſon-police, and of which I am informed there is much need."

The Memoir here terminates, but not ſo the benevolent labours of Mr. Neild. His health did not, however, allow him to viſit Ireland as he intended; but he continued to inſpect the various priſons of England, Scotland, and Wales, and to ſuggeſt numerous improvements, both in regard to the conſtruction of the wards, and the internal management of theſe eſtabliſhments. In 1812 he publiſhed the "State of Priſons," above alluded to, in a large and very elegant quarto volume, with a portrait of the author. It is a work teeming with valuable information. Yet upon ſome occaſions the author ſeems to have been actuated with a deſire to find fault, and diſingenuouſly to conceal facts. An inſtance is given in the Gent. Mag. for Nov. 1805. p. 1019.

Mr. Neild continued his exertions, as treaſurer of the

Society for Small Debts, until the time of his death, which took place Feb. 16, 1814.

NE'ILSVILLE, a town of Virginia, with a poſt-office: 340 miles weſt of Waſhington.

NE'IMPHY, a town of Meckley: ninety-ſix miles ſouth-ſouth-eaſt of Munnypour.

NE'INDORF, a town of Holſtein: two miles north-eaſt of Lutkenborg.

NEINSCHE'NA, *ſ.* in botany. See ARUM.

NEIR IBN MAREND, a town of Arabia, in the province of Nedsjed: 110 miles north-eaſt of Mecca.

NEI'RA, one of the Banda Iſlands, and the firſt in rank, being the ſeat of government. It has a ſpacious and commodious harbour, but difficult to be entered. Ships anchor under the cannon of two forts. It ſupplies annually about 8000 pounds of nutmegs, and 2000 of mace. Here are two towns, one called the ſame as the iſland, the other Labetacka. Lat. 4. 8. S. lon. 130. 37. E.

NEISAPOU'R, NESSAPOUR, or NISABUR, a town of Perſia, in the province of Chorаſan: 150 miles north-weſt of Herat, and 365 north-eaſt of Iſpahan. Lat. 36. 20. N. lon. 57. 10. E.

NEI'SCHLOT, a town of Ruſſia, in the government of Viborg, on the Lake Saima: forty miles north of Viborg. Lat. 60. 15. N. lon. 28. 24. E.

NEI'SIDEL, a town of Auſtria: two miles north-north-eaſt of Siſtersdorff.

NEI'SIG, a town of Bavaria, in the biſhopric of Bamberg: fifteen miles north of Bamberg.

NEISS, a river of Weſtphalia, which runs into the Emmer, four miles ſouth-ſouth-eaſt of Blomberg, in the county of Lippe.

NEISSE, a river which riſes in the north part of Bohemia, ſoon after enters Luſatia, and paſſes by Hirſchfeld, Goritz, Rothenberg, Priebus, Forſte, Guben, &c. and enters the Oder about twelve miles north-eaſt from the latter town.

NEISSE, or NEYSSE, a principality of Sileſia, ſometimes, but improperly, called the Principality of Grotkau. This principality, which is environed by thoſe of Munſterberg, Brieg, Oppeln, and Jagerndorf, as alſo of Moravia and the county of Glatz, is one of the largeſt in all Sileſia; and, among the mediate principalities, the firſt. The ſouthern half of it is very hilly; but the northern half, as being leſs mountainous, is more fertile. The Neiſſe and Grotkau circles breed good horſes. The latter alſo yields tobacco, and in the former is a great number of iron-mills. Its largeſt river is the Neiſſe. The whole principality of Neiſſe contains under it eleven cities. It belongs to the king of Pruſſia, but that part which is contiguous to Moravia, is annexed to the crown of Bohemia. Though the Grotkau diſtrict of itſelf forms no duchy, nor any diſtinct principality, yet is the biſhop of Breſlau uſually ſtyled Prince of Neiſſe and Duke of Grotkau; and by virtue of this principality takes place of all the other princes in Sileſia.

NEISSE, or NEYSZE, capital of the above principality. It is a place of great ſtrength, and ſituated on the ſide of the river Neiſſe, on the oppoſite ſide of which is a Pruſſian fort, erected in 1743. The king appoints a governor and commandant here; but the prince-biſhop is poſſeſſed of the palace, with a treaſury, a court of juſtice, a demeſne, and a conſiſtorial office. This town was pillaged and deſtroyed in 1284, by duke Henry IV. In 1525, one-half of it was demoliſhed by fire. In 1642, it was taken by the Swedes; and in 1741 the Auſtrians, having laid ſiege to it, cauſed the ſuburbs to be ſet on fire; but, after the peace of Dreſden, in 1745, they were rebuilt, and a new ſuburb added, by the name of Friedrichſtadt, lying between Pruſſia Fort and the Neiſſe, in which is held a court, in his majeſty's name. It is 42 miles ſouth of Breſlau, and 115 eaſt of Prague. Lat. 52. 20. N. lon. 17. 13. E.

NEI'STIFT, a town of Auſtria; ſixteen miles ſouth-eaſt of Steyr.

NEI'STRIFFT, a town of Auſtria: eight miles ſouth-weſt of Sonneberg.

NEI'THER, *conj.* [napðeꞃ, naðæꞃ, Sax. *ne either.*] Not either. A particle uſed in the firſt branch of a negative ſentence, and anſwered by *nor. Johnſon.*—Improperly uſed when more than two things come under conſideration: as where Addiſon uſes "determined in his conduct *neither* by the dictates of his own conſcience, the ſuggeſtions of true honour, *nor* the principles of religion." He ſhould have either left out "the ſuggeſtions of true honour," or he ſhould have ſaid, "is not determined by the dictates of his own conſcience, the ſuggeſtions of true honour, or the principles of religion. *Bp. Hurd.*—We cannot think this a proper objection; for ſurely neither of three things is as eaſy to be conceived, and as fitly expreſſed, as neither of two things.—Men lived at home, *neither* intent upon any foreign merchandiſe, *nor* inquiſitive after the lives and fortunes of their neighbours. *Heylin.*

He was *neither* there *ne* here,
But clene out of himſelfe away,
That he n'ot wot to thinke or ſay. *Gower's Conf. Am.*

It is ſometimes the ſecond branch of a negative or prohibition to any ſentence.—Ye ſhall *not* eat of it, *neither* ſhall ye touch it. *Gen.* iii. 3.—This commandment ſtandeth *not* for a cypher, *neither* is it read and expounded in vain among Chriſtians. *White.*—Sometimes at the end of a ſentence it follows as a negative; and, though not very grammatically, yet emphatically, after another negative; in old Engliſh, two negatives denied.—If it be thought that it is the greatneſs of diſtance, whereby the ſound cannot be heard; we ſee that lightnings and coruſcations, near at hand, yield *no* ſound *neither. Bacon.*—Men come not to the knowledge of ideas which are thought innate till they come to the uſe of reaſon, *nor* then *neither. Locke.*

NEI'THER, *pronoun.* Not either; nor one nor other.—They lived with the friendſhip and equality of brethren, *neither* lord, *neither* ſlave to his brother; but independent of each other. *Locke.*

Which of them ſhall I take?
Both, one, or *neither? neither* can be enjoy'd
If both remain alive. *Shakeſpeare's K. Lear.*

NEI'TRA, a river of Hungary, which runs into the Danube five miles above Comorn.

NEI'TRA, a town of Hungary, on a river of the ſame name; the capital of a country, and the ſee of a biſhop. The water is unwholeſome, and the houſes low. It contains two convents and a college, and is defended by a caſtle. In the year 1619, the town and caſtle were taken by Bethlem Gabor; and in the year 1623, they were given up to the Turks, but recovered the following year: eleven miles eaſt of Serat, and thirty-four north of Gran.

NEI'TSERSOAK, an iſland near the weſt coaſt of Greenland. Lat. 63. 22. N. lon. 49. 10. W.

NEI'VA, a river of Ruſſia, which runs into the Tura thirty-four miles weſt of Tiumen.

NEIVAN'SKOI, a town of Ruſſia, in the province of Ekaterinburg, on the river Neiva, with conſiderable iron-works: forty miles weſt of Turinſk.

NEKA'IL, a town of Egypt, on the left bank of the Nile: four miles ſouth-ſouth-eaſt of Abutige.

NE'KER, with the Mahometans, the name of one of the two angels which are ſuppoſed to examine the ſouls of the departed.

NEK'KADE, NEG'ADE, or NEGUA'DA, a town of Egypt, on the weſt bank of the Nile, inhabited by Chriſtians; the ſee of a biſhop, whoſe dioceſe extends to the extremity of Egypt. The emerald-mines of Egypt are ſuppoſed to have been ſituated near this town: four miles ſouth-weſt of Kous. Lat. 25. 38. N. lon. 32. E.

NEKAVIKBAN', a town of Perſian Armenia: thirty-five miles ſouth-eaſt of Erivan.

NEK'KE, a town of Egypt, on the left bank of the Nile: four miles ſouth of Momflot.

NEK'OUBAN LAKE, a lake of Canada: twenty-four miles north-weſt of Quebec. Lat. 49. 55. N. lon. 75. W.

NEKRE'SE, a town of the principality of Georgia, in the province of Kaket: ſixty-five miles north-eaſt of Teflis.

NEK'SHAB, or KARSHI, a town of Grand Bukharia: ſixty miles eaſt of Bukharia. Lat. 39. 5. N. lon. 63. 40. E.

NE'LAM-MARI, *ſ.* in botany. See HEDYSARUM.

NE'LAM-PAREN'DA. See VIOLA.

NELCYN'DA, in ancient geography. See NELISURAM.—Alſo, a town of Arabia, near the mouth of the Red Sea; ſaid by Arrian to have been a commercial place.

NELD, *ſ.* [perhaps a poetical contraction of] Needle:

For thee fit weapons were
Thy *neld* and ſpindle, not a ſword and ſpear. *Fairfax.*

NELEVANGO'LE, a town of Hindooſtan, in Myſore: fifteen miles north-weſt of Bangalore.

NE'LEUS, a ſon of Neptune and Tyro. He was brother to Pelias, with whom he was expoſed by his mother, who wiſhed to conceal her infirmities from her father. They were preſerved and brought to Tyro, who had then married Cretheus king of Iolchos. After the death of Cretheus, Pelias and Neleus ſeized the kingdom of Iolchos, which belonged to Æſon, the lawful ſon of Tyro by the deceaſed monarch. After they had reigned for ſome time conjointly, Pelias expelled Neleus from Iolchos. Neleus came to Aphareus, king of Meſſenia, who treated him with kindneſs, and permitted him to build a city, which he called Pylos. Neleus married Chloris the daughter of Amphion, by whom he had a daughter, and twelve ſons, who were all, except Neſtor, killed by Hercules, together with their father. Neleus promiſed his daughter in marriage only to him who brought him the bulls of Iphiclus. Bias was the ſucceſsful lover, by means of his brother MELAMPUS. See that word, vol. xv.

NELGOO'ND, a town of Hindooſtan, in Viſiapour: thirty miles weſt of Baddammy.

NE'LI-PO'LI, *ſ.* in botany. See AVERRHOA.

NE'LI-PU'. See UTRICULARIA.

NE'LI-TA'LI. See PSIDIUM.

NELI'TRIS, *ſ.* in botany. See PSIDIUM.

NELISURAM', formerly *Nelcynda*, a town of Hindooſtan, and capital of a ſmall country on the weſt coaſt, ſouth of Canara. This town and diſtrict were ceded to Great Britain in 1799. The town is thirty-three miles north-eaſt of Mangalore. The fort of Neliſuram is ſituated on a river named Cangenecora, whoſe courſe is from the north-eaſt, and falls in about four miles to the north of Mount Della. This Neliſuram, which is ſituated about twelve miles up the river, is conſidered by major Rennell as the place meant by Nelcynda and Melcynda by Pliny and Ptolemy; a place viſited by the Egyptian and Roman ſhips. Lat. 12. 20. N. lon. 74. 57. E.

NEL'LA CORVIN'DUM, in mineralogy. See ADAMANTINE SPAR, vol. i. and the article MINERALOGY, vol. xv. p. 465.

NEL'LA TEN'DALE COT'TI. See CROTALARIA.

NEL'LE-COT'TA. See the article HINDOOSTAN, vol. x. p. 85, 6.

NELLEM'BI, a town of the iſland of Ceylon: fourteen miles ſouth of Candi. Lat. 7. 25. N. lon. 80. 50. E.

NEL'LENBURG, a landgraviate of Germany, which conſiſted formerly of the towns and prefecturates named from it, viz. Stockach, Aach, and Thengen, and contained about thirty boroughs, villages, and a diſtrict thirty-two miles in circuit. This landgraviate, diminiſhed by the diſmemberment of Thengen, and deprived of the land-court which is held at Stockach, is now governed by a landvogt; and it has its name from Nellenburg, a town with a citadel ſituated on a mountain. It is ſixteen miles north-weſt of Conſtance. The grand duke of Baden has the title of Landgrave of Nellenberg.

NEL'LER (George Chriſtopher), a learned German writer on eccleſiaſtical antiquities and medals, was born at Auba-Ganerbial in Franconia, in the year 1709. He became canon of St. Simeon's at Treves, privy-counſellor to the prince-elector, and doctor of laws. He excelled in the knowledge of ancient monuments and medals, of which he had a fine collection; and he acquired no little celebrity by his various publications. Theſe conſiſt of diſſertations, which diſplay great learning and laborious reſearch; but are not entirely exempt from marks of ſyſtem, and notions that are paradoxical. The author died at Treves, in 1783, in the ſeventy-fourth year of his age. For a liſt of his pieces, we refer to the *Gen. Biog.*

NEL'LI CAMA'RUM, or NELLI'KA, *ſ.* in botany. See PHYLLANTHUS.

NELLIPIL'LY, a town of Hindooſtan, in the circar of Rajamundry, on the coaſt: thirty miles ſouth-eaſt of Rajamundry.

NELLO'RE, a town and fortreſs of Hindooſtan, in the Carnatic, near the Pennar river: eighty-five miles north of Madras, and ninety-eight north of Arcot. Lat. 14. 26. N. lon. 79. 57. E.

NEL'LY, a town of Hindooſtan, in Myſore: thirty-four miles ſouth of Harponelly.

NEL'SON, a county of Kentucky, with about 9087 inhabitants, including 1234 ſlaves. Bardſtown is the chief place.

NEL'SON (Robert), a learned and worthy Engliſh gentleman, generally diſtinguiſhed by the appellation of "the pious Mr. Nelſon," was the ſon of a conſiderable Turkey merchant, and born at London in the year 1656. He loſt his father when he was only two years of age, who left him a handſome fortune, and committed him to the care of his mother, and of her brother ſir Gabriel Roberts, whom he appointed his guardian. This gentleman ſoon became extremely attached to his nephew, who poſſeſſed a beautiful perſonal form, with ſingular ſweetneſs of temper, and gave early evidence of ſtrength and vivacity of intellect. For ſome time he was placed at St. Paul's ſchool; but afterwards his mother took him home to her houſe at Dryfield, near Cirenceſter in Glouceſterſhire, where ſhe engaged the learned Dr. George Bull, then rector of Suddington in that neighbourhood, to attend him in the capacity of private tutor. When he was qualified for entering on academic ſtudies, he was ſent to the univerſity of Cambridge, and admitted a fellow-commoner of Trinity college. Here he ſecured the eſteem and affection of all who knew him, by the excellence of his character, and the ripening, as he grew to manhood, of thoſe amiable qualities which diſcloſed themſelves early in his youth. Being frequently induced to viſit London, he ſoon became acquainted with Dr. Tillotſon, with whom his uncle was very intimate; and, from the congeniality of their characters and diſpoſitions, a cloſe friendſhip took place between that worthy divine and our author, which was diſſolved only by the death of the former. In the year 1680, Mr. Nelſon was choſen fellow of the Royal Society; and, being deſirous of improving himſelf by foreign travel, ſet out for Paris towards the latter end of the year, in company with his ſchool-fellow and friend Dr. Halley. On their road to that city, they ſaw the remarkable comet which gave riſe to ſir Iſaac Newton's Aſtronomy of Comets, and to Dr. Halley's Synopſis Cometarum. While he continued at Paris, he had an invitation to undertake an office at the court of Charles II. of England, which he declined, on account of the averſion that his mother and other friends had for it. From Paris the travellers paſſed to Rome, where they ſeparated; and Mr. Nelſon, after completing what is called the grand tour, returned to England in the ſummer of 1682. At Rome he met with the widow of ſir Kingſmill Lucy, bart. ſecond daughter of the earl of Berkeley; a mutual affection took place between them, and he married her ſoon after their arrival in England. Some time after this union had taken place, the lady acquainted her huſband with what ſhe had previouſly concealed from him, viz. that ſhe had become a convert to the Roman-catholic religion. This change in her religious ſentiments had been

“ About ſix months afterwards, going down Wood-ſtreet when a felon was being taken to gaol, I went and peeped through the apertures of the wooden-grated door, and the turnkey ſaid I might go in: ‘ Yes, but, ſays I, will you let me out again?’ He ſaid he would; ſo in I went, and, looking down a very long flight of ſteps, a cellar ſeemed full of people in irons, drinking; this was called the tap-room, but I had been ſo frightened in Newgate, that I durſt not venture down. So, putting three-pence into the turnkey's hand, for a pot of beer, was glad when I got into the ſtreet again. I concluded that all the gaols in which felons were confined were the ſame, and my curioſity would bring me to ſome miſchief; therefore dropt the purſuit.

“ In 1766, being then in my twenty-ſecond year, I had a deſire to ſee my friends in Cheſhire; but I took the ſtage only to Derby, intending to paſs one day there, to ſee if the gaol was like thoſe in town. This gaol had not been long built, and the ſituation was both airy and healthy: there was a large dungeon in it down a few ſteps, but in every reſpect it was ſo much better than Newgate or Wood-ſtreet, that it gave me courage to viſit others before my return. The conveyance by the duke of Bridgewater's canal to Warrington coſt me but ſix-pence; and for about half-a-crown more I reached Liverpool, and from thence to Cheſter for a few ſhillings. As I had never ſeen either of theſe places, I carefully concealed the motive of my viſits, particularly from my uncle, who doated upon me, and made his will during my ſtay, in which he left me almoſt the whole of his property. At Liverpool there was the ſame promiſcuous intercourſe of the ſexes, the ſame drunkenneſs going forward, which I had obſerved in London; but the dungeons were worſe, and ſo very offenſive I did not ſtay to examine into them. In the Bridewell I ſaw a *ducking-ſtool* complete, the firſt I had ever ſeen. We had two at Knutsford. But the ſtandard in each, was all that remained in my memory. I never remembered them uſed; but this at Liverpool enables me to deſcribe it. A ſtandard was fixed for a long pole, at the extremity of which was faſtened a chair; on this the woman was placed, and ſouſed three times under water till almoſt ſuffocated. At Liverpool, the ſtandard was fixed in the court, and a bath made on purpoſe for ducking; but why in a priſon this wanton and dangerous ſeverity was exerciſed on *women*, and not on *men*, I could no-where learn. This mode of puniſhment ſeems formerly to have been general, for it is in the memory of perſons now (1806) living, when a machine of this kind was in the Green Park. This, however, was not the only cruel puniſhment uſed at this Bridewell, for the women were flogged weekly at the whipping-poſt.

“ In the polite city of Cheſter I expected to find better priſons; a better police I certainly did. The keeper appeared to me to be a civil humane man; but, as I went down ſteps, near ſeven yards below the court, to viſit the dungeons, I almoſt now feel the horror with which I was then ſtruck. There were ſix of them, very ſmall, and as dark as pitch; three felons ſlept in each every night; not a breath of air but what was admitted through a ſmall hole in the door. The ſame drinking and intercourſe of the ſexes as in Liverpool and London. The dungeon of the North Gate was yet worſe than thoſe of the Caſtle; it was nearly as deep, and had fourteen inches of water in it. Theſe ſubterraneous places, which are totally dark, are beyond imagination horrid and dreadful. On my return to London I do not recollect viſiting any priſons; till, in 1768, I reviſited my native county, calling at Derby as before. My uncle died ſoon after I came down, having quitted the farming buſineſs in a ſhort time after I left him in 1760.

“ I was now out of my apprenticeſhip, and had taken up my freedom of the city. This year I employed myſelf in embanking ſome meadow-land to protect my tenant from again ſuffering the great loſs which the floods of a preceding year had occaſioned. The large ſum of money requiſite to ſet up as a jeweller, made me heſitate whether I ſhould go into buſineſs or not. The firſt thing I did was to pay off the legacies and incumbrances on my father's eſtate, which I did by ſelling ſome detached property. My rental then was not ſufficient to ſupport me as a gentleman, and I returned to London to conſult my friends. They were unanimouſly in favour of trade, and their opinion was deciſive. In 1770 I ſettled in St. James's-ſtreet, and immediately made it known to thoſe ladies and gentlemen who, when I was an apprentice, had promiſed me their ſupport. At this time French faſhions were prevalent, and I thought a trip to Paris would give me a ſanction and advantage. My houſe was under the care of my excellent aunt, and I left my ſhop to the care of a jeweller with whom I had been long acquainted, and ſet out, accompanied by Mr. Thomas Evans, bookſeller, of King-ſtreet, Covent Garden. This gentleman could ſpeak French fluently, and had ſeveral correſpondents at Paris. On our arrival at Calais we went to ſee the priſon, and likewiſe at St. Omer's and Dunkirk, and the city-priſon at Lille; there were, I think, no priſoners in any of them. Some days afterwards, I viſited ſir William Burnaby, bart. who reſided there; but he was not willing to accompany me to the priſon in the Citadel, and I could not gain admittance. When we arrived at Paris, I got, through the intereſt of a bookſeller, admiſſion into a priſon called Fon l'Eveque, and Petit Chatelet. The dungeons were dreadful, and, I then thought, worſe than any I had ſeen in England. There were ſeveral priſoners in both, but I think not in irons. My recollection of them is, however, very imperfect. Colonel (afterwards ſir Eyre) Coote lodged in the ſame hotel with us, and I made application to ſee the Baſtille, but was unſucceſsful. Mr. Evans ſaid he believed I was priſon-mad, and that my impertinent curioſity would perhaps ſend us both to priſon: after this reproof I was ſilent on the ſubject. He however accompanied me to many of the *hoſpitals*, which appeared to be affectionately attended by ſome female religious order: and this I obſerved in the provincial gaols, which in my ſeveral viſits to France I viſited.

“ Freſh imported from Paris, from whence I had brought many curious articles, my ſhop ſoon became viſited by carriages, and I found my buſineſs increaſe beyond my capital; but I found no difficulty in borrowing 500l. which, with the frugal management of my aunt in my houſehold concerns, ſoon opened flattering proſpects. In 1772 a ſermon was preached, on behalf of perſons impriſoned for ſmall debts, at which I was preſent. A general approbation of the idea was declared, and a few of us formed ourſelves into a committee, and viſited the priſons to ſearch out proper objects. The diſtreſs and extreme wretchedneſs to which we were eye-witneſſes, determined us to lay an account before the public, who inſtantly caught the flame, and enabled us to reach out the hand of pity to a very large number of miſerable ſufferers in confinement. In May 1773, the Society for the Relief and Diſcharge of Perſons impriſoned for Small Debts, was inſtituted or formed; and, in 1774, I was unanimouſly elected the treaſurer, [in which office he continued till his death, forty years after.] At this time I viſited ſome of the priſons in and about the metropolis, and reported upon them every week. The finances of our ſociety increaſed, and my viſits and inquiries extended; ſo that in a few years I had travelled over a very conſiderable part of the kingdom.

“ In 1778 I married the eldeſt daughter of John Camden, of Batterſea, eſq. by whom I had two ſons and a daughter.

“ In 1779 I went through Flanders into Germany; and, getting acquainted with colonel (afterwards general) Dalton, I was, through his intereſt, permitted to viſit the Maiſon de Force, at Ghent. This was, without exception, the beſt-planned and the beſt-regulated priſon I had ſeen before, or, I think, ſince. It is ſituated near a canal; the plan octagon; ſeparate courts for men-va-grants and men-criminals: one ſide is for women, and in the middle of their court is a baſon of water for waſhing the linen of the houſe; and a large wooden horſe, to ride by way of puniſhment. Their bed-rooms uniform, and in a range, ſomething like Chelſea Hoſpital; every range opens into a gallery, or lobby, which is open to the air of the court: the priſoner has a uniform clothing, with the number of his room. The work-rooms are on the ground-floor, and there were more than one hundred priſoners, with only one perſon to ſuperintend them; he was at one end of the room, with a deſk before him, and a large book, in which were entered the names of the priſoners, the crimes for which they were committed, the time of impriſonment, from one to twenty years, according to their crimes; the day the work was begun, the day it was finiſhed, the meaſure of the piece, the taſk due per day, obſervations, ſuch as ſick, lame, &c. &c. and deficiency of taſk, puniſhment, &c. &c. &c. Though this room was ſo crowded, not a word was ſpoken by any of the priſoners during the time we inſpected it; no noiſe or confuſion, all were ſilent and attentive to their work; in ſhort, it appeared a moſt noble inſtitution. A few years after, being at Ghent, I think in 1784, having no acquaintance there, I could not gain admiſſion; but was told the manufactory was deſtroyed, and the whole in a very bad ſtate. At Bruges the priſon is on a much ſmaller ſcale; ſome were employed in making clothes, and others in making ſaddles, bridles, &c. &c. for the army.

"In 1780 I had the honour of the king's commiſſion in a corps of volunteer infantry, in which I was actively employed till there was no further occaſion for our ſervices. In 1781 I viſited Warwick gaol, and in the dungeons caught the gaol fever, or diſtemper. Mr. Roe, the keeper, was too ill to accompany me, and ſent his turnkey: he died ſoon after; but his death was, I believe, accelerated by drinking. I did not recover for ſome time. This ſickneſs, and my young family, made me more cautious of entering dungeons, which had now become leſs neceſſary, from the labours of the immortal Howard, whoſe viſits and inquiries comprehended every claſs of priſoners, whilſt mine were particularly directed to the debtors: but I did not wholly abſtain from making remarks on felons, particularly in the dungeons of the two priſons at Cheſter and Liverpool.

"The acts which paſſed in conſequence of the benevolent Howard's Reports, produced an immediate and general reform in priſon-police, by the abolition of taps. Several new gaols were built, in which ſolitary cells ſupplied the place of dungeons; and, in many priſons, women were not loaded with irons. From this period to 1791 my viſits were leſs frequent, and extended to the country, as buſineſs would permit.

"This year I loſt a moſt amiable wife; my own health was rapidly on the decline, and my buſineſs increaſed beyond my abilities or power to manage. In 1792, having only two ſons to provide for, I retired from buſineſs with a very ample fortune; and, as my health became reſtored, re-commenced my priſon viſits and inquiries, reports of which (as far as related to debtors) I made regularly, at the meetings of the committee in Craven-ſtreet. In 1800, when the exceſſive dearneſs of proviſions and the difficulties of the poorer claſſes of the people required an extraordinary relief, the neceſſity of a general viſit and inquiry into the ſtate of all the gaols ſtruck me very forcibly. The two-penny loaf in London, Auguſt 1783, weighed 21 ounces: in March 1801, the two-penny loaf in London weighed only 6 ounces.

"In 1801, I publiſhed my firſt Account of Debtors, by which it appeared there were thirty-nine priſons in England and Wales which did not furniſh the *debtor* with any allowance whatever; and in theſe there were, in the month of April 1800, 427 perſons confined to this wretched ſtate of captivity. Lord Romney, as preſident of our ſociety, did me the honour of preſenting this book to the king, and his majeſty was pleaſed moſt graciouſly to receive it. The approbation with which it was honoured by the public, together with the very conſiderable benefactions to the Society for Relief of Perſons impriſoned for Small Debts in conſequence of it, induced me to publiſh a new and more copious edition, in 1802, and likewiſe extend my viſits to Scotland and Wales.

"As I kept a diary, ſo I wrote to my benevolent friend Dr. Lettſom an account of the moſt ſtriking occurrences; and to his ſuggeſtions alone the publiſhing my priſon-remarks owe their origin. It had been my conſtant practice in my various priſon-excurſions, during a period of thirty years, to wait upon the magiſtrates, particularly of cities and boroughs, and reſpectfully to repreſent what I ſaw amiſs in their gaols. I was always received with cordiality and kindneſs; and, as they were ſtruck with compaſſion at the recital, reform was determined upon, and reſolutions entered into; but, after a lapſe of eight or ten years, gueſs my ſurpriſe, when I found nothing done! So total and general a neglect muſt be produced by ſome cauſe. I inquired into it; and found many who were magiſtrates, from local ſituations, and before they were acquainted with its duties, were out of the commiſſion; others, whoſe active ſituations in commerce denied them time; ſome, who had large families, were afraid to venture *inſide* of the priſon; and many were numbered with the dead. Under theſe diſcouraging circumſtances I had almoſt deſpaired, when Providence raiſed up a man, by whoſe labour the cloud was diſpelled; and that life, hitherto ſpent uſeleſsly, became fruitful. If Howard owed any thing to Fothergill, I am in a ten-fold degree indebted to Dr. John Coakley Lettſom. He firſt ſuggeſted, nay, requeſted permiſſion to publiſh ſome of thoſe crude remarks, which I had ſent for his peruſal, and by which communication I had found a ſenſible relief: they were begun and continued without deſign; written in the hours of fatigue, laſſitude, ſickneſs, and the buſtle of inns; little calculated to appear before the public, except in matters of fact. Theſe remarks on priſons were introduced with a preface, which cauſed a general ſenſation, and brought a degree of celebrity on the Viſitor of Priſons he neither deſired or deſerved; whilſt it enriched his funds as treaſurer to the Society for Small Debts, in the ſum of 328*l.* 2*s.* 9*d.* evidently occaſioned by the reading the Gentleman's Magazine, in which they were inſerted.

"The benevolence of my friend did not reſt here; for, as he was no ſtranger to the *inſide* of the priſon-houſe, ſo did he frequently accompany me to thoſe abodes of guilt and miſery, and ſuggeſt what his profeſſional ſkill ſo well enabled him to do, to my great advantage, and the priſoners' comforts. Many new gaols are now (1806) building; and, from the alterations and improvements which have been making theſe four years, and are now daily making, the particulars of which my 'State of Priſons' will notice, my viſits will become leſs neceſſary. As ſoon as this work is publiſhed, and I can provide for my neceſſary abſence, I propoſe viſiting Ireland: and happy will the ſhort remaining period of my life be ſpent, if I can ſuggeſt to a brave and generous people any improvements in their priſon-police, and of which I am informed there is much need."

The Memoir here terminates, but not ſo the benevolent labours of Mr. Neild. His health did not, however, allow him to viſit Ireland as he intended; but he continued to inſpect the various priſons of England, Scotland, and Wales, and to ſuggeſt numerous improvements, both in regard to the conſtruction of the wards, and the internal management of theſe eſtabliſhments. In 1812 he publiſhed the "State of Priſons," above alluded to, in a large and very elegant quarto volume, with a portrait of the author. It is a work teeming with valuable information. Yet upon ſome occaſions the author ſeems to have been actuated with a deſire to find fault, and diſingenuouſly to conceal facts. An inſtance is given in the Gent. Mag. for Nov. 1805. p. 1019.

Mr. Neild continued his exertions, as treaſurer of the

Society for Small Debts, until the time of his death, which took place Feb. 16, 1814.

NE'ILSVILLE, a town of Virginia, with a poſt-office: 340 miles weſt of Waſhington.

NE'IMPHY, a town of Meckley: ninety-ſix miles ſouth-ſouth-eaſt of Munnypour.

NE'INDORF, a town of Holſtein: two miles north-eaſt of Lutkenborg.

NEINSCHE'NA, *ſ.* in botany. See ARUM.

NEIR IBN MAREND, a town of Arabia, in the province of Nedsjed: 110 miles north-eaſt of Mecca.

NEI'RA, one of the Banda Iſlands, and the firſt in rank, being the ſeat of government. It has a ſpacious and commodious harbour, but difficult to be entered. Ships anchor under the cannon of two forts. It ſupplies annually about 8000 pounds of nutmegs, and 2000 of mace. Here are two towns, one called the ſame as the iſland, the other Labetacka. Lat. 4. 8. S. lon. 130. 37. E.

NEISAPOU'R, NESSAPOUR, or NISABUR, a town of Perſia, in the province of Choraſan: 150 miles north-weſt of Herat, and 365 north-eaſt of Iſpahan. Lat. 36. 20. N. lon. 57. 10. E.

NEI'SCHLOT, a town of Ruſſia, in the government of Viborg, on the Lake Saima: forty miles north of Viborg. Lat. 60. 15. N. lon. 28. 24. E.

NEI'SIDEL, a town of Auſtria: two miles north-north-eaſt of Siſtersdorff.

NEI'SIG, a town of Bavaria, in the biſhopric of Bamberg: fifteen miles north of Bamberg.

NEISS, a river of Weſtphalia, which runs into the Emmer, four miles ſouth-ſouth-eaſt of Blomberg, in the county of Lippe.

NEISSE, a river which riſes in the north part of Bohemia, ſoon after enters Luſatia, and paſſes by Hirſchfeld, Goritz, Rothenberg, Priebus, Forſte, Guben, &c. and enters the Oder about twelve miles north-eaſt from the latter town.

NEISSE, or NEYSSE, a principality of Sileſia, ſometimes, but improperly, called the Principality of Grotkau. This principality, which is environed by thoſe of Munſterberg, Brieg, Oppeln, and Jagerndorf, as alſo of Moravia and the county of Glatz, is one of the largeſt in all Sileſia; and, among the mediate principalities, the firſt. The ſouthern half of it is very hilly; but the northern half, as being leſs mountainous, is more fertile. The Neiſſe and Grotkau circles breed good horſes. The latter alſo yields tobacco, and in the former is a great number of iron-mills. Its largeſt river is the Neiſſe. The whole principality of Neiſſe contains under it eleven cities. It belongs to the king of Pruſſia, but that part which is contiguous to Moravia, is annexed to the crown of Bohemia. Though the Grotkau diſtrict of itſelf forms no duchy, nor any diſtinct principality, yet is the biſhop of Breſlau uſually ſtyled Prince of Neiſſe and Duke of Grotkau; and by virtue of this principality takes place of all the other princes in Sileſia.

NEISSE, or NEYSZE, capital of the above principality. It is a place of great ſtrength, and ſituated on the ſide of the river Neiſſe, on the oppoſite ſide of which is a Pruſſian fort, erected in 1743. The king appoints a governor and commandant here; but the prince-biſhop is poſſeſſed of the palace, with a treaſury, a court of juſtice, a demeſne, and a conſiſtorial office. This town was pillaged and deſtroyed in 1284, by duke Henry IV. In 1525, one-half of it was demoliſhed by fire. In 1642, it was taken by the Swedes; and in 1741 the Auſtrians, having laid ſiege to it, cauſed the ſuburbs to be ſet on fire; but, after the peace of Dreſden, in 1745, they were rebuilt, and a new ſuburb added, by the name of Friedrichſtadt, lying between Pruſſia Fort and the Neiſſe, in which is held a court, in his majeſty's name. It is 42 miles ſouth of Breſlau, and 115 eaſt of Prague. Lat. 52. 20. N. lon. 17. 13. E.

NEI'STIFT, a town of Auſtria; ſixteen miles ſouth-eaſt of Steyr.

NEI'STRIFFT, a town of Auſtria: eight miles ſouth-weſt of Sonneberg.

NEI'THER, *conj.* [naƿðeꞃ, naðæꞃ, Sax. *ne either.*] Not either. A particle uſed in the firſt branch of a negative ſentence, and anſwered by *nor. Johnſon.*—Improperly uſed when more than two things come under conſideration: as where Addiſon uſes "determined in his conduct *neither* by the dictates of his own conſcience, the ſuggeſtions of true honour, *nor* the principles of religion." He ſhould have either left out "the ſuggeſtions of true honour," or he ſhould have ſaid, "is not determined by the dictates of his own conſcience, the ſuggeſtions of true honour, or the principles of religion. *Bp. Hurd.*—We cannot think this a proper objection; for ſurely neither of three things is as eaſy to be conceived, and as fitly expreſſed, as neither of two things.—Men lived at home, *neither* intent upon any foreign merchandiſe, *nor* inquiſitive after the lives and fortunes of their neighbours. *Heylin.*

He was *neither* there *ne* here,
But clene out of himſelfe away,
That he n'ot wot to thinke or ſay. *Gower's Conf. Am.*

It is ſometimes the ſecond branch of a negative or prohibition to any ſentence.—Ye ſhall *not* eat of it, *neither* ſhall ye touch it. *Gen.* iii. 3.—This commandment ſtandeth *not* for a cypher, *neither* is it read and expounded in vain among Chriſtians. *White.*—Sometimes at the end of a ſentence it follows as a negative; and, though not very grammatically, yet emphatically, after another negative; in old Engliſh, two negatives denied.—If it be thought that it is the greatneſs of diſtance, whereby the ſound cannot be heard; we ſee that lightnings and coruſcations, near at hand, yield *no* ſound *neither. Bacon.*—Men come not to the knowledge of ideas which are thought innate till they come to the uſe of reaſon, *nor* then *neither. Locke.*

NEI'THER, *pronoun.* Not either; nor one nor other.—They lived with the friendſhip and equality of brethren, *neither* lord, *neither* ſlave to his brother; but independent of each other. *Locke.*

Which of them ſhall I take?
Both, one, or *neither? neither* can be enjoy'd
If both remain alive. *Shakeſpeare's K. Lear.*

NEI'TRA, a river of Hungary, which runs into the Danube five miles above Comorn.

NEI'TRA, a town of Hungary, on a river of the ſame name; the capital of a country, and the ſee of a biſhop. The water is unwholeſome, and the houſes low. It contains two convents and a college, and is defended by a caſtle. In the year 1619, the town and caſtle were taken by Bethlem Gabor; and in the year 1623, they were given up to the Turks, but recovered the following year: eleven miles eaſt of Serat, and thirty-four north of Gran.

NEI'TSERSOAK, an iſland near the weſt coaſt of Greenland. Lat. 63. 22. N. lon. 49. 10. W.

NEI'VA, a river of Ruſſia, which runs into the Tura thirty-four miles weſt of Tiumen.

NEIVAN'SKOI, a town of Ruſſia, in the province of Ekaterinburg, on the river Neiva, with conſiderable iron-works: forty miles weſt of Turinſk.

NEKA'IL, a town of Egypt, on the left bank of the Nile: four miles ſouth-ſouth-eaſt of Abutige.

NE'KER, with the Mahometans, the name of one of the two angels which are ſuppoſed to examine the ſouls of the departed.

NEK'KADE, NEG'ADE, or NEGUA'DA, a town of Egypt, on the weſt bank of the Nile, inhabited by Chriſtians; the ſee of a biſhop, whoſe dioceſe extends to the extremity of Egypt. The emerald-mines of Egypt are ſuppoſed to have been ſituated near this town: four miles ſouth-weſt of Kous. Lat. 25. 38. N. lon. 32. E.

NEKAVIKBAN', a town of Perſian Armenia: thirty-five miles ſouth-eaſt of Erivan.

NEK'KE, a town of Egypt, on the left bank of the Nile; four miles ſouth of Momflot.

NEK'OUBAN LAKE, a lake of Canada: twenty-four miles north-weſt of Quebec. Lat. 49. 55. N. lon. 75. W.

NEKRE'SE, a town of the principality of Georgia, in the province of Kaket: ſixty-five miles north-eaſt of Teflis.

NEK'SHAB, or KARSHI, a town of Grand Bukharia: ſixty miles eaſt of Bukharia. Lat. 39. 5. N. lon. 63. 40. E.

NE'LAM-MARI, *ſ.* in botany. See HEDYSARUM.

NE'LAM-PAREN'DA. See VIOLA.

NELCYN'DA, in ancient geography. See NELISURAM.—Alſo, a town of Arabia, near the mouth of the Red Sea; ſaid by Arrian to have been a commercial place.

NELD, *ſ.* [perhaps a poetical contraction of] Needle:

For thee fit weapons were
Thy *neld* and ſpindle, not a ſword and ſpear. *Fairfax.*

NELEVANGO'LE, a town of Hindooſtan, in Myſore: fifteen miles north-weſt of Bangalore.

NE'LEUS, a ſon of Neptune and Tyro. He was brother to Pelias, with whom he was expoſed by his mother, who wiſhed to conceal her infirmities from her father. They were preſerved and brought to Tyro, who had then married Cretheus king of Iolchos. After the death of Cretheus, Pelias and Neleus ſeized the kingdom of Iolchos, which belonged to Æſon, the lawful ſon of Tyro by the deceaſed monarch. After they had reigned for ſome time conjointly, Pelias expelled Neleus from Iolchos. Neleus came to Aphareus, king of Meſſenia, who treated him with kindneſs, and permitted him to build a city, which he called Pylos. Neleus married Chloris the daughter of Amphion, by whom he had a daughter, and twelve ſons, who were all, except Neſtor, killed by Hercules, together with their father. Neleus promiſed his daughter in marriage only to him who brought him the bulls of Iphiclus. Bias was the ſucceſsful lover, by means of his brother MELAMPUS. See that word, vol. xv.

NELGOO'ND, a town of Hindooſtan, in Viſiapour: thirty miles weſt of Baddammy.

NE'LI-PO'LI, *ſ.* in botany. See AVERRHOA.

NE'LI-PU'. See UTRICULARIA.

NE'LI-TA'LI. See PSIDIUM.

NELI'TRIS, *ſ.* in botany. See PSIDIUM.

NELISURAM', formerly *Nelcynda*, a town of Hindooſtan, and capital of a ſmall country on the weſt coaſt, ſouth of Canara. This town and diſtrict were ceded to Great Britain in 1799. The town is thirty-three miles north-eaſt of Mangalore. The fort of Neliſuram is ſituated on a river named Cangenecora, whoſe courſe is from the north-eaſt, and falls in about four miles to the north of Mount Della. This Neliſuram, which is ſituated about twelve miles up the river, is conſidered by major Rennell as the place meant by Nelcynda and Melcynda by Pliny and Ptolemy; a place viſited by the Egyptian and Roman ſhips. Lat. 12. 20. N. lon. 74. 57. E.

NEL'LA CORVIN'DUM, in mineralogy. See ADAMANTINE SPAR, vol. i. and the article MINERALOGY, vol. xv. p. 465.

NEL'LA TEN'DALE COT'TI. See CROTALARIA.

NEL'LE-COT'TA. See the article HINDOOSTAN, vol. x. p. 85, 6.

NELLEM'BI, a town of the iſland of Ceylon: fourteen miles ſouth of Candi. Lat. 7. 25. N. lon. 80. 50. E.

NEL'LENBURG, a landgraviate of Germany, which conſiſted formerly of the towns and prefecturates named from it, viz. Stockach, Aach, and Thengen, and contained about thirty boroughs, villages, and a diſtrict thirty-two miles in circuit. This landgraviate, diminiſhed by the diſmemberment of Thengen, and deprived of the land-court which is held at Stockach, is now governed by a landvogt; and it has its name from Nellenburg, a town with a citadel ſituated on a mountain. It is ſixteen miles north-weſt of Conſtance. The grand duke of Baden has the title of Landgrave of Nellenberg.

NEL'LER (George Chriſtopher), a learned German writer on eccleſiaſtical antiquities and medals, was born at Auba-Ganerbial in Franconia, in the year 1709. He became canon of St. Simeon's at Treves, privy-counſellor to the prince-elector, and doctor of laws. He excelled in the knowledge of ancient monuments and medals, of which he had a fine collection; and he acquired no little celebrity by his various publications. Theſe conſiſt of diſſertations, which diſplay great learning and laborious reſearch; but are not entirely exempt from marks of ſyſtem, and notions that are paradoxical. The author died at Treves, in 1783, in the ſeventy-fourth year of his age. For a liſt of his pieces, we refer to the *Gen. Biog.*

NEL'LI CAMA'RUM, or NELLI'KA, *ſ.* in botany. See PHYLLANTHUS.

NELLIPIL'LY, a town of Hindooſtan, in the circar of Rajamundry, on the coaſt: thirty miles ſouth-eaſt of Rajamundry.

NELLO'RE, a town and fortreſs of Hindooſtan, in the Carnatic, near the Pennar river: eighty-five miles north of Madras, and ninety-eight north of Arcot. Lat. 14. 26. N. lon. 79. 57. E.

NEL'LY, a town of Hindooſtan, in Myſore: thirty-four miles ſouth of Harponelly.

NEL'SON, a county of Kentucky, with about 9087 inhabitants, including 1234 ſlaves. Bardſtown is the chief place.

NEL'SON (Robert), a learned and worthy Engliſh gentleman, generally diſtinguiſhed by the appellation of "the pious Mr. Nelſon," was the ſon of a conſiderable Turkey merchant, and born at London in the year 1656. He loſt his father when he was only two years of age, who left him a handſome fortune, and committed him to the care of his mother, and of her brother ſir Gabriel Roberts, whom he appointed his guardian. This gentleman ſoon became extremely attached to his nephew, who poſſeſſed a beautiful perſonal form, with ſingular ſweetneſs of temper, and gave early evidence of ſtrength and vivacity of intellect. For ſome time he was placed at St. Paul's ſchool; but afterwards his mother took him home to her houſe at Dryfield, near Cirenceſter in Glouceſterſhire, where ſhe engaged the learned Dr. George Bull, then rector of Suddington in that neighbourhood, to attend him in the capacity of private tutor. When he was qualified for entering on academic ſtudies, he was ſent to the univerſity of Cambridge, and admitted a fellow-commoner of Trinity college. Here he ſecured the eſteem and affection of all who knew him, by the excellence of his character, and the ripening, as he grew to manhood, of thoſe amiable qualities which diſcloſed themſelves early in his youth. Being frequently induced to viſit London, he ſoon became acquainted with Dr. Tillotſon, with whom his uncle was very intimate; and, from the congeniality of their characters and diſpoſitions, a cloſe friendſhip took place between that worthy divine and our author, which was diſſolved only by the death of the former. In the year 1680, Mr. Nelſon was choſen fellow of the Royal Society; and, being deſirous of improving himſelf by foreign travel, ſet out for Paris towards the latter end of the year, in company with his ſchool-fellow and friend Dr. Halley. On their road to that city, they ſaw the remarkable comet which gave riſe to ſir Iſaac Newton's Aſtronomy of Comets, and to Dr. Halley's Synopſis Cometarum. While he continued at Paris, he had an invitation to undertake an office at the court of Charles II. of England, which he declined, on account of the averſion that his mother and other friends had for it. From Paris the travellers paſſed to Rome, where they ſeparated; and Mr. Nelſon, after completing what is called the grand tour, returned to England in the ſummer of 1682. At Rome he met with the widow of ſir Kingſmill Lucy, bart. ſecond daughter of the earl of Berkeley; a mutual affection took place between them, and he married her ſoon after their arrival in England. Some time after this union had taken place, the lady acquainted her huſband with what ſhe had previouſly concealed from him, viz. that ſhe had become a convert to the Roman-catholic religion. This change in her religious ſentiments had

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been effected by her converſation at Rome with cardinal Howard, (grandſon of the earl of Arundel, collector of the Arundelian marbles,) who had been raiſed to that high dignity by pope Clement X. Lady Nelſon, having once avowed an adherence to the catholic faith, became a zealous advocate for the papal doctrines, made a convert of her daughter by her former huſband, entered into the liſts of controverſy, and is ſuppoſed to have written a piece, publiſhed in 1686, under the title of "A Diſcourſe concerning a Judge of Controverſy in Matters of Religion, ſhowing the Neceſſity of ſuch a Judge." Mr. Nelſon was filled with grief when he learnt of the dereliction of his lady from the principles of the proteſtant faith, and made every effort in his power to reclaim her; but his attempts, as well as thoſe of his friends Tillotſon and Hickes, were unavailing. The former, however, wrote a long letter to her on the ſubject; and the latter, on her account, publiſhed his collection of "Letters," which paſſed between him and a popiſh prieſt in 1675. In this collection is a letter to an Engliſh prieſt of the Roman communion at Rome, which was written by Mr. Nelſon for his lady's uſe. It was very ſimilar to a view which he took of the ſame ſubject in 1687, in a piece entitled "Tranſubſtantiation contrary to Scripture; or, the Proteſtant's Anſwer to the Seeker's Requeſt." Lady Nelſon, notwithſtanding all the pains taken to bring her back to the church of England, continued in the popiſh communion till her death. She was a perſon of fine underſtanding, and had cultivated her mental powers with great care and ſucceſs. Dr. Tillotſon not only lamented the loſs of this lady from his own church, but probably dreaded that the influence which ſhe had over her huſband's mind might wean him from the faith in which he had been educated. He, however, continued ſteady to his principles, though he travelled in foreign countries with his lady for the ſake of her health, where the temptations to abandon the proteſtant religion muſt have been much ſtronger than they could have been at home.

In 1691 Mr. Nelſon returned home, entirely diſſatisfied with the revolution that had taken place in the government three years before, and with a determination not to transfer his allegiance from king James. To that prince he ſhowed his ſteady attachment while he reſided at Florence, by keeping up a correſpondence with the earl of Melfort, ambaſſador from the exiled James to the pope; and he now avowed himſelf a nonjuror, and withdrew from the communion of the church of England. His conduct in this particular did not diſturb the friendſhip that ſubſiſted between him and archbiſhop Tillotſon, whoſe death-bed he ſedulouſly attended, and who at length expired in his arms; after that event he continued his kindneſs to his grace's widow, and was very inſtrumental in procuring her penſion from the crown to be augmented from 400l. to 600l. per ann. As he now reſided in or near the metropolis, a coincidence of opinions led him to form an acquaintance with Mr. Kettlewell, who appointed him ſole executor and truſtee to his laſt will; and in purſuance of that truſt Mr. Nelſon publiſhed ſome poſthumous pieces of that worthy divine, with particulars of his life and character; and it was by the perſuaſion of this gentleman that he took up his pen in the ſervice of piety and devotion, under the idea that books upon ſuch ſubjects, when coming from a layman, would meet with a more favourable reception, and be likely to be more extenſively uſeful, than ſimilar productions from a clerical hand.

While he was proceeding with theſe works, he zealouſly contributed, both by his perſonal recommendations and liberal ſubſcriptions, to the encouragement of various ſchemes for promoting the Chriſtian religion, as it is profeſſed in the church of England, at home and abroad; ſuch as the Society for the Propagation of the Goſpel in Foreign Parts; that for the Reformation of Manners at home; together with ſeveral propoſals for building, repairing, and endowing, churches, and particularly charity-ſchools. Hitherto he had adhered to the communion of the biſhops deprived after the revolution; but, upon the death of Dr. Lloyd, biſhop of Norwich, in the year 1709, who was the laſt of that number, excepting Dr. Kenn, he joined in communion with the church as eſtabliſhed by law. From this time Mr. Nelſon's health declined very rapidly. He had long been afflicted with an aſthmatic complaint and dropſy in the breaſt, which his extraordinary application in writing contributed to increaſe in an alarming degree. At length, retiring to the houſe of a relation at Kenſington for the benefit of the air, he died there in January 1714-15, in the fifty-ninth year of his age. He left his whole fortune to pious and charitable uſes, to which indeed he had devoted a great part of his income during his life.

Mr. Nelſon's principal works are—1. A Companion for the Feſtivals and Faſts of the Church of England, &c. 1704, which has been exceedingly popular, and has paſſed through twenty or thirty editions. 2. The great Duty of frequenting the Chriſtian Sacrifice, 1707. 3. The Practice of true Devotion, in relation to the End as well as the Means of Religion, with an Office for the Holy Communion, 1708. 4. The Life of Dr. George Bull, biſhop of St. David's, with the Hiſtory of the Controverſies in which he was engaged, &c. 1713. 5. The Scripture Doctrine of the moſt holy and undivided Trinity, vindicated from the Miſrepreſentations of Dr. Clarke, 1714. 6. An Addreſs to Perſons of Quality and Eſtate, &c. 1715. 7. The whole Duty of a Chriſtian, by Way of Queſtion and Anſwer, deſigned for the uſe of the charity-ſchools in and about London. 8. Letters written to himſelf, which ſhow how much he was known and eſteemed by exalted characters and men of diſtinguiſhed worth, both in his own country and in foreign parts. In Nichols's Anecdotes of Bowyer, ſome of his own letters are inſerted, which are highly characteriſtic of his benevolence. *Gen. Biog.*

NEL'SON (James), an apothecary in Red Lion Street, Holborn, where he reſided upwards of half a century. In 1753 he publiſhed an excellent treatiſe On the Government of Children, under the Heads of Health, Manners, and Education, 8vo. He died April 19, 1794, aged 84 years. He was alſo author of The Affectionate Father, a ſentimental comedy, 8vo. 1786.

NEL'SON (Horatio, Viſcount), one of the braveſt and moſt ſucceſsful naval commanders in the Britiſh annals, was fifth ſon of the reverend Edmund Nelſon, of a family long ſettled at Hilborough in the county of Norfolk, and rector of Burnham-Thorpe in the ſame county. Horatio was born September 29, 1758, at his father's parſonage-houſe. His grammatical education, which he received at the public ſchools of Norwich and North Walſham, was cut ſhort in his twelfth year, by a ſummons from his maternal uncle, captain Suckling, to go on-board his ſhip, the Raiſonable of 64 guns, in quality of a midſhipman. This veſſel was among the equipments in conſequence of the diſpute with Spain reſpecting the Falkland iſlands; and its ſpeedy termination ſoon returned the young ſailor to ſhore. He had, however, in this ſhort period, imbibed a decided predilection for a nautical life; in conſequence of which, his uncle placed him immediately with the captain of a Weſt Indiaman who was going to ſea. With him Horatio made his firſt voyage, from which he returned in 1772, with the acquiſition of no ſmall ſhare of profeſſional knowledge. Soon after his return, captain Suckling took him on-board his ſhip, the Triumph, then lying at Chatham, in which ſituation his chief employment was navigating the cutter in the channel of the Thames. The expedition planned in 1773 for the purpoſe of penetrating as far as poſſible towards the north pole, operated ſo forcibly upon the enterpriſing ſpirit of the young ſailor, that he uſed all his influence with captain Lutwidge, one of the commanders, to be appointed his coxſwain. His application was ſucceſsful, and he ſailed in the ſummer of that year with the expedition.

Its reſults are well known to the public by the narrative of captain Phipps, afterwards lord Mulgrave; and there is nothing to be related perſonal to Nelſon on this occaſion, except an anecdote ſtrongly exemplifying his fearleſs and adventurous ſpirit. During one fine clear but cold night, he was miſſing from the ſhip, and ſearch was made for him, but in vain. At day-break he was deſcried at a diſtance upon the ice in which the veſſels were locked, with his muſket in his hand, purſuing a polar bear. On being reprimanded by the captain for his raſhneſs, and aſked what could be his inducement to run ſuch a hazard, he replied, "I wiſhed, ſir, to get the bear's ſkin for my father." The filial affection of the motive was not leſs laudable than the intrepidity of the attempt was admirable.

On his return from this voyage, his uncle procured him a ſtation under captain Farmer, who commanded a ſhip in a ſquadron deſtined for the Eaſt Indies, under the conduct of ſir Edward Hughes. He ſailed thither; but the climate proved unfriendly to his conſtitution, and it was found neceſſary to ſend him home. When he reached England, he found his uncle comptroller of the navy; and was immediately appointed to act as fourth lieutenant of the Worceſter of 64 guns, captain Mark Robinſon, then on the point of ſailing with a convoy to Gibraltar; and he was at ſea from this time, September 1776, to the beginning of April of the next year; and, though he had not yet completed his eighteenth year, captain Robinſon placed the moſt unlimited confidence in him, and declared that he felt equally eaſy during the night, when it was Nelſon's watch, as when the oldeſt officer on-board had charge of the ſhip. Mr. Nelſon was paſſed as lieutenant on the 10th of April, 1777; and the next day received his commiſſion as ſecond of the Loweſtoffe, 32 guns, captain William Locker. During his examination, captain Suckling ſat at the head of the table; and, when it had ended in a manner moſt honourable to him, he introduced him to the other members of the board as his nephew. The examining captains expreſſed their ſurpriſe that he had not appriſed them of this relationſhip before. "No," replied the comptroller, "I did not wiſh the yonker to be favoured: I felt convinced that he would paſs a good examination, and you ſee I have not been diſappointed." In the Loweſtoffe he arrived at Jamaica; but, finding that even a frigate was not ſufficiently active for his ardent mind, he ſolicited an appointment to the command of a ſchooner, tender to the Loweſtoffe; and in this ſmall veſſel he eagerly availed himſelf of the opportunity of becoming a complete pilot for all the intricate paſſages through the keys, ſituated north of Hiſpaniola. During Mr. Nelſon's continuance in the Loweſtoffe, ſhe captured, in a ſtrong gale of wind and a heavy ſea, an American letter of marque. The captain ordered his firſt lieutenant to board her, which he inſtantly attempted, but was unable to effect, owing to the tremendous ſea. On his return to the ſhip, the captain exclaimed, "Have I then no officer who can board the prize?" On hearing this, the maſter immediately ran to the gangway, in order to jump into the boat, when lieutenant Nelſon ſuddenly ſtopped him, ſaying, "It is my turn now; if I come back, it will be yours." He no doubt had made up his mind not to return, unleſs he firſt accompliſhed his object; he did accompliſh it: and this circumſtance ſtrongly preſaged his future character; for, as it afterwards appears, the greater the obſtacles with which he had to contend, the better was he pleaſed with the nature of his duty.

After a year's active ſervice, he was removed to the Briſtol, the flag-ſhip of ſir Peter Parker; and under this commander he finiſhed his ſervices as a lieutenant. It is obſervable that the late lord Collingwood, who ſucceeded to the command ſo many years afterwards, upon his glorious death, ſucceeded him now in the Loweſtoffe, and again in the flag-ſhip, when, on the 8th of December, the ſame year, he was made commander in the Badger brig, at the age of twenty-one. While captain Nelſon commanded the Badger, his majeſty's ſhip Glaſgow, captain Thomas Lloyd, lying near, took fire from a caſk of rum; but, by the unceaſing exertions and preſence of mind of Nelſon, the whole crew was ſaved from the flames.

Captain Nelſon obtained his rank of poſt-captain on the 11th of July, 1779; and, during nine years that he had been in ſervice, he had, by keen obſervation, and inceſſant application to every part of his known duty, not only become an able officer, but had likewiſe laid the foundation for forming a moſt ſkilful and ſucceſsful pilot. This ſeems indeed, as has been already obſerved, from the firſt, to have been his conſtant ambition. After his advance to poſt-rank, he was appointed to the Hinchinbroke, of 28 guns. On the arrival of count d'Eſtaing at Hiſpaniola, with a numerous fleet and army from Martinique, an attack upon Jamaica was expected. In this ſituation of the iſland, Nelſon was entruſted, both by the admiral and general, with the command of the batteries at Port-Royal. This was the moſt important poſt in the whole iſland, as being at once the key to the naval force of the town of Kingſton, and to the ſeat of government at Spaniſh Town. A plan was next formed for taking Fort San Juan, on the river St. John, in the gulf of Mexico; and captain Nelſon was appointed to the command of the naval department. His buſineſs was to have ended when he had convoyed the forces, about 500 men, from Jamaica to the Spaniſh main; but it was found, that not a man of the whole party had ever been up the river: he therefore diſplayed his uſual intrepidity, quitted his ſhip, and ſuperintended the tranſporting of the troops, in boats, one hundred miles up a river which, ſince the time of the Buccaneers, none but Spaniards had ever navigated. Of all the ſervices in which he had been engaged, this was the moſt perilous. It was the latter end of the dry ſeaſon; the river was low, full of ſhoals and ſandy beaches; and the men were often obliged to quit the boats, and drag them through ſhallow channels, which the natives went before to explore. This labour, and that of forcing the rapids, were chiefly ſuſtained by the ſailors; men at all times accuſtomed to rely on their own exertions, and at all times ſure to do their duty. Seven or eight hours during the day they were expoſed to a burning ſun, rendered more intolerable by being reflected from dry ſhoals of white ſand; and at night their ſufferings were not leſs ſevere, owing to the heavy dews that fall in that climate. On the 9th of April they arrived at a ſmall iſland, called St. Bartholomew, which commanded the river in a rapid and difficult part, and was defended by a battery, mounting nine or ten ſwivels. Nelſon, according to his own phraſe, reſolved to board this out-poſt. Putting himſelf at the head of a few ſailors, he leaped on the beach. Captain Deſpard (afterwards driven to deſperation, crimes, and an ignominious end) gallantly ſupported him; they ſtormed the battery, and fought and defeated the Spaniards with their own guns. Two days afterwards they came in ſight of the caſtle of San Juan, and began to beſiege it on the 13th; it ſurrendered on the 24th. Before that time they had a more formidable enemy to encounter, and againſt which even the proweſs of a Britiſh ſailor is of no avail. The bad weather had ſet in: ſailors, ſoldiers, and Indians, ſunk alike under it; the latter from exertions to which they had never been accuſtomed, and the Europeans from the deadly effects of a climate allotted by the diſtribution of nature to a race of different colour and complexion. All that victory procured them was a ceſſation from toil: no ſupplies were found, and the caſtle itſelf was worſe than a priſon. The hovels, which were uſed as an hoſpital, were ſurrounded with putrid hides; and, when orders were obtained from the commander-in-chief to build one, the ſickneſs had become ſo general, that there were no hands to work at it. The rains continued, with few intervals, from April to October, when they abandoned their baneful conqueſt. Of 1800, who were ſent to different poſts upon this ill-fated ſcheme, only 380 returned. Nelſon narrowly eſcaped. His advice had been to carry the caſtle by aſſault; inſtead of which, eleven days were ſpent in the formalities of a ſiege. He returned before its ſurrender, exhauſted with fatigue, and ſuffering under a dyſentery; yet to him the commander-in-chief aſcribed the principal cauſe of ſucceſs in reducing Fort Juan, in which were found one braſs mortar of five inches and a half, twenty pieces of braſs ordnance mounted, beſides ſwivels, ten or twelve ditto diſmounted, with a proportionable quantity of military ſtores. From the extreme fatigue which captain Nelſon endured on this expedition, his health became viſibly impaired; but he fortunately received an appointment to the Janus of 44 guns, vacant by the death of captain Glover, ſon to the author of Leonidas. This promotion removed him from the fatal ſtation juſt in time; and he reached Jamaica in ſuch a ſtate of ſickneſs, that he was carried on-ſhore in his cot. The attention of a good old negreſs, and afterwards that of ſir Peter Parker and his lady, ſaved his life; but his health had ſuffered ſo much and ſo ſeverely, that he was ſoon compelled to return to England, which he did in the Lion, commanded by the Hon. William Cornwallis, through whoſe attention a complete recovery was effected.

In the month of Auguſt 1781, captain Nelſon was appointed to the command of the Albemarle of 28 guns, and ſent into the North Seas. During this voyage he gained a conſiderable knowledge of the Daniſh coaſt, and its ſoundings; a knowledge which afterwards proved of great importance to his country. On his return, he was ordered to Quebec with a convoy, under the orders of captain Thomas Pringle. Here he became acquainted with Mr. Alexander Daviſon, who ſaved him from an imprudent marriage. Captain Nelſon ſailed from Quebec with a convoy to New York, in the month of October 1782, at which place he joined the fleet under the command of ſir Samuel Hood. In November he ſailed with ſir Samuel Hood to the Weſt Indies, where he continued actively employed till the peace. When Nelſon was ordered back to England, he was directed, in his way, to attend his royal highneſs prince William (duke of Clarence) on a viſit to the Havannah. On his arrival, the Albemarle was paid off at Portſmouth, on the 31ſt of July, 1783.

During the autumn of this year captain Nelſon went to France, where he continued till the ſpring of the year 1784; when he was appointed to the command of the Boreas frigate, 28 guns, and was ordered to the Leeward Iſlands. While his veſſel was at anchor in Nevis road, a French frigate paſſed to the leeward, cloſe along-ſhore. Nelſon had received information that this frigate was ſent from Martinico, for the purpoſe of making a ſurvey of our Weſt-India Iſlands. This he was determined to prevent. Accordingly he followed her to St. Euſtatia; and, being invited by the Dutch governor to meet the French officers at dinner, (the reader will pleaſe to recollect that this was during the peace,) he took that opportunity of aſſuring the captain, that, underſtanding it was his intention to honour the Britiſh poſſeſſions with a viſit, he had taken the earlieſt opportunity in his power to accompany him in his majeſty's ſhip the Boreas, in order that ſuch attention might be paid to an officer of his moſt Chriſtian majeſty as every Engliſhman would be proud to ſhow. The Frenchmen, with equal politeneſs, proteſted againſt giving him this trouble; but Nelſon inſiſted upon paying them this compliment, followed them cloſe, in ſpite of all attempts to elude his vigilance, and never loſt ſight of them, till, finding it impoſſible either to deceive or eſcape him, they gave up their intention in deſpair, and beat up to Martinico.

This ſtation, moreover, opened a new ſcene to the officers of the Britiſh navy. The Americans, when coloniſts, poſſeſſed almoſt the whole of the trade from America to our Weſt-India Iſlands; but, on the return of peace, and when their independence was acknowledged, they forgot that they were then to be conſidered as having no more privileges in this trade than foreigners. The governors and cuſtom-houſe officers pretended, that by the Navigation-Act the Americans had a right to trade. He knew the meaning of that act as well as they; and, though the commander-in-chief was diſpoſed to wink at this commerce, he addreſſed a letter to the governor of the Leeward Iſlands on the ſubject, who, in reply, told him that old generals were not in the habit of taking advice from young gentlemen. Nelſon, in anſwer to this, ſaid, "Sir, I am as old as the prime-miniſter of England, and think myſelf as capable of commanding one of his majeſty's ſhips as that miniſter is of governing the ſtate." He accordingly ſhowed that he could act for himſelf; and, in defiance of the judgment of thoſe who thought themſelves his ſuperiors, ordered all the American veſſels to quit the iſlands in forty-eight hours; declaring that, if they refuſed, or heſitated, or preſumed to land their cargoes, he would ſeize them. The Americans, ſupported by the governors of the iſlands, did reſiſt; and the admiral, unwilling to take an active part on either ſide, *adviſed* captain Nelſon to be guided by the wiſhes of the preſidents of the council. With reſpect to this advice of ſir Richard Hughes, he ſaid within himſelf, "I muſt now diſobey my orders, or diſobey acts of parliament: I determined on the former, truſting to the uprightneſs of my intentions, and believing that my country would not allow me to be ruined by protecting her commerce." He wrote to the admiral, and in very reſpectful language told him, he ſhould decline obeying his orders till he had an opportunity of ſeeing and converſing with him. The firſt feelings of ſir Richard Hughes were thoſe of anger, and he determined to ſuperſede Nelſon; but, having mentioned the buſineſs to his own captain, the latter told him, he believed all the ſquadron thought he had iſſued illegal orders, and therefore did not know how far they were bound to obey him. The admiral ſubmitted, and even thanked Nelſon for having ſhown him his error. At Nevis the Boreas found ſome American veſſels deeply laden, with the colours of the iſland flying. They were ordered to hoiſt their proper flag, and leave it in eight-and-forty hours. At firſt they denied their country, and refuſed to obey; but, upon being examined before the judge of the admiralty, they admitted that they were Americans, and that their veſſels and cargoes were wholly American property. Upon this, Nelſon ſeized them. Actions were brought againſt him, and the damages laid at 40,000l. he, however, triumphed, and the four ſhips and their cargoes were condemned. While the affair was pending, he ſent a memorial to the king; in conſequence of which, orders were forwarded to defend him at the expenſe of the crown; and, upon the repreſentation which he made at the ſame time to the ſecretary of ſtate, the regiſter-act was framed. The miniſtry, upon this occaſion, and certainly without much reaſon, tranſmitted thanks to ſir Richard Hughes, and the officers under him, for their activity and zeal in protecting the commerce of Great Britain. Nelſon felt indignant at their conduct: *he*, indeed, had protected the commerce of his country, in oppoſition to the opinion and the expreſs *advice*, which in military language always means *order*, of ſir Richard; and yet Nelſon was paſſed over, and the admiral applauded. "I feel hurt," ſaid the high-minded captain, "that, after the loſs of health, and the riſk of my fortune, another ſhould be thanked for what I did, and againſt his orders. I either deſerved to be ſent out of the ſervice, or elſe to have had ſome little notice taken of what I had done. They have thought the *act* worthy of notice, but they have neglected *me*."

At Nevis, captain Nelſon was united in marriage, in 1787, with Mrs. Neſbit, a Weſt-Indian lady, widow of Dr. Neſbit, a phyſician. She had already a ſon; but no farther iſſue was the reſult of this connexion. In the ſame year, the uſual term of ſervice on that ſtation being expired, he returned to England with his bride.

Of his life on-ſhore, which chiefly paſſed in retirement in Norfolk, there is little to be ſaid. The ſea was his true element, to which he was reſtored in 1793, on the breaking out of the war with France, when he was appointed to the command of the Agamemnon of 64 guns. His reputation ſoon completed his ſhip's company, which was raiſed chiefly from Norfolk and Suffolk. He was placed under the orders of admiral lord Hood, then appointed to command in the Mediterranean. The unbounded confidence which lord Hood always repoſed in captain Nelſon, manifeſts the high opinion which he entertained, not only of his courage, but of his talents and ability to execute the arduous ſervices with which he was entruſted. If batteries were to be attacked, if ſhips were to be cut out of their harbours, if the hazardous landing of troops was to be effected, or difficult paſſages to be explored, we invariably find Nelſon foremoſt on the occaſion, with his brave officers, and the gallant crew of the Agamemnon. At Toulon, and the celebrated victories achieved at Baſtia and Calvi, lord Hood bore ample teſtimony to the ſkill and unremitting exertions of captain Nelſon, "which," ſaid his lordſhip, "I cannot ſufficiently applaud." During the memorable ſiege of Baſtia, he ſuperintended the diſembarkation of the troops and ſtores, and commanded a brigade of ſeamen, who ſerved on-ſhore at the batteries. Lord Hood had ſubmitted to general Dundas, and afterwards to his ſucceſſor d'Aubert, a plan for the reduction of Baſtia; but they refuſed to co-operate, or to furniſh a ſingle ſoldier on the occaſion. He obtained only a few artillery-men, and began the ſiege with leſs than 1200 ſoldiers, artillery-men, and marines, and 250 ſailors. "We are but few," ſays the brave Nelſon, "but of the right ſort; our general not giving us one of the five regiments he has lying idle." They were landed on the 4th of April. The ſailors dragged the guns up the heights, which was a work that could probably have been accompliſhed only by Britiſh ſeamen. The ſoldiers behaved with the ſame ſpirit. The ſiege continued nearly ſeven weeks, and on the 19th of May a treaty of capitulation was begun; and on that ſame evening, and not before, the troops made their appearance on the hills; and, on the following morning, general d'Aubert arrived with his whole army to take Baſtia. The event of the ſiege had juſtified the opinion of the ſailors; and, when the conqueſt was as good as made, then they had the aſſiſtance of the army, which they had ſolicited before in vain. "I am," ſaid Nelſon, when he got poſſeſſion of the fortreſs, "all aſtoniſhment, when I reflect on what we have achieved; 1000 regulars, 1500 national guards, and a large body of Corſican troops, laying down their arms to 1000 ſoldiers and marines, and 200 ſeamen." The enemy were ſuppoſed to be far inferior in number, when it was reſolved to attack the place; and it was not till every arrangement was made, that Nelſon received certain information of their great ſuperiority. This intelligence he kept a ſecret, fearing the attempt would be readily abandoned, if a fair pretext were afforded.

The ſiege of Calvi was carried on by general Stuart, and Nelſon had leſs reſponſibility here than at Baſtia, but the buſineſs was equally arduous. He certainly knew the importance of his ſervices, and on no occaſion ſcrupled to ſet a value upon them. When at Calvi, he ſaid to lord Hood, "We will fag ourſelves to death, before any blame ſhall lie at our doors. I truſt it will not be forgotten, that twenty-five pieces of cannon have been dragged to the different batteries, and mounted, and all but three fought by ſeamen." He was employed full four months on-ſhore; and the climate was more deſtructive to his health, and to the conſtitutions of his brave comrades, than the war. Nelſon deſcribed himſelf as the reed among the oaks bowing before the ſtorm, when they were laid low. "All the prevailing diſorders have attacked me," ſaid the captain; "but I have not ſtrength enough for them to faſten on me. One plan I purſue, never to employ a doctor. Nature does all for me, and Providence protects me." It was at the ſiege of Calvi that he loſt an eye; and yet, ſtrange as it muſt appear, he was altogether overlooked; his name did not even appear among the wounded. "One hundred and ten days," ſaid he, "I have been actually engaged at ſea, and on-ſhore, with the enemy; three actions againſt ſhips, two againſt Baſtia in my own ſhip, four boat-actions, and two villages taken, and twelve ſail burnt. I do not know that any one has done more. I have had the comfort of being always applauded by my commanders-in-chief, but never rewarded; and, what is more mortifying, for ſervice in which I have been actually wounded, others have been praiſed, who, at the time, were actually in bed, and far from the ſcene of action. They have not done me juſtice; but never mind; I'll have a Gazette of my own." He lived long enough to taſte all the glory that he anticipated.

When lord Hood left the Mediterranean in October 1794, the command devolved on admiral Hotham, who confided in Nelſon with the ſame alacrity as lord Hood had done before; and Nelſon again diſtinguiſhed himſelf in the actions with the French fleet of the 13th and 14th of March, and alſo on the 13th of July, 1795. Under admiral Hotham, he had occaſionally the command of a light ſquadron of frigates, with which he performed ſome valuable ſervices; and he was rewarded with a colonelcy of marines. When ſir John Jervis, now earl St. Vincent, ſucceeded admiral Hotham in November 1795, he was too ſenſible of the merits of captain Nelſon to part with him. He raiſed him to the rank of commodore, and removed him from the Agamemnon to the Captain of 74 guns; and on the 11th of Auguſt he had a captain appointed under him.

From the month of April till October, commodore Nelſon was conſtantly employed in the moſt arduous ſervices, viz. the blockade of Leghorn, the taking of Port Ferrajo, with the Iſland of Caprea, and, laſtly, in the evacuation of Baſtia; after which, he joined the admiral in St. Fiorenza Bay, and proceeded with him to Gibraltar. While the name of Nelſon was but little known to the Engliſh public, it was feared, reſpected, and highly honoured, throughout Italy, and in other parts of the continent. A letter was ſent to him, directed, "Horatio Nelſon, Genoa." When the writer was aſked, how he could addreſs a letter ſo vaguely? he replied, "There is but one Horatio Nelſon in the world." In the letter in which he mentions this circumſtance to his lady, captain Nelſon ſays, "Had all my actions been gazetted, not one fortnight would have paſſed, during the whole war, without a letter from me. One day or other I will have a long gazette to myſelf. I feel that ſuch an opportunity will be given me. I cannot, if I am in the field of glory, be kept out of ſight."

During the month of December 1796, commodore Nelſon hoiſted his broad pendant on-board La Minerve frigate, captain George Cockburne, and was diſpatched with that ſhip and La Blanche to Porto Ferrajo, to bring the naval ſtores left there to Gibraltar. On the paſſage thither, in the night of the 19th, the commodore fell in with two Spaniſh frigates. He immediately attacked the ſhip which carried the poop-light, and directed the Blanche to bear down and engage the other. At forty minutes paſt ten at night, the commodore brought his ſhip to cloſe action, which continued without intermiſſion till half-paſt one, when La Sabina, of 40 guns and 286 men, commanded by captain Don Jacobo Stuart, ſtruck to La Minerve. Captain Preſton in La Blanche ſilenced the ſhip he had engaged, but could not effect poſſeſſion, owing to three more ſhips heaving in ſight. Commodore Nelſon's letter, on this occaſion, to his admiral ſir John Jervis, has been regarded as a noble example of a generous and modeſt ſpirit, inaſmuch as he aſſumes no merit to himſelf, but gives every praiſe to the captain, his officers, and crew. "You are, ſir," ſays he, "ſo thoroughly acquainted with the merits of captain Cockburne, that it is needleſs for me to expreſs them; but the diſcipline of La Minerve does the higheſt credit to her captain and lieutenants, and I wiſh fully to expreſs the ſenſe I have of their judgment and gallantry. Lieutenant Culverhouſe, the firſt lieutenant, is an old officer of very diſtinguiſhed merit; lieutenants Hardy, Gage, and Noble, deſerve every praiſe which gallantry and zeal juſtly entitle them to; as does every man in the ſhip. You will obſerve, ſir, I am ſure, with regret, among the wounded, lieutenant James Noble, who quitted the Captain to ſerve with me, and whoſe merits, and repeated wounds received in fighting the enemies of our country, entitle him to every reward a grateful nation can beſtow.” In this action, the captured ſhip had 164 men killed and wounded, and loſt the mizen, main, and fore, maſts; and La Minerve had ſeven men killed, 34 wounded, and all her maſts ſhot through.

On the 29th of January, 1797, commodore Nelſon ſailed in La Minerve from Porto Ferrajo, on his return to ſir John Jervis, with a mind irritated and depreſſed, through the fear that a general engagement would take place before he could join the fleet. He arrived at Gibraltar a few days after the Spaniſh fleet had paſſed the ſtraits from Carthagena. Impatient to join his admiral, the commodore only remained one day at Gibraltar; and on the 11th of February, while he was proceeding to the weſtward, to the place of rendezvous, he was chaſed by two Spaniſh line-of-battle ſhips, and fell in with their whole fleet off the mouth of the ſtraits. He fortunately effected his eſcape, and joined the admiral off Cape St. Vincent, on the 13th of February, juſt in time to communicate intelligence relative to the force and ſtate of the Spaniſh fleet, and to ſhift his pendant on-board his former ſhip, the Captain, of 74 guns. Before ſun-ſet, the ſignal was made to prepare for action. At day-break, the enemy were in ſight. The Britiſh force conſiſted of two ſhips of 100 guns each, two of 98, two of 90, eight of 74, and one of 64, with four frigates, a ſloop, and a cutter. The Spaniards had one ſhip of 136 guns, ſix of 112 guns each, two of 84, and eighteen of 74 guns. The diſproportion was very great, but the Spaniſh admiral, Don Joſeph de Cordova, had reaſon to believe it was ſtill greater, or he would not have hazarded a battle. He had learnt from an American, that the Engliſh had but nine ſhips on that ſtation, which was actually the caſe when the American had fallen in with them; and upon this information he fought an engagement, inſtead of going into Cadiz, as he at firſt intended, relying with a fatal confidence upon the accuracy of the American. A ſhort account of the iſſue of this battle has been given under the article ENGLAND, vol. vi. 787. but we think it right in this place to add a few particulars as to the ſhare which Nelſon had in the glory of the day.

Sir John Jervis, following the new ſyſtem of naval tactics, determined to break the line of the enemy; and, before the Spaniſh admiral could form a regular order of battle, of which he ſeemed very deſirous, ſir John, by carrying a preſs of ſail, came up with them, paſſed through the fleet, then tacked, and thus cut off nine of their ſhips from the main body. Theſe, in their turn, attempted to form on their larboard tack, either with a deſign of paſſing through the Britiſh line, or to the leeward of it, and thus rejoining their friends. One of the nine only ſucceeded; the others were ſo warmly received, that they took to flight, and did not appear in action till the cloſe. The admiral was now enabled to direct his whole attention to the enemy's main body, ſtill ſuperior to his whole fleet. He made ſignal to tack in ſucceſſion. Nelſon, whoſe ſtation was in the rear of the Britiſh line, perceiving that the Spaniſh fleet was bearing up before the wind, with an intention of forming their line, joining their ſeparated ſhips, or flying; determined to prevent either of theſe ſchemes from taking effect, and accordingly, without a moment's heſitation, diſobeyed the ſignal, and ordered his ſhip to be wore. This at once brought him into action with ſeven of the largeſt ſhips of the enemy's fleet, among which were the Santiſſima of 136 guns, and two others of 112. Captain Trowbridge, in the Culloden, nobly ſupported him; and the Blenheim, captain Frederick, came to their aſſiſtance. The Salvador del Mundo and the San Iſidro dropped aſtern, and were fired into by the Excellent, captain Collingwood, to whom the latter ſtruck. “But Collingwood,” ſays Nelſon, “diſdaining the parade of taking poſſeſſion of beaten enemies, moſt gallantly puſhed up, with every ſail ſet, to ſave his old friend and meſs-mate, who was to all appearance in a very critical ſituation.” The Captain was at this moment fired upon by three firſt-rates, and the San Nicholas and a 74 were within piſtol-ſhot. The Blenheim was a-head, and the Culloden crippled a-ſtern. Collingwood ranged, and paſſed within ten feet of the San Nicholas, giving her a moſt tremendous broadſide, puſhed on for the Santiſſima Trinidada. At this time the Captain had loſt her fore-top-maſt, had not a ſail, ſhroud, or rope, left; her wheel was ſhot away, and thus left incapable of farther ſervice in the line or the chaſe; her noble commander, Nelſon, inſtantly reſolved on a bold and deciſive meaſure, and determined, whatever might be the event, to attempt his opponent ſword in hand; and directed captain Miller to put the helm a-ſtarboard, and the boarders were ſummoned. “Fortune,” ſays colonel Drinkwater, the animated narrator of this battle, “favours the brave!” nor on this occaſion was ſhe unmindful of her favourite. Ralph Willett Miller, the commodore's captain, (who was afterwards in the battle of the Nile, where he gained great honour, and was ſlain in the Theſeus, under ſir Sidney Smith,) ſo judiciouſly directed the courſe of his ſhip, that he laid her a-board the ſtarboard quarter of the Spaniſh 84; her ſprit-ſail-yard paſſing over the enemy's poop, and hooking in her mizen ſhrouds: when the word to board was given, the officers and ſeamen, deſtined for this perilous duty, headed by lieutenant (now ſir Edward) Berry, (who was afterwards lord Nelſon's captain in the Vanguard, in the battle of the Nile,) together with the detachment of the 69th regiment, commanded by lieutenant Pearſon, then doing duty on-board the Captain, paſſed with rapidity on-board the enemy's ſhip, and in a ſhort time the San Nicholas was in poſſeſſion of her intrepid aſſailants. The commodore's ardour would not permit him to remain an inactive ſpectator of this ſcene. He was aware that the attempt was hazardous, and he thought his preſence might animate his brave companions, and contribute to the ſucceſs of this bold enterpriſe. He, therefore, as if by magic impulſe, accompanied the party in this attack; paſſing from the fore-chains of his own ſhip into the enemy's quarter-gallery, and thence through the cabin to the quarter-deck, where he arrived in time to receive the ſword of the dying commander, who had been mortally wounded by the boarders. The Engliſh were at this time in poſſeſſion of every part of the ſhip, and a fire of muſketry opened upon them from the ſtern-gallery of the San Joſef. The commodore was not long in reſolving on the line of conduct which he ſhould adopt. The two alternatives that preſented themſelves were, to quit the prize, or inſtantly to board the three-decker. Confident in the bravery of his ſeamen, he determined on the latter. Directing, therefore, an additional number of men to be ſent from the Captain on-board the San Nicholas, Nelſon, whom no danger could appal, headed himſelf the aſſailants in this new attack, exclaiming, “Weſtminſter Abbey, or a glorious victory!” Succeſs in a few minutes, and with little loſs, crowned the enterpriſe. For a moment, commodore Nelſon could ſcarcely perſuade himſelf of this ſecond inſtance of good fortune; he, therefore, ordered the Spaniſh commandant, who had the rank of brigadier, to aſſemble the officers on the quarter-deck, and means to be taken inſtantly for communicating to the crew the ſurrender of the ſhip. All the officers immediately appeared, and the commodore had the ſurrender of the San Joſef duly confirmed, by each of them delivering his ſword. It was at this moment, one of the ſailors came up, and with an

Engliſhman's feeling, and apologizing for the liberty, took his commander by the hand, and congratulated him on being ſafe on the quarter-deck of a Spaniſh three-decker. On this occaſion Nelſon had received only a few bruiſes. The Spaniards had ſtill eighteen or twenty ſhips, which had ſuffered little or no injury; but they did not think fit to renew the battle. As ſoon as the action was diſcontinued, Nelſon went on-board the admiral's ſhip, who received him on the quarter-deck, took him in his arms, and ſaid he could not ſufficiently thank him.

Before the news of the action had arrived in England, Nelſon had been advanced to the rank of rear-admiral; and now, for his gallantry on the 14th of February, he received the inſignia of the Bath, and the gold medal from his ſovereign. He was alſo preſented with the freedom of the city of London in a gold box.

In the month of April, 1797, ſir Horatio Nelſon hoiſted his flag as rear-admiral of the blue, and was detached to bring down the garriſon of Porto Ferrajo; and, on the 28th of May, he ſhifted his flag from the Captain to the Theſeus, and was appointed to the command of the inner ſquadron at the blockade of Cadiz. During this ſervice, his perſonal courage was, if poſſible, more conſpicuous than at any other period of his former exploits. In the attack on the Spaniſh gun-boats, July 3d, 1797, he was in his barge, with only its uſual complement of ten men and the coxſwain, accompanied by captain Freemantle. The commander of the Spaniſh gun-boats, Don Miguel Tregovia, in a barge rowed by twenty-ſix oars, having thirty men, including officers, made a moſt deſperate effort to overpower Nelſon and his brave companions. The conflict was long and doubtful: they fought hand to hand with their ſwords. His faithful coxſwain, John Sykes, was wounded in defending the admiral; and twice ſaved his life, by parrying the blows that were aimed at him, and mortally wounded his adverſaries; and at laſt actually interpoſed his head to receive the ſtroke of a ſabre, which he could not by any other means avert. The whole of the Spaniards were either killed or wounded, and Nelſon brought off the launch.

On the 15th of July, he was detached with a ſmall ſquadron to make an attack on the town of Santa Cruz, in the iſland of Teneriffe, where it was imagined a Manilla-ſhip had landed an immenſe treaſure. The rear-admiral, on his arrival before the town, loſt no time in directing a thouſand men, including marines, to be prepared for landing from the ſhips, under the direction of captains Trowbridge, Hood, Thomſon, Freemantle, Bowen, Miller, and Waller, who volunteered their ſervices. The boats of the ſquadron were accordingly manned, and the landing was effected in the courſe of a dark night. The party were in full poſſeſſion of the town of Santa Cruz in about ſeven hours; but, finding it impracticable to ſtorm the citadel, they prepared for their retreat, which was allowed by the Spaniards unmoleſted, agreeably to the ſtipulations made with captain Trowbridge. On this expedition, Nelſon had orders on no account to land in perſon with the forces, unleſs his preſence was abſolutely neceſſary; but no orders could reſtrain him, where there was danger to be encountered. In ſtepping out of the boat, he received a ſhot through the right elbow, and fell. His ſon-in-law, lieutenant Neſbit, who was cloſe to him, placed him at the bottom of the boat, and applied his handkerchief as a tourniquet to the arm, and conveyed him to the Theſeus, under a tremendous fire from the enemy. The ſame night, at ten o'clock, the admiral's arm was amputated; and, immediately after, he began his official letter. On the following day he wrote to lady Nelſon, and ſays, "I know it will give you much pleaſure, in finding that your ſon, under God's providence, was inſtrumental in ſaving my life." The loſs of the Engliſh amounted to 250. But the admiral, in his official diſpatches, did not mention his own wound; though in a private letter to lord St. Vincent, the firſt which he penned with his left hand, he ſays, in the ſpirit of deſpondence, "I am become a burthen to my friends, and uſeleſs to my country. When I leave your command, I become dead to the world. I go hence, and am no more ſeen." He was obliged to go to England for advice that he could not have abroad; and here honours awaited him, abundantly more than ſufficient to recover his accuſtomed ſpirit: but what gave zeſt to every pleaſure was the aſſurance, that he would be ſoon fit for active ſervice. Letters were addreſſed to him by the firſt lord of the admiralty, and by his ſteady friend the duke of Clarence, to congratulate him on his return. The freedom of the cities of Briſtol and London was tranſmitted to him; he was inveſted with the order of the Bath, and he received a penſion of 1000l. a-year. Not having been in England ſince he loſt his eye, he went to receive a year's pay as ſmart-money; but could not obtain it, becauſe he had not brought a certificate from a ſurgeon, that the ſight was actually deſtroyed. He was ſomewhat angry that this formality ſhould be inſiſted upon, the fact being ſo notorious. He, however, complied; and on his return to the office, the clerk, finding it was the annual pay of a captain only, obſerved, he thought it had been more. "Oh," replied Nelſon, "this is only for an eye; in a few days, I ſhall come for an arm; and in a little time longer, God knows, moſt probably for a leg." Accordingly he ſoon after went, and exhibited the certificate of the loſs of an arm.

Previouſly to his having received the grant of a penſion, cuſtom required that a memorial of his ſervices ſhould be drawn up; and a more brilliant detail was never exhibited. He had been engaged againſt the enemy 120 times. Leſt any doubt of this ſhould remain, we have preſerved a copy of the Memorial.

" *To the King's Moſt Excellent Majeſty.*

"The Memorial of ſir Horatio Nelſon, K.B. and a rear-admiral in your majeſty's fleet, humbly repreſents, that, during the preſent war, your memorialiſt has been in four actions with the fleets of the enemy, viz. on the 13th and 14th of October, 1795; on the 13th of July, 1796; and on the 14th of February, 1797. In three actions with frigates; in ſix engagements with batteries; in ten actions with boats employed in cutting out of harbours, and in deſtroying veſſels; and in taking three towns. Your memorialiſt has ſerved on-ſhore with the army four months, and commanded the batteries at the ſieges of Baſtia and Calvi. That, during the war, he has aſſiſted at the capture of ſeven ſail of the line, ſix corvettes, and twenty privateers of different ſizes, and taken and deſtroyed near fifty ſail of merchant-veſſels; and your memorialiſt has actually been *engaged againſt the enemy one hundred and twenty times;* in which ſervice your memorialiſt has loſt his right eye and arm, and been ſeverely wounded and bruiſed in his body. All of ſuch ſervices and wounds your memorialiſt ſubmits to your majeſty's moſt gracious conſideration. October, 1797."

In the following December, Nelſon received orders to hoiſt his flag on-board the Vanguard and proceeded to the Mediterranean, where, in April 1798, he joined lord St. Vincent off Cadiz. At this period the formidable armament prepared by the French for the conqueſt of Egypt was collected at Toulon; and Nelſon was ſent with a ſquadron of three men-of-war and ſome frigates, to watch its motions. In conſequence of a violent ſtorm, he was obliged to anchor off Sardinia; and in the mean time the French armament ſailed for its deſtination. He was joined on the 8th of June by ten ſail of the line under captain Trowbridge, and immediately proceeded in ſearch of the French fleet. Their object being unknown, much time and pains were conſumed in the queſt, along the ſhores of Italy and Sicily, and as far as Alexandria. From this port, where the French were not yet arrived, Nelſon returned to Sicily; and at length, on new intelligence, reviſited the Egyptian coaſt. On the 1ſt of

Auguſt, they came in ſight of Alexandria; and at four in the afternoon, captain Hood, in the Zealous, made ſignal for the French fleet. For ſeveral preceding days, the admiral had ſcarcely taken either food or ſleep: he now ordered his dinner to be ſerved, while preparations were making for battle; and, when his officers roſe from table, and went to their ſeparate ſtations, he ſaid to them, "Before this time to-morrow I ſhall have gained a peerage or Weſtminſter Abbey." The French admiral, not being able to enter the port of Alexandria, had moored his fleet in Aboukir-bay, in a ſtrong and compact line of battle; the headmoſt veſſel being as cloſe as poſſible to a ſhoal on the north-weſt, and the reſt of the fleet forming a kind of curve along the line of deep water, ſo as not to be turned by any means on the ſouth-weſt. This poſition the French admiral thought the ſtrongeſt poſſible, in an open road; and he had no doubt that he could bid defiance to a force more than double their own. Inſtead of which, he had the advantage of numbers in ſhips, in guns, and in men: he had thirteen ſhips of the line and four frigates, carrying 1196 guns, and 11,230 men; whereas the Engliſh had the ſame number of ſhips of the line, and one 50-gun ſhip, carrying 1012 guns, and 8068 men. They had, however, Nelſon for chief-in-command, who, in all caſes, was a hoſt in himſelf.

During the whole cruiſe, it had been Nelſon's practice, whenever circumſtances would admit of it, to have his captains on-board the Vanguard, and fully explain to them his own ideas of the beſt modes of attack, whatever might be the ſituation of the enemy. His officers, therefore, were well acquainted with his principles of tactics; and ſuch was his confidence in their abilities and zeal, that the only plan arranged, in caſe they ſhould find the French at anchor, was for the ſhips to form as moſt convenient for their mutual ſupport, and to anchor by the ſtern. The poſition of the enemy preſented the moſt formidable obſtacles, but the admiral viewed theſe with the eye of a ſeamen determined on an attack; and it inſtantly ſtruck him, that, where there was room for an enemy's ſhip to ſwing, there was room for one of ours to anchor. No further ſignal was neceſſary than thoſe which had already been made. The admiral's deſigns were as fully known to his whole ſquadron, as was his determination to conquer, or periſh in the attempt. The action commenced at ſun-ſet, at half paſt ſix o'clock, with an ardour that cannot be deſcribed. The ſhores of the bay of Aboukir were ſoon lined with ſpectators, who beheld the approach of the Engliſh, and the awful conflict of the hoſtile fleets, in ſilent aſtoniſhment. Admiral Nelſon had ſix colours flying in different parts of his rigging, leſt they ſhould be ſhot away; that they ſhould be ſtruck, no Britiſh commander conſiders as a poſſibility. The two firſt ſhips of the French line were diſmaſted within a quarter of an hour after the action began; and the others had ſuffered ſo ſeverely, that victory was even then regarded as certain. The third, the fourth, and the fifth, were taken poſſeſſion of at half paſt eight. In the mean time, Nelſon had received a ſevere wound on the head from a piece of iron, called a langridge-ſhot; the ſkin of his forehead, being cut with it at right angles, hung down over his face. Captain Berry caught him in his arms, as he was falling. The great effuſion of blood occaſioned an apprehenſion that the wound was mortal. When the ſurgeon had examined it, he found there was no immediate danger, but urged him to keep himſelf quiet. He called for his ſecretary to write the diſpatches, but he had been himſelf wounded. The chaplain was next ſummoned; but, before he could get to the admiral's cabin, Nelſon ſeized the pen, and began himſelf. Suddenly a cry was heard on deck, that the Orient was on fire. In the confuſion the admiral found his way up, and, to the aſtoniſhment of every one, appeared on the quarter-deck, when he immediately gave orders that boats ſhould be ſent to the relief of the enemy. It was about nine o'clock that this fire broke out. Brueys was dead: he had received three different wounds, yet would not leave his poſt: a fourth almoſt cut him in two; he refuſed to be carried below, being determined to die upon the deck. The flames ſoon overpowered every effort to ſave the ſhip. By the prodigious light of this conflagration, the ſituation of the two fleets was clearly diſtinguiſhable by the colours of each ſhip. About ten o'clock the Orient blew up with a moſt tremendous exploſion. This was followed by an awful pauſe, and a death-like ſilence. The firing inſtantaneouſly ceaſed on both ſides, and the firſt ſound was the fall of her ſhattered maſts and yards, which had been carried to an aſtoniſhing height. The firing recommenced with the ſhips to leeward of the centre, and continued till three in the morning. At day-break, the two rear ſhips of the enemy were the only French ſhips of the line which had their colours flying: theſe cut their cables in the forenoon, and ſtood out to ſea, and two frigates with them. Theſe were all that eſcaped; and the victory was the moſt complete and glorious *then* in the annals of naval hiſtory. Of thirteen ſail of the line, nine were taken and two burnt; of the four frigates, one was ſunk and another burnt. The loſs on the part of the Engliſh, in killed and wounded, amounted to 895; on the part of the French, 5225 periſhed, and 3105, including the wounded, were ſent on-ſhore by cartel.

Admiral Nelſon was now at the height of his glory. He had realized his hopes: he had nobly earned a peerage. Congratulations, rewards, and honours of every kind, were ſhowered down upon him in great abundance, by all the princes and powers to which this important victory or ſplendid conqueſt was beneficial. The grand ſeignior and his mother, the czar, the kings of Naples and Sardinia, ſent him preſents, accompanied with letters, acknowledging his unequalled ſervices to the common cauſe. In his own country he was created Baron Nelſon of the Nile and of Burnham Thorpe, with a penſion of 2000l. for his own life, and thoſe of two of his immediate ſucceſſors. When this ſubject was brought before the houſe by Mr. Secretary Dundas, he ſaid, "Some victories had been marked with peculiar circumſtances: ſome had been marked by the ſkill of the commanders; ſome by the particular bravery of the ſeamen; others by the great and extenſive benefits reſulting from them. But it was peculiar to this victory, that it united all thoſe qualities by which other victories had been moſt diſtinguiſhed. When," ſaid he, "we look to the extent of the conſequences of this victory, both at home and abroad; when we behold the ſpirit with which it has electrified Europe from one end to the other; we muſt acknowledge that there never did exiſt a victory, which had produced ſo much at preſent, and which was likely to produce ſo many and ſuch important conſequences in future."

After leaving a ſquadron to watch the coaſt of Egypt, lord Nelſon proceeded in the Vanguard to Naples, where his arrival was celebrated with every demonſtration of joy. The king himſelf went ſome leagues to ſea in his barge to meet him. The victory of the Nile had inſpired that court with the courage openly to declare againſt France, and a powerful army under general Mack was preparing to march againſt the French in Italy. (See the article NAPLES, p. 541.) Malta was at this time in a ſtate of blockade by the Engliſh and Neapolitans, and lord Nelſon ſailed thither to aſſiſt in its reduction. In the month of November he proceeded with a ſquadron to Leghorn, which town with its fortreſs was delivered to the Neapolitan troops accompanying him. When the miſmanagement of the wretched court of Naples, and the cowardice of the troops, had rendered the French triumphant, and brought the capital into immediate danger, lord Nelſon, zealouſly attached by principle to the royal family, took them, with his friends ſir W. and lady Hamilton, on-board his ſhip, and carried them ſafe to Palermo. He remained at that capital, directing various operations of the veſſels under his orders in the Mediterranean, not without ſome occaſional bickerings with ſir Sidney Smith, who was ſent out with a ſeparate command.

After the French had taken poſſeſſion of Naples, and eſtabliſhed a Parthenopean republic on the ruins of the former monarchy, the dormant ſpirit of loyalty began to revive, and meaſures were taken for a counter-revolution. In theſe lord Nelſon warmly concurred; and he ſent captain Trowbridge to cruiſe in the bay of Naples, and reduce the iſlands by which it is ſurrounded. On the 24th of June, 1799, Nelſon himſelf arrived in the bay, when the republicans had juſt entered into an armiſtice with the Neapolitan general, cardinal Ruffo, ſigned by commodore Foote and the Turkiſh and Ruſſian commanders, for the caſtles which alone remained in their poſſeſſion. The king of Naples, in this proſperous ſtate of his affairs, was induced to diſavow the authority of the cardinal to treat with ſubjects in rebellion; and lord Nelſon immediately put an end to the truce. The fortreſſes were afterwards obliged to capitulate; and a bloody execution, in ſpite of the treaty, took place of a number of the Neapolitan republicans, under the eye of the Britiſh admiral. For this part of lord Nelſon's conduct, much has been ſaid by his panegyriſts; but it is not, and cannot be, juſtified. He ſubmitted to be ſubſervient to the paſſions of the court; and this perhaps the more readily, as his own prejudices and paſſions were all on the ſame ſide. That we have not ſpoken too ſtrongly on this ſubject is evident from the vindication of commodore Foote, who ſhall ſpeak for himſelf: "Nothing," ſays this much injured and inſulted officer, "can be more evident, than the fact that a ſolemn capitulation had been agreed upon, formally ſigned by the chief commander of the forces of the king of Naples, by the Ruſſian commander, and by myſelf, all duly authorized to ſign any capitulation in the abſence of ſuperior powers. This was not a treaty of peace, ſubject to ratification: it was not liable to be broken; it was a ſerious agreement for ſurrender, upon terms which involved the lives and properties of men, who might have choſen to forfeit thoſe lives and properties, had they not relied principally upon the faith of a Britiſh officer. Parts of the agreement were performed; and actual advantage was afterwards taken of thoſe parts of the capitulation that had been thus executed, to ſeize the unhappy men who, having been thus deceived by a ſacred pledge, were ſacrificed in a cruel and deſpotic manner." "Theſe facts," ſays the writer in the Quarterly Review, "are certain and undeniable. They cannot be defended; they cannot be excuſed; they cannot by any ſophiſtry be palliated. A faithful hiſtorian has no alternative but to relate them with ſhame and ſorrow." See NAPLES, p. 544.

On the 9th of Auguſt, lord Nelſon brought his Sicilian majeſty ſafe to his court, having kept him ſome weeks in his ſhip out of the reach of peril; and on the 13th the king preſented him with a ſword moſt magnificently enriched with diamonds, and conferred upon him the title of Duke of Bronté, and annexed to the title an eſtate ſuppoſed to be worth 3000l. per annum. Lord Nelſon himſelf gave an account of the preſents which he had received for his ſervices in the Mediterranean, between the 1ſt of October, 1798, and the 1ſt of October, 1799. Theſe we ſhall bring into one view from the 12th volume of the Britannic Magazine.

From the parliament of Great Britain, for his own life, and two next heirs, per annum	£2000
From the parliament of Ireland, not exactly known, but ſuppoſed to be the ſame as given earl St. Vincent and lord Duncan, per annum	1000
From the Eaſt-India Company	10,000
From the Turkey Company, a piece of plate of great value.	
From Alexander Davidſon, eſq. a gold medal.	
From the city of London, a ſword of great value.	
From the grand ſignior, a diamond aigrette, or plume of triumph, valued at	£2000
From the ſame, a rich peliſſe, valued at	1000
From the grand ſignior's mother, a roſe, ſet with diamonds, valued at	1000
From the emperor of Ruſſia, a box, ſet with diamonds, value	2500
From the king of the Two Sicilies, a ſword richly ornamented with diamonds, value	5000
Alſo, the dukedom of Bronti, with an eſtate, ſuppoſed, per annum	3000
From the king of Sardinia, a box, ſet with diamonds, in value	1200
From the iſland of Zante, a gold-headed ſword and cane.	
From the city of Palermo, a gold box and chain, brought on a ſilver waiter. Alſo, the freedom of the city of Palermo, which conſtituted him a grandee of Spain.	

It was at Naples, that lord Nelſon ſuffered himſelf to be ſo far infatuated as to form a connexion with lady Hamilton, which led to his ſeparation from his own wife, and till which he had been an affectionate huſband, and happy and amiable in all his domeſtic relations. This is inconteſtibly proved by the letters which paſſed between him and his lady, and which have been given in the life of his lordſhip by Meſſrs. Clarke and M'Arthur.

After the appointment of lord Keith to the command of the Mediterranean fleet, lord Nelſon made preparations to return; and, proceeding, in company with ſir William and lady Hamilton, to Trieſte, he travelled through Germany to Hamburgh, every-where received with diſtinguiſhed honours. He embarked at Cuxhaven, and landed at Yarmouth on the 6th of November, 1800, after an abſence from his native country of three years. In the following January he received orders to embark again; and it was during this ſhort interval that he formally ſeparated from lady Nelſon. Some of his laſt words to her were, "I call God to witneſs that there is nothing in you or your conduct that I wiſh otherwiſe." He was now raiſed to the rank of vice-admiral of the blue; and ſoon after hoiſted his flag on-board the San Joſef of 112 guns, his own prize at the battle of Cape St. Vincent. About this time the emperor Paul of Ruſſia had renewed the northern confederacy, the expreſs and avowed object of which was to ſet limits to the naval ſupremacy of England. A reſolution being taken by the Engliſh cabinet to attempt its diſſolution, a formidable fleet was fitted out for the North Seas under ſir Hyde Parker, in which lord Nelſon conſented to go ſecond in command. Having ſhifted his flag to the St. George, of 98 guns, he ſailed with the fleet in the month of March, and on the 30th of that ſame month he led the way through the Sound, which was paſſed without any loſs.

The battle of Copenhagen gave occaſion for an equal diſplay of lord Nelſon's talents as that of the Nile. The Danes were well prepared for defence. Upwards of two hundred pieces of cannon were mounted upon the crown-batteries at the entrance of the harbour; and a line of 25 two-deckers, frigates, and floating batteries, was moored acroſs its mouth. An attack being determined upon, the conduct of it was entruſted to lord Nelſon; the action was fought on the 2d of April. Nelſon had with him twelve ſhips of the line, with all the frigates and ſmall craft; the remainder of the fleet was with the commander-in-chief, about four miles off. The combat which ſucceeded was one of the moſt terrible on record. Nelſon himſelf ſaid, that of all the engagements in which he had borne a part it was the moſt terrible. It began at ten in the morning, and at one victory had not declared itſelf. A ſhot through the main-maſt knocked a few ſplinters about the admiral: "It is warm work," ſaid he, "and this may be the laſt day to any of us in a moment; but, mark you, I would not be elſewhere for thouſands."

About two o'clock, great part of the Daniſh line had ceaſed to fire, and many of them had ſtruck; but, though the victory was complete, yet it was difficult to take poſſeſſion of the vanquiſhed ſhips, on account of the fire from the ſhore, which was ſtill kept up. Nelſon was irritated at this; and the more ſo, as part of his own fleet was in a perilous ſtate. The crown-batteries were, as yet, untouched, as were the ſhips at the entrance of the arſenal; while two of his own were a-ground, and others in imminent hazard of a like fate. At this critical period lord Nelſon, with the preſence of mind of one familiarized to danger, inſtantly opened a negociation: pretending that he had been urged to this ſtep through humanity to the vanquiſhed Danes, he thus wrote to the crown-prince: "Lord Nelſon has directions to ſpare Denmark, when no longer reſiſting; but, if the firing is continued on the part of Denmark, lord Nelſon muſt be obliged to ſet on-fire all the floating batteries he has taken, without having the power of ſaving the brave Danes who have defended them." A wafer was given him for his letter; but he ordered wax and a candle, ſaying, he did not wiſh it to appear that he was hurried. This meaſure put an end to further carnage; and, on the landing of lord Nelſon, the preliminaries of a treaty were arranged, which finally terminated the diſpute. The death of Paul, though not then known, had happened about nine days before this dreadful engagement; and thus the northern confederacy was annihilated. For this ſignal ſervice, in which lord Nelſon has been applauded as well for his adroitneſs as a negociator and ſtateſman, as for his courage and talents as an admiral, he was raiſed to the rank of viſcount. "There was ſome prudence," ſays a biographer, "in thus dealing out honours to him ſtep by ſtep: had he lived, he would have fought his way to a dukedom."

The preparations made for the invaſion of England from Boulogne, having now excited a great alarm in the nation, it was thought adviſable to calm the public fears by entruſting the marine defence to the popular hero; and lord Nelſon was appointed commander-in-chief of a ſquadron, with the whole attached flotilla of gun-boats, bomb-veſſels, &c. Reſolving to attempt ſomething that was worthy of his name, and the celebrity to which he had attained; ſomething that ſhould effect more than a temporary ſecurity; he planned a vigorous attack upon the enemy's veſſels before Boulogne harbour. This was executed on the 16th of Auguſt, 1801; but, from a miſtaken calculation of the enemy's preparations, and from the extreme difficulty of the enterpriſe, it proved unſucceſsful. He however received the thanks of the firſt lord of the admiralty in very warm terms: "I cannot," ſays lord St. Vincent, "ſufficiently expreſs my admiration of the zeal and perſevering courage with which this gallant enterpriſe was followed up, lamenting moſt ſincerely the loſs ſuſtained in it. The manner in which the boats of the flotilla were made faſt to the ground, and to each other, could not have been foreſeen. The higheſt praiſe is due to your lordſhip, and all under your command, who were actors in this gallant attempt."

The enſuing peace reſtored lord Nelſon to his friends on-ſhore, and to the enjoyment of that renown which rendered all his journeys of amuſement to different parts of the kingdom ſo many triumphal progreſſes. On the termination of the ſhort-lived peace, lord Nelſon, more fitted for action than repoſe, accepted the command of the Mediterranean fleet, and in May 1803 ſailed for Gibraltar in his flag-ſhip the Victory. It was his particular buſineſs to watch the Toulon fleet; but he diſdained a cloſe blockade, and rather wiſhed to give the enemy an opportunity of coming out, and trying his ſtrength and fortune againſt him. This was not ſo ſucceſsful as he anticipated; for, after having been on the look-out for two years with an inferior force, they eſcaped him, formed a junction with the Spaniards, and ran for the Weſt Indies, whither Nelſon ſoon followed. The enemy's fleet now conſiſted of eighteen ſail of the line and ſix frigates, having 12,000 troops a-board; which Nelſon did not heſitate to purſue with ten ſhips and three frigates. This extraordinary chaſe acroſs the Atlantic was conducted with ſingular order and expedition. The mere terror of Nelſon's name compelled them to fly before him; but falſe intelligence miſled him, and they ſecured their return to Europe, without having accompliſhed any other part of their purpoſe than that of reinforcing ſome of their own iſlands; ours were preſerved from pillage, invaſion, and perhaps conqueſt, by this purſuit, which, in all its circumſtances, cannot be parallelled in naval hiſtory. Having purſued them to Europe, and found that they had joined the fleet from Ferrol, and had got ſafe to Cadiz, he returned to England; and, after a viſit of three weeks to his ſeat at Merton, he ſailed again in the Victory to join admiral Collingwood with the fleet off Cadiz. He reached this ſtation on his birth-day, September 29, 1805, on which day the French admiral, Villeneuve, received orders to put to ſea the firſt opportunity. In point of preparation the two fleets were ſuppoſed to be on an equality; but, in reſpect to force, the French were the ſtronger in the proportion of nearly three to two, they having 34 ſhips of the line of 74 guns and upwards; and under lord Nelſon there were but 24 of the ſame rank: in frigates they out-numbered him in a ſimilar proportion. Early in the month of October, lord Nelſon received information which led him to imagine the enemy would ſoon put to ſea. He had already arranged a plan, according to which he determined to fight. He was aware of the miſchief of too many ſignals, and was reſolved never to diſtract the attention of his fleet on the day of action by a great number of them. On the 4th of October he aſſembled the admirals and captains of the fleet into the cabin of his ſhip, the Victory, and laid before them a new and ſimple mode of attack. Every man comprehended his method in a moment, and felt certain that it muſt ſucceed. It proved irreſiſtible.

Lord Nelſon did not remain directly off Cadiz with his fleet, or even within ſight of the port. His object was to induce the enemy to come out; with this view he ſtationed his fleet in the following manner. The Euryalus frigate was within half a mile of the mouth of the harbour, to watch the enemy's movements, and to give the earlieſt intelligence. At a ſtill greater diſtance he had ſeven or eight ſail of the line. He himſelf remained off Cape St. Mary with the reſt of the fleet, and a line of frigates extended and communicated between him and the ſeven or eight ſail off Cadiz. The advantage of this plan was, that he could receive ample ſupplies and reinforcement off Cape St. Mary, without the enemy being informed of it; and thus they always remained ignorant of the real force under his command. Villeneuve had alſo been miſled by an American, unintentionally on his part, who declared that he was ſure Nelſon could not poſſibly be with the fleet, as he had ſeen him in London but a few days before. Relying on this, and on their own ſuperiority, they put to ſea on the 19th; and on the 21ſt lord Nelſon intercepted them off Cape Trafalgar, about ſixty miles eaſt of Cadiz. When his lordſhip found that, by his manœuvres, he had placed the enemy in ſuch a ſituation, that they could not avoid an engagement, he diſplayed much animation, and his uſual confidence of victory. "Now," ſaid he, "they cannot eſcape us; I think we may make ſure of twenty of them; I ſhall probably loſe a leg, but that will be purchaſing a victory cheaply." Notwithſtanding this light way of ſpeaking, Nelſon never went into battle but with a full ſenſe of its danger; and he ſeems, on all occaſions of the kind, rather to have prepared his mind for death, than to have taken any means to baniſh the thought of it. On the morning of this, his laſt conteſt for glory and immortality, he wrote a prayer in his journal; and ſolemnly bequeathed (not his wife, but) lady Hamilton as a legacy to his king and country. He had put on the coat which he always wore in action, and kept for that purpoſe with a degree of veneration:

it bore the inſignia of all his orders. "In honour," ſaid he, "I gained them, and in honour I will die with them." The laſt order which his lordſhip gave previouſly to action was ſhort but comprehenſive: "ENGLAND EXPECTS EVERY MAN TO DO HIS DUTY." It was received with a ſhout of applauſe throughout the whole fleet. "Now," ſaid the admiral, "I can do no more; we muſt truſt to the great Diſpoſer of all events, and the juſtice of our cauſe. I thank God for this opportunity of doing my duty." It had been repreſented to him ſo ſtrongly, both by captain Blackwood, and his own captain, Hardy, how advantageous it would be for him to keep out of the action as long as poſſible, that he conſented that the Temeraire, which was then ſailing a-breaſt of the Victory, ſhould be ordered to paſs a-head, and the Leviathan alſo. They could not poſſibly do this if the Victory continued to carry all her ſail; and yet ſo far was Nelſon from ſhortening ſail, that he ſeemed to take pleaſure in baffling the advice to which he could not but aſſent. As uſual, he hoiſted ſeveral flags, that they might not eaſily be ſhot away. The enemy, on the other hand, ſhowed no colours till late in the action, when they began to feel the neceſſity of having them to ſtrike.

Lord Nelſon determined himſelf to fight the Santiſſima Trinidada; and it is worthy of remark, that he gained the higheſt honour in grappling with this ſhip in the action off Cape St. Vincent. She was the largeſt ſhip in the world, carried 136 guns, and had four decks. The Victory did not fire a ſingle ſhot till ſhe was cloſe along-ſide the Trinidada, and had already loſt fifty men, in killed and wounded. Lord Nelſon ordered his ſhip to be laſhed to his rival, and in this labour the commander of the Trinidada ordered his men alſo to aſſiſt. For four hours the conflict which enſued was tremendous. The Victory ran on-board the Redoubtable, which, firing her broadſides into the Engliſh flag-ſhip, inſtantly let down her lower-deck ports, for fear of being boarded through them. Captain Harvey, in the Temeraire, fell on-board the Redoubtable on the other ſide; another ſhip, in like manner, was on-board the Temeraire; ſo that theſe four ſhips, in the heat of battle, formed as compact a tier as if they had been moored together, their heads lying all the ſame way. The lieutenants of the Victory immediately depreſſed their guns, and fired with a diminiſhed charge, leſt the ſhot ſhould paſs through and injure the Temeraire: and, becauſe there was danger that the enemy's ſhip might take fire from the guns of the lower-deck, whoſe muzzles touched her ſide when they were run out, the fireman of each gun ſtood ready with a bucket of water, which, as ſoon as the gun was diſcharged, he daſhed at the hole made in her ſides by the ſhot. In the prayer to which we have already alluded, and which Nelſon wrote before the action, he deſires that humanity, after victory, might diſtinguiſh the Britiſh fleet. Setting an example himſelf, he twice gave orders to ceaſe firing upon the Redoubtable, ſuppoſing ſhe had ſtruck, becauſe her great guns were ſilent; and, as ſhe carried no flag, there were no means of aſcertaining the fact. From this ſhip, whoſe deſtruction was twice delayed by his wiſh to ſpare the vanquiſhed, he received his death. Captain Hardy, on perceiving frequent ſhowers of muſket-balls fired on the Victory's quarter-deck, requeſted lord Nelſon to take off the *inſignia* by which he was expoſed, as a mark, to the ſharp-ſhooters placed in the main-round-top of the enemy's ſhips. He anſwered, he would when he had time; but paid no farther attention to his ſafety. In a minute afterwards, his ſecretary, Mr. Scott, who ſtood near him, was killed: a muſket-ball entered his head, and he fell dead inſtantly. Another ſhot, a few minutes afterwards, ſtruck the epaulette on Nelſon's left ſhoulder: he fell with his face on the deck. "They have done for me at laſt, Hardy," he exclaimed; "my back-bone is ſhot through." He did not, for the ſmalleſt portion of time, loſe his preſence of mind; but obſerved, as they were carrying him down the ladder, that the tiller-ropes, which had been ſhot away, were not replaced, and ordered that new ones ſhould be rove immediately; and, to prevent any dejection which the ſight of their dying admiral might occaſion, he took out his handkerchief and covered his face, and the inſignia upon his coat; certain, by the ſenſations which he felt in his back, that no human aid could benefit him. After the ſurgeon had probed the wound, he deſired him to return to aſſiſt thoſe to whom his ſervices might be uſeful; "for," ſaid he, "you can do nothing for me." From the ſeverity of the pain, he could not refrain from wiſhing to die; "yet," ſaid he, checking himſelf, "one would like to live a little longer;" no doubt, to hear the completion of a victory which he had ſeen ſo gloriouſly begun. Having been placed in a chair, he deſired that captain Hardy might attend him, and during the hour that he lived he diſplayed all his coolneſs and recollection, and employed the time in dictating orders relative to the battle, in receiving reports, in inquiring what was the condition of the enemy, and what ſhips had ſtruck. Upon hearing that fourteen or fifteen had certainly ſurrendered, "That's well," ſaid he; "but I bargained for twenty." After a ſhort pauſe, he exclaimed, "Anchor, Hardy, anchor." To this the captain replied, that he ſuppoſed admiral Collingwood would now take upon himſelf the command. "Not while I live," cried the dying hero; "no, do you anchor, Hardy." He had foreſeen the great importance of this; for, by the poſition in which the enemy waited for the attack, the ſhoals of Trafalgar and St. Pedro were under their lee, and the port of Cadiz, with the exiſting wind, open to them; and it was on this account he had, before the action, made ſignal to prepare to anchor. The laſt ſhip that ſtruck before his death was the Santiſſima Trinidada, of which he heard with the moſt lively emotions of joy. He felt himſelf now nearly at the laſt gaſp, and called for Hardy, and ſaid, in a low tone, "Don't throw me overboard;" and deſired that he might be buried at Burnham-Thorpe, unleſs it ſhould pleaſe the king to order otherwiſe. "Kiſs me, Hardy," ſaid he. Hardy knelt and kiſſed his cheek; and the admiral ſaid, "Now I am ſatisfied: I have done my duty. Thank God! I have done my duty." Theſe were the laſt words that he uttered; and in the arms of his gallant captain he breathed his laſt.

The final event of this action was the capture of eighteen men-of-war, of the French commander-in-chief, and two other flag-officers, with a general. See the article GREAT BRITAIN, vol. viii. p. 818–20. It was a blow to the maritime ſtrength of the two hoſtile powers that entirely ruined their preſent projects, and laſtingly crippled their exertions. The maritime war might from this day be conſidered as at an end: the fleets of the enemy were not merely defeated; they were as good as annihilated, and with them the ſpirit of the French marine ſo completely depreſſed, as to forbid the hope of a revival, till a new race of men ſhould ariſe, upon whom the terror of the name of Nelſon would ceaſe to operate. Well then might the death of lord Nelſon be felt as ſomething more than a public calamity: well might our countrymen, when the fatal intelligence was communicated to them, ſtart and turn pale, as if they had heard of the loſs of a dear friend; the object of their admiration and affection, of their pride and hopes, had been ſuddenly taken from them; and it is ſtill in the remembrance of every one, that it ſeemed as if they had never, till then, known how deeply they eſteemed and reverenced him. The victory of Trafalgar was celebrated with the uſual forms of rejoicing, but they were without joy; for, ſuch was the glory of Nelſon, and of the Britiſh navy, in a great meaſure through his genius, that they ſcarcely ſeemed to receive any addition from this; and the moſt ſignal victory that ever was achieved upon the ſeas, and the deſtruction of ſo great a fleet, hardly appeared to add to our ſtrength or ſecurity; for we felt ourſelves as ſtrong and ſecure while Nelſon was living to watch them, as when they were deſtroyed.

Perhaps in no country have higher public honours been paid to the memory of a public benefactor than thoſe that were enthuſiaſtically given to lord Nelſon. His body was brought home for interment: it was exhibited for ſeveral days in the proudeſt ſtate at Greenwich: from thence it was conveyed to Weſtminſter; and finally buried in the cathedral of St. Paul. The funeral, made at the public expenſe, was the moſt ſolemn and magnificent ſpectacle ever beheld in this country, and was honoured by the preſence of his majeſty's ſeven ſons. Honours and rewards were munificently beſtowed on his relations; and an earldom was perpetuated in the family of Nelſon, of which his brother was the firſt, and is the preſent, poſſeſſor; and, to leſſen the probability of the title becoming extinct, his majeſty has been pleaſed to extend the ſucceſſion thereof (in default of the male-heir of the preſent poſſeſſor) to the heirs male ſucceſſively of Suſanne, wife of Thomas Bolton, eſq. and Catharine, wife of George Matcham, eſq. ſiſters of the immortal Nelſon. Yet the public feelings were outraged by the aſtoniſhing omiſſion of lady Nelſon, in the honours and wealth beſtowed on the family at lord Nelſon's death. The government, on that occaſion, took part with his unwarrantable caprice, and neglected that amiable and excellent woman, (as all who have ever mentioned her name admit her to be,) merely becauſe ſhe had been moſt cauſeleſsly neglected by her huſband. Indeed, the only blot in the eſcutcheon of this great man was his behaviour to his wife after he became faſcinated with lady Hamilton.

Lord Nelſon died at the age of forty-ſeven, yet *he* cannot be ſaid to have fallen prematurely, whoſe work was done; nor ought he to be lamented who died ſo full of honours, and at the height of human fame; for, in tracing this illuſtrious mariner, from the ardour of his boyiſh days to the active magnanimity with which he cloſed his glorious life, the mind muſt be dazzled with the brilliant variety of his actions in every part of it. What danger did he not encounter? What hardſhip did he not ſuffer? What obſtacle did he not ſubdue? What climate did he not endure? What ſeas had he not ſailed? What ſervice had he not performed? What duty did he leave undone? When it was his rank to obey, he had the confidence of his commanders: when he was advanced to command, he had the enthuſiaſm of thoſe who obeyed him. The ſame promptitude of thought and reſource, the ſame rapid movement, the ſame application of the beſt poſſible means to the ends he had in view, whether at the inſtant or in expectation, ſeemed equally to operate in his mind, and to animate his genius in every ſituation, and all the extraordinary emergencies of his profeſſional life.

Nor were his talents wholly confined to the knowledge of naval tactics; for it is known that as a ſenator he was highly reſpectable, although he enjoyed few opportunities of coming forward in that capacity. When he did, his ſpeeches were heard by their lordſhips with reſpect, and the moſt profound attention. The few ſpecimens we have of his abilities as a politician, afford no mean proof that, if he had devoted as much of his time to thoſe ſtudies as he did to his peculiar profeſſion, he would have made a diſtinguiſhed figure in the houſe of peers.

Beſides the funeral honours decreed to our naval hero by the government, trophies have been erected to his memory by various public bodies, and even by private individuals.

A monument was voted by the city of London, and erected in Guildhall, which bears an inſcription from the pen of the late Mr. Sheridan.

A bronze ſtatue (by Weſtmacott) was erected in the market-place at Birmingham to the memory of Nelſon. In this work, intended to perpetuate the greateſt example of naval genius, ſimplicity has been the chief object. The hero is repreſented in a repoſed and dignified attitude, the left arm reclined upon an anchor. He appears in the coſtume of his country, inveſted with the inſignia of thoſe honours by which his ſovereign and foreign princes had diſtinguiſhed him. To the right of the ſtatue is introduced the grand ſymbol of the naval profeſſion: Victory, the conſtant leader of her favourite hero, embelliſhes the prow. To the left is diſpoſed a ſail, which, paſſing behind the ſtatue, gives breadth to that view of the compoſition. Above the ſhip is the fac-ſimile of the flag-ſtaff truck of the l'Orient, fiſhed up by ſir Samuel Hood the day following the battle of the Nile, preſented by him to lord Nelſon, and now depoſited at Milford, as a trophy of that ever-memorable action. This groupe is ſurmounted upon a pedeſtal of ſtatuary marble. A circular form has been ſelected as beſt adapted to the ſituation. To perſonify that affectionate regard which cauſed the preſent patriotic tribute to be raiſed, the Town of Birmingham, murally crowned, in a dejected attitude, is repreſented mourning her loſs. She is accompanied by groupes of genii, or children, in alluſion to the riſing race, who offer her conſolation by bringing her trident and rudder. In the front of the pedeſtal is an inſcription, which bears the date of 1809.

On Chriſtmas-day in that year, the workmen of the Lorn Furnace Company erected a pillar of rude granite, of about ſeventeen feet in height, to the memory of Nelſon. It has been propoſed to affix, in ſome way or other, the following lines:

No artiſt's hands the trophied column raiſe,
No chiſſel'd labours ſwell the theme of praiſe;
An unhewn ſtone here bears our NELSON's name,
Bold as his genius, towering as his fame;
What fairer tribute would his ſpirit crave,
Than that which freemen offer to the brave!

In 1813 was completed a monument, erected by ſubſcription, in the area of the Exchange Buildings, Liverpool. The deſign was by Mr. M. C. Wyatt; and the monument, which is in bronze, was executed by Weſtmacott. At the baſe of the pedeſtal are four emblematic figures, in the character of captives, or vanquiſhed enemies, in alluſion to the four ſignal victories obtained by lord Nelſon, viz. thoſe of St. Vincent, the Nile, Copenhagen, and of Trafalgar. The ſpaces between theſe figures are filled by four grand bas-reliefs, executed in bronze, repreſenting ſome of the great naval actions in which Nelſon was engaged. In a moulding round the upper part is inſcribed, in letters of braſs, the impreſſive charge, delivered previous to the battle of Trafalgar, "England expects every man to do his duty." The principal figure is the admiral, reſting one foot on a conquered enemy, and the other on a cannon. With an eye ſtedfaſt and upraiſed to Victory, he is receiving from her a fourth naval crown upon his ſword; which, to indicate the loſs of his right arm, is held in his left-hand. Britannia, with laurels in her hand, and leaning on her ſpear and ſhield, deſcribes the feelings of the country on Nelſon's death.

The trophy, erected to the memory of lord Nelſon at Yarmouth, is a doric column, 78 feet high. It is raiſed upon a ſtructure 31 feet in height. The lower part of the ſub-ſtructure is a terrace, aſcended by a broad flight of ſteps in each of its four fronts. Upon this terrace, the ſtylobate, ornamented with the characteriſtics of the doric order of architecture, is reared. The trophy, properly ſo called, ſurmounting the column, is a circular podium, ornamented with wreaths ſupporting four *Victories*, which, after the manner of Caryatides, uphold a conical roof. The whole is terminated by an antique gallery, which four dolphins appear to ſuſtain. Upon each of the four fronts of the capital of the column the names of the four ſhips, in which the four principal victories of Nelſon were achieved, are inſcribed; the names of the ſpots which have been thus celebrated appear upon the blockading courſe of the ſtylobate. Over the name of Trafalgar a ſarcophagus is placed, denoting that that victory was purchaſed by the death of the hero. The ſarcophagus affords a ſcale for the admeaſurement of the column. A ſpiral ſtaircaſe conducts the ſpectator to a ſtation a few feet below the level of the Victories; from this ſpot a commanding view of the ſea and ſurrounding country is obtained. The height of the monument from the ground to the ſummit of the gallery is 140 feet. The top-ſtone was laid on Saturday the 12th of September laſt, with maſonic ceremonies.

A monument to lord Nelſon on the Calton hill, Edinburgh, was completed in Feb. 1818. It is 484 feet above the level of high-water mark; riſes 100 feet above its foundation; and is an elegant pillar. The under part forms a neat cottage, which is divided into rooms: theſe are kept by the widow of a petty-officer of the navy, who is allowed to provide dinners and ſuppers for ſtrangers, but not to ſell wines or ſtrong drink. There is alſo a garden round it, which is kept in excellent order, from which ſhe has plenty of vegetables, with ſtrawberries and other fruit in their ſeaſons. A few of the moſt reſpectable citizens of Edinburgh have formed themſelves into what they are pleaſed to call the Nelſon Club; and, properly ſpeaking, the apartments in the monument belong to this club, which dines there on the anniverſary of all the hero's victories. Over the door by which you enter, the Nelſon creſt, viz. the ſtern of the San Joſef, has been cut in bas-relief, and in a manner which does credit to the artiſt; and ſo anxious, we underſtand, was the worthy dean of guild (Robert Johnſton, eſq. treaſurer to the Waterloo-fund for Scotland) to have this emblem correct, that he was at the trouble of getting a geometrical drawing of the identical San Joſef's ſtern, with drawings of all the Spaniſh ornaments of that ſhip. The inſcription is a moſt elegant piece of Engliſh compoſition, and the intention with which the building has been raiſed is moſt beautifully expreſſed. The apartments of this Nelſon club-room are plainly but neatly furniſhed. The walls are hung with prints of the hero, his ſhips, and views of his victories; as alſo with engravings of the principal objects of art which have been dedicated to his memory. On all grand holidays the St. George is diſplayed from the ſtaff of the monument; and on the anniverſary of each victory the particular flags of the nations whoſe fleets he overcame. A good print of this monument has been engraved and publiſhed by Mr. R. Scott of Edinburgh.

In the compilation of this article, we have been conſiderably indebted to a monthly magazine called the Naval Chronicle, to which his lordſhip communicated, under his own hand, many particulars of the early part of his life and naval exploits. Other works, which we have laid under contribution, more or leſs, are—the Britannic Magazine, vol. xii. Wars of England, vol. viii. Charnock's Biographical Memoirs; and Southey's Life of Nelſon.

NEL'SON's FER'RY, a town of South-Carolina. Here is a poſt-office: fifty miles north of Charleſtown.

NEL'SON's FO'RT, a fort and ſettlement of North-America, in the country of Labrador, at the mouth of Nelſon's River; originally built by ſome French adventurers, but now belonging to the Engliſh Hudſon's-Bay company, for the purpoſe of trading with the Indians.

NEL'SON's RIV'ER, a river of North-America, which runs into Hudſon's Bay in lat. 57. 2. N. lon. 92. 46. W.

NELSO'NIA, *ſ.* [ſo named by Mr. Brown, in commemoration of the merits of the late Mr. David Nelſon, an excellent gardener and good practical botaniſt, who was ſent out with captain Cook, in his laſt voyage, and diſcovered many new plants. He afterwards accompanied captain Bligh, in his firſt voyage, and died in the iſland of Timor.] In botany, a genus of the claſs diandria, order monogynia, natural order perſonatæ, *Linn.* (acanthi, or acanthaceæ, *Juſſ.*)—Eſſential generic character. Calyx in four deep unequal ſegments; corolla funnel-ſhaped; limb five-cleft, ſlightly unequal; ſtamens two, ſhorter than the tube, without any barren filaments; cells of the antheræ equal in their inſertion, divaricated; capſule ſeſſile, with an elaſtic point, the partitions from the centre of the valve; ſeeds ſeveral in each cell, without any ſpinous ſpring.

This is a genus of herbaceous plants, with diffuſe ſtems, and a downy, ſomewhat-hoary, habit; leaves broadiſh, undivided; ſpikes terminal, denſe, equal; bractes broad, oppoſite, ſingle-flowered; flowers ſmall, each with a pair of ſmaller inner bracteas; anterior ſegment of the calyx emarginate, or divided half-way down; corolla either white or purple. The two New-Holland ſpecies, both tropical, are thus defined.

1. Nelſonia campeſtris: leaves elliptical, woolly; bractes of the ſpike acute, anterior ſegment of the calyx cloven half-way down; dorſal one acute, undivided; ſegments of the corolla entire. Gathered by Mr. Brown in New Holland.

2. Nelſonia rotundifolia: leaves roundiſh; ſomewhat hairy when full-grown; bractes of the ſpike acute; two broader ſegments of the calyx emarginate, as well as the diviſions of the corolla. Gathered by ſir Joſeph Banks, in whoſe herbarium only Mr. Brown had ſeen it. ***Prod. Nov. Holl.*** i. 481.

NELUM'BIUM, or NELUMBO, *ſ.* in botany. See NYMPHÆA nelumbo.

NE'MA, a river of Ruſſia, in the province of Uſtiug, which runs into the Vitchegda at Utnemſkoi.

NEMÆ'A, in ancient geography, a river of Achaia, running between Sicyon and Corinth, the common boundary of both territories, and falling into the Corinthian bay.

NEMÆ'A, a town of Argolis between Cleonæ and Phlius, with a wood, where Hercules, in the ſixteenth year of his age, killed the celebrated Nemæan lion. This animal, born of the hundred-headed Typhon, infeſted the neighbourhood of Nemæa, and kept the inhabitants under continual alarm. It was the firſt labour of Hercules to deſtroy it; and the hero, when he found that his arrows and his club were uſeleſs againſt an animal whoſe ſkin was hard and impenetrable, ſeized him in his arms, and ſqueezed him to death. The conqueror clothed himſelf in the ſkin; and games were inſtituted to commemorate ſo great an event.

But the NEMÆAN GAMES were originally inſtituted by the Argives in honour of Archemorus, or Opheltes, ſon of Lycurgus king of Nemæa by Eurydice. The ſtory is this: The child was in the arms of Hypſipyle queen of Lemnos, who had fled to Thrace, and was employed as a nurſe in the king's family: ſhe was met by the ſeven chiefs who were going againſt Thebes; and, they begging her to ſhow them ſome water, ſhe laid the child down on the graſs, and conducted them to a well. In her abſence, a venomous ſerpent killed the child; upon which the nurſe, out of an exceſs of grief, grew deſperate. The chiefs, at their return with her, killed the ſerpent, buried the young Archemorus, and, to divert Hypſipyle, inſtituted the Nemæan games.

Hercules, on his victory over the Nemæan lion, revived and augmented the games, and conſecrated them to Jupiter Nemæus. They were one of the four great and ſolemn games which were obſerved in Greece. The Argives, Corinthians, and the inhabitants of Cleonæ, generally preſided by turns at the celebration, in which were exhibited foot and horſe races, chariot-races, boxing, wreſtling, and conteſts of every kind, both gymnaſtic and equeſtrian. The conqueror was rewarded with a crown of olive, afterwards of green parſley, in memory of the adventure of Archemorus, whom his nurſe laid down on a ſprig of that plant. They were celebrated every third year, or more properly on the firſt and third year of every Olympiad, on the twelfth day of the Corinthian month *Panemos*, which correſponds to our Auguſt. They ſerved as an era to the Argives, and to the inhabitants of the neighbouring country. It was always uſual for an orator to pronounce a funeral oration in memory of the death of Archemorus, and thoſe who diſtributed the prizes were always dreſſed in mourning.

NEMÆ'A, now called *Triſtena*, is a village of European Turkey, in the Morea, twenty miles ſouth-weſt of Corinth.

NEMÆ'AN, *adj.* Belonging to Nemæa; belonging to the public games celebrated at Nemæa every third year.

NEM'AKAS. See NAMAQUAS.

NEMAKA PEARLS, a name given by Mr. Barrow to ſubſtances which he found on the mountains north of the Cape of Good Hope, in the Nemaka, or Namaqua, country; and which conſiſted of large rounded maſſes of granite.

NEMAL'LY, a town of Hindooſtan, in Madura: fifteen miles north of Coilpetta.

NEMALO'NI, in ancient geography, a people of the Alps, placed by Pliny in the number of thoſe who were ſubdued by Auguſtus.

NEMANTURIS'TA, a town of Spain, according to Ptolemy, who places it among the Vaſcones, betweeen Andelus and Curnonium.

NEMARAM', a town of Hindooſtan, in Golconda: thirty-two miles ſouth of Combamet.

NEMATOSPER'MUM, *ſ.* in botany. See LACISTEMA, vol. xii. p. 68.

NEMAU'SIS, or NEMAUSUM, in ancient geography, the capital of the Arecomici in Gallia Narbonenſis; a colony with the ſurname of Auguſta. In it ſtands a Roman amphitheatre, which is ſtill almoſt entire. Now *Niſmes* in Languedoc.

NEM'BRO, a town of Italy, in the Serio: four miles north-eaſt of Bergamo.

NEMBS, a town of the duchy of Holſtein: ſix miles north of Segeborg.

NEME. See NEHEIM, p. 690.

NEME'A. See NEMÆA.

NE'MEN, a town of Hindooſtan, in Travancore: fifteen miles north-weſt of Travancore.

NE'MERSDORF, a town of Germany, in the principality of Culmbach: ſix miles north-eaſt of Bayreuth.

NEMESIA'NUS (M. Aurelius Olympius), a Latin poet, was a native of Carthage, and flouriſhed about the year 281, under the emperor Carus, and his ſons Carinus and Numerianus. The laſt of theſe princes had a particular eſteem for him, and entered into a friendly poetical conteſt with him. It is ſuppoſed that he reſided at Rome during the reign of this prince, and roſe to high favour and fortune, and that he intereſted himſelf in behalf of his cotemporary poet Calphurnius, who was reduced to indigence. Nemeſianus, according to the hiſtorian Vopiſcus, wrote three poems, entitled Halieutica, Cynegetica, and Nautica. Of theſe, the ſecond only is come down to modern times, and that in an imperfect ſtate. He is alſo uſually conſidered as the author of four eclogues printed with the ſeven of Calphurnius, though ſome critics have attempted to prove that all theſe were compoſed by the latter poet. The *Cynegeticon* of Nemeſianus appears to have been well known in the dark ages; but it was unknown to the modern till Sannazaro diſcovered a manuſcript of it in France, which he gave to Paulus Manutius to print. It cannot rank high as a poetical compoſition; but it deſerves praiſe for its poliſh and elegance, and is free from moſt of the faults of the preceding age. The Cynegeticon is uſually printed with that of Gratius Faliſcus; and the Eclogues with thoſe of Calphurnius.

Another poet of the ſame name and age, but of inferior merit, wrote a work entitled *Ixeutica*, of which ſome fragments have been publiſhed in the Poet. Lat. Minor. and Poet. Rei. Venat. *Voſſii Poet. Lat.*

NEM'ESIS, one of the infernal deities, daughter of Nox. She was the Goddeſs of Vengeance, always prepared to puniſh impiety, and at the ſame time liberally to reward the good and virtuous. She is made one of the Parcæ by ſome mythologiſts, and is repreſented with a helm and a wheel. The people of Smyrna were the firſt who made her ſtatues with wings, to ſhow with what celerity ſhe is prepared to puniſh the crimes of the wicked both by ſea and land, as the helm and the wheel in her hands intimate. Her power did not only exiſt in this life, but ſhe was alſo employed after death to find out the moſt effectual and rigorous means of correction. Nemeſis was particularly worſhipped at Rhamnus in Attica, where ſhe had a celebrated ſtatue ten cubits high, made of Parian marble by Phidias, or, according to others, by one of his pupils. The Romans were alſo particularly attentive to the adoration of a deity whom they ſolemnly invoked, and to whom they offered ſacrifices, before they declared war againſt their enemies, to ſhow the world that their wars were undertaken upon the moſt juſt grounds. Her ſtatue at Rome was in the capitol. Some ſuppoſe that Nemeſis was the perſon whom Jupiter deceived in the form of a ſwan, and that Leda was entruſted with the care of the children which ſprung from the two eggs. Others obſerve that Leda obtained the name of Nemeſis after death. According to Pauſanias, there were more than one Nemeſis. The Greeks celebrated a feſtival called *Nemeſia*, in memory of the deceaſed perſons, as the goddeſs Nemeſis was ſuppoſed to defend the relics and the memory of the dead from all inſult.

NEME'SIUM, in ancient geography, a town of Marmarica, placed by Ptolemy between Azicis and Tiſarchi.

NEME'SIUS, an eminent ancient Chriſtian philoſopher, is ſuppoſed to have been biſhop of Emeſa in Phœnicia, and to have flouriſhed, according to ſome writers, towards the cloſe of the fourth century, while others place him in the fifth. Since antiquity, however, affords us no light on this ſubject, we muſt conſider his age to be uncertain. He was the author of a treatiſe "On the Nature of Man," which by ſome has been erroneouſly aſcribed to St. Gregory Nyſſen. It refutes the notions of the Manichæans, Eunomians, and Apollinariſts, and defends that of Origen concerning the pre-exiſtence of ſouls. The opinions of the Greek philoſophers on the ſubject of his work, he relates with great perſpicuity of thought, and correctneſs of language; but his treatiſe is chiefly curious as it diſcovers a degree of acquaintance with phyſiology not to be paralleled in any other writers of ſo early a date. He treats clearly concerning the uſe of the bile, the ſpleen, the kidneys, and other glands of the human body; and ſeems to have had ſome idea of the circulation of the blood. Upon the whole, his performance is one of the moſt elegant ſpecimens, now extant, of the philoſophy which prevailed among the ancient Chriſtians. George Valla publiſhed the firſt Latin verſion of it at Lyons, in 1538; which was treated with great contempt by Nicaſius Ellebodius, who gave the firſt edition of it, in Greek and Latin, at Antwerp, in 1565, octavo, with a preface in the Greek language. It is inſerted in the ſecond volume of the Auctuar. Bibl. Patr. but the beſt edition of it was publiſhed at Oxford, in 1671, octavo, in Greek and Latin, with notes and a learned preface. *Enfield's Hiſt. Phil. Gen. Biog.*

NEMES'KO, a town of Hungary: ſix miles weſt of Ziget.

NEMESTRI'NUS, in mythology, an ancient divinity who preſided over foreſts, called *Nemora*. He was probably the ſovereign of the dryads, hamadryads, fauns, ſatyrs, and other gods, inhabitants of the woods.

NE'MET, a town of Hungary: two miles ſouth-weſt of Korpona.

NE'MET, a town of Tranſilvania, on the river Maros: twelve miles weſt-north-weſt of Hunyad.

NEM'ETES, in ancient geography, a people of Germany, who named their capital Nomamagus. In the time of Cæſar, they occupied both ſides of the Rhine. They were eſtabliſhed along the Rhine, between the Vangiones to the north, and the Triboci to the ſouth.

NE'METH U'JAVAR, or GLUSSINGEN, a town of Hungary, on the borders of Stiria; it is a populous walled town, with a caſtle ſtanding on a very high rock, which is wholly detached from all the other mountains; this place is moſt delightfully ſituated among woods, corn-fields, and riſing grounds, which are covered with vines. It is forty-five miles ſouth-weſt Raab, and twenty-ſix ſouth of Edenburg.

NEMETOBRI'GA, in ancient geography, a town of Spain, in the Tarragonenſis, belonging to the Callaici, at ſome diſtance north of the Aquæ Flaviæ, on the route from Breraca to Aſturica.

NE'METZ, a town of Hungary: fourteen miles from Caſchau.

NEMET'ZKA HAUZO'VA, or HAU'SE TEUTSCH, a town of Moravia, in the circle of Olmutz: thirteen miles north of Olmutz.

NE'MI, a town of the Popedom, in the Campagna di Roma: two miles ſouth of Albano.

NE'MIA, *ſ.* in botany. See MANULEA.

NEM'INE CONTRADICEN'TE, "No one oppoſing, or diſſenting." Words uſed to ſignify the unanimous conſent of the members of the houſe of commons in parliament to a vote or reſolution. The term *Nemine diſſentiente* is, in the ſame manner, applied in the houſe of peers.

NEMINPIL'LY, a town of Hindooſtan, in Myſore: ſixteen miles north-north-eaſt of Punganore.

NE'MIR, a town of Perſia, in Choraſan: fifteen miles north of Terſhiz.

NEM'LI, a town of Hindooſtan, in Viſiapour: twenty miles eaſt of Anamſagur.

NEM'ORAL, *adj.* [from the Lat. *nemus*, a grove.] Belonging to a grove. *Scott.*

NEMORA'LIA, feſtivals obſerved in the woods of Aricia, in honour of Diana, who preſided over the country and the foreſts, on which account that part of Italy was ſometimes denominated *Nemorenſis Ager.*

NEMORIV'AGOUS, *adj.* Wandering in woods, inhabiting groves. *Scott.*

NEMORO'SE, *adj.* Full of woods, abounding with groves. *Bailey.*

NEMOROS'ITY, *ſ.* The ſtate of abounding in groves. *Scott.*

NEM'OROUS, *adj.* [*nemoroſus*, Lat.] Woody.—Paradiſe itſelf was but a kind of *nemorous* temple, or ſacred grove. *Evelyn.*

NEMOR'OW, a town of the duchy of Mecklenburg: ſix miles ſouth-weſt of Stargard.

NEMOS'SUS, in ancient geography, an ancient town of Gaul, and capital of the Averni. Now *Clermont* in Auvergne.

NEMOUR'S, a town of France, and principal place of a diſtrict, in the department of the Seine and Marne: two poſts ſouth of Fontainbleau, and nine and a quarter ſouth-ſouth-eaſt of Paris. Lat. 48. 16. N. lon. 2. 47. E.

NEMOUR'S (Ducheſs of). See LONGUEVILLE, vol. xiii.

NEMOU'RT, a town of Aſiatic Turkey, in Natolia; near the ſea: twenty miles ſouth of Adramiti.

To NEM'PNE, *v. a.* [nemnan, Sax.] To name. *Obſolete.*—Ye moten *nempne* him to what place alſo. *Chaucer's Squire's Tale.*

As much diſdeigning to be ſo miſdempt,
Or a warmonger to be baſely *nempt.* *Spenſer.*

NEMR. See NEMIR.

NEM'TCHITZ, a town of Moravia, in the circle of Olmutz: twelve miles ſouth of Olmutz.

NEM'TSCHITZ, or NEMEZICE, a town of Moravia, in the circle of Brunn: fifteen miles from Brunn.

NEM'UEL, [Hebrew.] A man's name.

NEMU'ELITE, *ſ.* A deſcendant of Nemuel.

NE'MUS, in ancient geography, a ſmall town of Latium, eaſt of Aricia; which owed its commencement to a temple erected in honour of Diana Taurica, by an inhabitant of Aricia. The Romans paid great reſpect to this divinity.

NEN, a town of Hindooſtan, in Lahore: ſeventy-four miles eaſt-north-eaſt of Bullauſpour.

NEN, a river of Upper Canada, which runs into Lake Ontario.

NEN, or NINE, a river of England, which croſſes the county of Northampton, and in part ſeparates it from Cambridgeſhire, and runs into the German Sea ten miles north of Wiſbeach.

NENA'GH, a town of Ireland, in the county of Tipperary, where is an ancient caſtle, which held out againſt general Ginckle, at the head of 1500 men, twenty-four hours. It is twenty-three miles north of Caſhel, and nineteen north-eaſt of Limeric.

NENEE'VA, one of the Friendly Iſlands; a ſmall low iſland in the ſouth Pacific Ocean: twenty-nine miles north-eaſt of Annamooka.

NEN'ESS, a cape on the ſouth-eaſt coaſt of Shetland. Lat. 59. 58. N. lon. 1. 20. W.

NEN'GENGOOD, a town of Hindooſtan, in Myſore: twenty miles ſouth-ſouth-weſt of Seringapatam.

NE'NIA. See NÆNIA, p. 502.

NEN'NE, a town of Perſia, in the province of Irak: thirty miles north-north-eaſt of Nehavend.

NEN'NIUS, an ancient Britiſh hiſtorian, abbot of Bangor, is generally ſaid to have flouriſhed about the year 620, and to have taken refuge at Cheſter at the time of the maſſacre of the monks at that monaſtery. But biſhop Nicholſon affirms, that from his own book he appears to have written in the ninth century. He compoſed ſeveral works, of which catalogues are given by Bale and Pits; but the only one remaining is his "Hiſtoria Britonum, vel Eulogium Britanniæ," which has been printed in Gale's Hiſt. Brit. Script. Oxon. 1691, folio.

NEN'NIUS (Duke of Locria). See the article LONDON, vol. xiii. p. 105.

NENORTO'LIK, an iſland on the ſouth-weſt coaſt of Greenland. Lat. 59. 54. N. lon. 45. W.

NENSLIN'GEN, a town of Germany, in the principality of Anſpach: twenty-ſix miles ſouth-eaſt of Anſpach.

NEN'TZENBRUNN, a town of the duchy of Wurzburg: five miles north-north-weſt of Carlſtadt.

NEN'UFAR, a river of Natolia, which runs into the ſea of Marmora ſix miles eaſt of Mikalidi.

NEOCÆSARE'A, in ancient geography, a town of Pontus, on the ſouth or the left ſide of the Lycus. About the year 342, when Leontius and Salluſtius were conſuls, it was entirely ruined by a dreadful earthquake, no edifice having withſtood the violence of the ſhock, except the church and the biſhop's habitation, who was ſaved, with the clergy and ſome other pious perſons, while the reſt of the inhabitants were buried in its ruins.—There were ſeveral other towns of this name, particularly one of Syria, in Cappadocia. See the next article.

NEOCÆSARE'ANS, in eccleſiaſtical hiſtory, Chriſtians of Neocæſarea in Cappadocia, who were the diſciples of Theodore, afterwards named Gregory, and called by Jerome, a man of apoſtolical ſigns and wonders. Theſe Chriſtians were very troubleſome to Baſil biſhop of Cæſarea; for, in divers of his letters, he complains of them that they were all Sabellians, and he laments the ſtrange averſion they had againſt him. They formed a ſmall church in Neocæſarea as early as the year 250, to which Gregory made many additions about that period. His church continued ſtedfaſt in the faith after his death, which happened either in the year 265 or 270. Theſe people retained for a long while remarkable impreſſions of religion; they had an affection for primitive ſimplicity, almoſt ſingular at that time, when innovations came apace into the church; and they ſeemed by no means to approve of the common zeal for the monaſtic life. *Lardner's Works*, vol. iii.

NEOCAS'TRO, a town of European Turkey, in the Morea, at the mouth of a river which runs into the Mediterranean: thirty-two miles north of Navarin.

NEOCAS'TRO, a town of European Turkey, in Romania, where is a ſtrong garriſon, and whither Chriſtian priſoners of conſequence are ſent. It is twelve miles north of Conſtantinople.

NEOCO'RI, *ſ.* [Greek.] Among the ancients, perſons whoſe buſineſs it was to take care of temples, and other conſecrated places. Theodoret (l. iii. c. 16.) mentions two other functions of the Neocori; theſe are, to ſtand at the gates of the temple in order to ſprinkle holy water for the purification of thoſe who were entering into them; the other to throw ſome of the ſame water upon the meat ſerved up at the emperor's table. They were otherwiſe called *æditui*.

NEŒ'NIA, *ſ.* in antiquity, a feſtival celebrated in honour of Bacchus, when the "new wine" was firſt taſted.

NEŒ'THO, in ancient geography, a ſmall town of Italy, in Brutium, towards the eaſt, upon the Neœtus, at a little diſtance north of Croton.

NEOG'AMIST, *ſ.* [from the Gr. νεος, new; and γαμος, a marriage.] One newly married.

NEO'LA, a country of Africa, ſituated on the north ſide of the Gambia, to the weſt of Dentila. Lat. 12. 30. N. lon. 11. 40. W.

NEO'LA KO'BA, a river of Africa, which runs into the Gambia in lat. 12. 40. N. lon. 12. 25. W.

NEOLOG'ICAL, *adj.* [from *neology*.] Employing new words or phraſes.—Such examples really make one tremble; and will, I am convinced, determine my fair fellow-ſubjects and their adherents to adopt, and ſcrupulouſly conform to, Johnſon's rules of true orthography by book. In return to this conceſſion, I ſeriouſly adviſe him to publiſh, by way of appendix to his great work, a genteel *neological* dictionary, containing thoſe polite, though perhaps not ſtrictly grammatical, words and phraſes, commonly uſed, and ſometimes underſtood, by the beau monde. *Ld. Cheſterfield; World*, N° 101.

NEOL'OGY, *ſ.* [from the Gr. νεος, new, and λογος, a word.] Invention or uſe of new words and phraſes.—They endeavour, by a ſort of *neology* of their own, to confound all ideas of right and wrong. *Boothby on Burke.*

NEOLO'GISM, *ſ.* A new and quaint expreſſion.

NEOM'AGUS, or NOVIOMAGUS, in ancient geography, a town of the Regni, in the Iſle of Albion, according to Ptolemy. The Itinerary of Antonine places it between Londinium (London) and Vagniacis (Northfleet). The ſituation of this ſtation is very uncertain; but Camden, Gale, and Horſley, have agreed in placing it at Woodcote, near Croydon, where traces of an ancient town are ſtill to be ſeen. Mr. Baxter, however, and ſome other antiquaries, contend for Ravenſburn in Kent; Mr. Lhyd for Guildford in Surrey; and Mr. Talbot for Croydon.

NEOM'AGUS, or NOVIOMAGUS, a town of the Treviri on the Moſelle. Now *Numagen*, fourteen miles eaſt, below Triers.—A town of Gallia Narbonenſis, on the confines of the Tricaſtini. Now *Nyons* in Dauphiné.

NEOM'AGUS, or NOVIOM'AGUS BATAVO'RUM, a town of Germania Secunda, at the extremity of Gaul. The Peutingerian Table places it on the Rhine, between Caſtra Herculis and Arenatio. Now *Nimeguen.*

NEOM'AGUS, or NOVIOMAGUS LEXOVIO'RUM, a town of Gallia Celtica. Now *Liſeux*, in Normandy.

NEOM'AGUS, or NOVIOMAGUS NEME'TUM, a city of the Palatinate, on the left or weſt ſide of the Rhine. Now *Spire.*

NEOME'NIA, *ſ.* [Greek, the new moon.] The feſtival of the ancient Greeks at the new moon. A feſtival was obſerved at the beginning of every lunar month, in honour of all the gods, but eſpecially Apollo, who was called Νεομενιος, becauſe the ſun is the author of all lights; for, whatever diſtinction of times and ſeaſons may be taken from other planets, yet they are all owing to him, as the original and fountain of all thoſe borrowed rays, which the reſt have only by participation from him.

The Jews, as ſome affirm, reckoned two kinds of neomenia, or new moons; the firſt on the day of her conjunction with the ſun; the ſecond on that of her apparition or phaſis; and add, that they celebrated two paſſovers, on account of the uncertainty which of theſe days it ſhould be held on. F. Hardouin, on the contrary, maintains, they had no other neomenia but that of the moon's conjunction with the ſun, which it was eaſy to aſcertain by aſtronomical calculation; whereas the other was liable to miſtakes, the moon ſometimes not ſhowing herſelf till four or five days after conjunction.

NEOM'INAS, a river of Peru, which runs into the Pacific Ocean in lat. 4. 30. N.

NE'ON, in ancient geography, a town of Greece, in the Phocide, ſituated on the ridge of Parnaſſus called Tithorea. At firſt a mere fort; it was a conſiderable town in the time of Plutarch.

NEO'NE, a town of European Turkey, in Theſſaly: twenty-eight miles north of Zeiton.

NEONTI'CHOS, in ancient geography, a town of the Eolide, placed by Strabo at twenty ſtadia from Lariſſa; but Herodotus places it at the diſtance of thirty ſtadia eaſt of that town, near the plain of Hermus. The appellation denotes "a new-walled town."—Alſo, a town of Greece, in the Phocide. *Pauſanias.*—A town of Thrace, on the Propontis.—A town of Aſia Minor, in Caria, between Orthoſia and Bargaſſa. *Ptolemy.*

NEOPA'TRA, a town of European Turkey, in Theſſaly: twenty miles weſt of Zeiton.

NE'OPHYTE, *ſ.* [Gr. from νεος, new, and φυω, I produce; i. e. newly born.] One regenerated; a convert; one entered into a new ſtate.—He tells thee true, my noble *neophyte*; my little grammaticaſter, he does. *B. Jonſon's Poetaſter.*—In the primitive church, a new Chriſtian; or a heathen newly converted to the faith.—In effects of grace, which exceed far the effects of nature, we ſee St. Paul makes a difference between thoſe he calls *neophytes*, that is, newly grafted into Chriſtianity; and thoſe that are brought up in the faith. *Bacon on the Union of Laws.*—The term is ſtill applied to the converts which the miſſionaries frequently make among the infidels.—The Japoneſe *neophytes*, in the latter end of the ſixteenth and beginning of the ſeventeenth century, are ſaid to have ſhown prodigies of courage and faith, equal to any known in the primitive church. *Chambers.*

NEOPHYTES has formerly likewiſe been uſed to denote new prieſts, or thoſe firſt admitted into orders; and, ſometimes, the novices in monaſteries.

NE'OPHYTE, *adj.* Newly entered into an employment.—It is with your young grammatical courtier, as with your *neophyte* player, a thing uſual to be daunted at the firſt preſence or interview. *B. Jonſon's Cynth. Revels.*

NEOP'SCO CREE'K, a river of Virginia, which runs into the Potomack in lat. 38. 40. N. lon. 77. 19. W.

NE'OR. See NORE.

NEOPTOL'EMUS, a king of Epirus, ſon of Achilles and Deidamia, called *Pyrrhus* from the *yellow* colour of his hair. He was carefully educated under the eye of his mother, and gave early proofs of his valour. After the death of Achilles, Calchas declared in the aſſembly of the Greeks, that Troy could not be taken without the aſſiſtance of the ſon of the deceaſed hero. Immediately upon this, Ulyſſes and Phœnix were commiſſioned to bring Pyrrhus to the war. He returned with them with pleaſure, and received the name of Neoptolemus, (*new ſoldier*,) becauſe he had come late to the field. On his arrival before Troy, he paid a viſit to the tomb of his father, and wept over his aſhes. He afterwards, according to ſome authors, accompanied Ulyſſes to Lemnos, to engage Philoctetes to come to the Trojan war. He greatly ſignalized himſelf during the remaining time of the ſiege, and was the firſt who entered the wooden horſe. He was inferior to none of the Grecian warriors in valour; and Ulyſſes and Neſtor alone could claim a ſuperiority over him in eloquence, wiſdom, and addreſs. His cruelty, however, was as great as that of his father. Not ſatisfied with breaking down the gates of Priam's palace, he exerciſed the greateſt barbarity upon the remains of his family; and, without any regard to the ſanctity of the place where Priam had taken refuge, he ſlaughtered him without mercy; or, according to others, dragged him by the hair to the tomb of his father, where he ſacrificed him, and where he cut off his head, and carried it in exultation

tion through the ſtreets of Troy, fixed on the point of a ſpear. He alſo ſacrificed Aſtyanax to his fury, and immolated Polyxena on the tomb of Achilles, according to thoſe who deny that that ſacrifice was voluntary. When Troy was taken, the captives were divided among the conquerors; and Pyrrhus had for his ſhare Andromache the widow of Hector, and Helenus the ſon of Priam. With theſe he departed for Greece; and he probably eſcaped deſtruction by giving credit to the words of Helenus, who foretold him that, if he failed with the reſt of the Greeks, his voyage would be attended with fatal conſequences, and perhaps with death. This induced him to take a different courſe from the reſt of the Greeks; and he travelled over the greateſt part of Thrace, where he had a ſevere encounter with Harpalyce, the daughter of Harpalycus king of Thrace, who with manly courage defended her father's kingdom, and defeated the attempt of Neoptolemus.

The place where Neoptolemus at length fixed his abode is not certainly known. Some maintain that he went to Theſſaly, where his grandfather ſtill reigned; but this is confuted by others, who obſerve, perhaps with more reaſon, that he went to Epirus, where he laid the foundations of a new kingdom, becauſe his grandfather Peleus had been deprived of his ſceptre by Acaſtus the ſon of Pelias. Neoptolemus lived with Andromache after his arrival in Greece; but it is unknown whether he treated her as a lawful wife, or a concubine. He had a ſon by this unfortunate princeſs, called Moloſſus, and two others, if we rely on the authority of Pauſanias. Beſides Andromache, he married Hermione, the daughter of Menelaus. The cauſe of his death is variouſly related. Menelaus, before the Trojan war, had promiſed his daughter Hermione to Oreſtes; but the ſervices he experienced from the valour and the courage of Neoptolemus during the ſiege of Troy, induced him to reward his merit by making him his ſon-in-law. The nuptials were accordingly celebrated; but Hermione became jealous of Andromache; and, becauſe ſhe had no children, ſhe reſolved to deſtroy her Trojan rival, who ſeemed to ſteal away the affections of their common huſband. In the abſence of Neoptolemus at Delphi, Hermione attempted to murder Andromache; but ſhe was prevented by the interference of Peleus, or, according to others, of the populace. When ſhe ſaw her ſchemes defeated, ſhe determined to lay violent hands upon herſelf, to avoid the reſentment of Neoptolemus. The ſudden arrival of Oreſtes changed her reſolution, and ſhe conſented to elope with that prince to Sparta. Oreſtes, at the ſame time, to revenge and to puniſh his rival, cauſed him to be aſſaſſinated in the Temple of Delphi; and he was murdered at the foot of the altar by Machareus the prieſt, or by the hand of Oreſtes himſelf, according to Virgil, Paterculus, and Hyginus. Some ſay that he was murdered by the Delphians, who had been bribed by the preſents of Oreſtes. It is unknown why Neoptolemus went to Delphi. Some ſuppoſe that he wiſhed to conſult the oracle to know how he might have children by the barren Hermione; others ſay, that he went thither to offer the ſpoils which he had obtained during the Trojan war, to appeaſe the reſentment of Apollo, whom he had provoked, by calling him the cauſe of the death of Achilles. The plunder of the rich temple of Delphi, if we believe others, was the object of the journey of Neoptolemus; and it cannot but be obſerved, that he ſuffered the ſame death, and the ſame barbarities, which he had inflicted in the Temple of Minerva upon the aged Priam and his wretched family. From this circumſtance, the ancients have made uſe of the proverb of *Neoptolemic revenge* when a perſon had ſuffered the ſame ſavage treatment which others had received from his hand. The Delphians celebrated a feſtival with great pomp and ſolemnity in memory of that event. *Lempriere's Claſſical Dict.*

NE'ORIS, in ancient geography, a large country of Aſia, near Gedroſia, almoſt deſtitute of water. The inhabitants were called *Neoritæ;* and it was uſual among them to ſuſpend their dead bodies on the boughs of trees. *Diod.* 17.

NE'OT's (St.), a town in the county of Cornwall, England, is ſituated four miles from Leſkeard, and 226 weſt from London. Its name was derived from Neotus (brother to king Alfred), who obtained the appellation of ſaint, and was buried in this church: a monaſtery was founded in honour of him, and ſubſiſted till after the conqueſt, when, being diſpoſſeſſed of its lands, it fell to decay, and only its name has deſcended to the preſent age. All remains of the ancient church have likewiſe been long ſince deſtroyed: the preſent pariſh-church, which conſiſts of a nave and two aiſles, with a tower at the weſt end, is apparently not older than the reign of Henry VI. the windows, ſeventeen in number, contain repreſentations, in painted glaſs, of ſcripture-hiſtory, and of the events recorded in the legends of St. Neot and other ſaints; but moſt of the windows are much damaged, and the broken panes repaired with plain glaſs, ſo that in ſome inſtances the deſigns can hardly be traced. The population of this pariſh, according to the return in the year 1811, was 1041 perſons, inhabiting 173 houſes.

Near the town are two monumental ſtones, one with an inſcription, which in the Continuation of Camden is ſuppoſed to be the baſe of a croſs. In the neighbourhood likewiſe ſtands a large group of rocks, 32 feet high, with a ſtone under them, ſuppoſed to be ſhaped like a cheeſe, whence the pile is called the *Wring Cheeſe.* On a plain adjoining, are three circles of large ſtones, of different diameters, but in the ſame line, which Dr. Borlaſe ſuppoſes to be druidical, and made uſe of as temples, tribunals, or amphitheatres.

NE'OT's (St.), a town in the county of Huntingdon, on the Ouſe, with a weekly market on Thurſday. This town was originally called *Ainulphſbury*, from Ainulph, a holy man; but changed its name to St. Neot's, on the removal of that ſaint from St. Neot's in Cornwall: in honour of whom Alfric turned the palace of earl Elfrid into a monaſtery for black monks. The monks of this monaſtery were diſperſed by the Danes; but, being reſtored again by earl Leofric, it continued a priory ſubordinate to Ely till after the conqueſt, when the religious were expelled a ſecond time by Gilbert de Clare. Lady Roiſa, wife to Richard, the earl's ſon, repleniſhed it, however, about the year 1113, and granted it, along with the manor, to the abbey of Bec in Normandy. On the diſſolution of priories, in the time of Henry VIII. its revenues were eſtimated at 256l. 1s. 3¼d. The ruins of this edifice, now remaining, are very inconſiderable.

St. Neot's conſiſts of a large market-place, and ſeveral reſpectable ſtreets interſecting each other. The church is a very beautiful building, in the pointed ſtyle of Henry VIIth's reign. At the weſt end riſes an elegant tower, 150 feet high. The windows are large, and bear the remains of paintings on the glaſs. In a chapel, called Jeſus chapel, lately laid open to the church, there was formerly a monument, ſuppoſed to have once contained the relics of St. Neot, and removed hither from the priory. This town contains, according to the population returns of 1811, 410 houſes, and 1988 inhabitants. The market-day is Thurſday.

On the oppoſite ſide of the river, and connected with the town by a large handſome ſtone bridge, is the village of Eyneſbury, which was the ſcene of an action between the royaliſts, under lord Holland, and the parliamentary forces, in 1648. The church here has a ſeparate tower on its ſouth-eaſt ſide; and in the north wall of the chancel is a ſtone coffin, in which Saar de Quincy is ſaid to have been buried. The pariſh-regiſter records a curious licence to eat fleſh on days not permitted by the ſtatute. *Beauties of England and Wales*, vol. vii.

NEOTER'IC, *ſ.* [*neotericus*, Lat. from the Gr. νεος, new, or νεωτερος, more recent.] One of modern times.—The ſtudents in divinity ſhould apply themſelves in the firſt place to the reading of the Scriptures, next the councils and ancient fathers, and then the ſchoolmen; excluding thoſe *neotericks*, both Jeſuits and Puritans, who are known to be meddlers in matters of ſtate and monarchy. *The King's Lett. to Vice-Ch. of Oxf.* 1622.—We are not to be guided either by the miſreports of ſome ancients, or the capricios of one or two *neotericks*. *Grew.*

NEOTER'IC, or NEOTERICAL, *adj.* Modern; novel; late.—I adviſe you not to neglect old authors; for, though we be come as it were to the meridian of truth, yet there be many *neoterical* commentators, and ſelf-conceited writers, that eclipſe her in many things, and go from obſcurum to obſcurius. *Howell's Lett.*

NEOT'TIA, *ſ.* in botany. See OPHRYS and SATYRIUM.

NE'OU, *ſ.* The African name of a tree, found by Adanſon at Senegal, which Juſſieu refers to the PETROCARYA; ſee that article.

NEOU'NDAH, a town of the kingdom of Birmah, on the Irawaddy, which roſe out of the decay of Pagham, to which it nearly joins.

NEOUNBENG'ZEICK, a town of Ava, on the Irawaddy: fifteen miles north of Prome.

NEP, *ſ.* [*nepeta*, Lat.] The herb catmint. See NEPETA.—The dog, when he is ſtomach-ſick, can go right to his proper graſs, the cat to her *nep*, the goat to his hemlock. *Bp. Hall's Select Thoughts.*

NE'PA, *ſ.* the WATER-SCORPION; in entomology, a genus of hemipterous inſects. Generic characters—Snout inflected, antennæ ſhort; wings four, croſs-complicate, coriaceous on the upper part; fore-feet cheliform, or reſembling the claws of a crab, the reſt formed for walking.

This genus is aquatic, inhabiting ſtagnant waters, and preying on the ſmaller water-inſects, &c. They dwell in the water, both in the ſtate of larva and chryſalids: the eggs are alſo depoſited in that element; they are of an oblong ſhape, and have at one extremity two or more vibriſcæ, the only part of them which is ſeen, the reſt being ſunk and concealed in the ſtalk of a bulruſh, or other water-plant. Theſe plants may be removed, and placed in water near the naturaliſt, who may thus have an opportunity of ſeeing them hatched and coming forth animated larvæ immediately under his eye. The water-ſcorpions, when thus excluded from the eggs, remain for ſome time in the ſtate of worms, in the place of their nativity. When they arrive at their full ſize, and are metamorphoſed into complete inſects, they are from one to three inches in length, and nearly half as broad. The antennæ appear in the uſual place of the fore legs; they are armed with a forceps, well adapted to the rapacious purpoſes to which they are applied. The nepæ are of all animals the moſt tyrannical; they deſtroy, like wolves among ſheep, twenty times as many as their hunger requires. If one of them is placed in a baſon of water with thirty or forty worms of the libellula tribe, each as large as itſelf, it will deſtroy them all in a very ſhort ſpace, getting on their backs, and piercing them through the body with its roſtrum. Theſe animals, though they live upon the water by day, are capable of taking long flights from one pool to another in queſt of food: this they are probably often obliged to attempt, from the fierceneſs of their manners, by which the inſects in their vicinity muſt be ſoon deſtroyed. Though ſo formidable to other creatures, they are nevertheleſs haunted by a little louſe, which probably repays the injuries which the water-ſcorpion ſo frequently commits upon others.

There are fourteen ſpecies included in this genus, which are divided into ſections, according as they have no lip, or a ſhort lip, or one that is projecting and round. Three of the ſpecies are common in this country.

I. Antennæ palmate, and without lip.

1. Nepa grandis: cheſnut-brown, variegated with yellow. This inſect, which very far ſurpaſſes in ſize all the European animals of the genus, is a native of Surinam and other parts of South-America, often meaſuring more than three inches in length. Its colour is a dull yellowiſh brown, with a few darker-yellow ſhades or variegations: the under-wings are of a ſemi-tranſparent white colour, and the abdomen is terminated by a ſhort tubular proceſs. Madame Merian repreſents this ſpecies, in her Surinam Inſects, as preying on tadpoles and young frogs. It is repreſented, of the natural ſize, on the annexed Engraving, at fig. 1.

2. Nepa annulata: tail unarmed, roundiſh, pale brown; fore-ſhanks pale, and annulate with brown. It is found in Coromandel.

3. Nepa ruſtica: tail unarmed, brown; the lateral and hind-margin of the thorax, and fore-margin of the upper wings whitiſh. This is likewiſe found in Coromandel.

4. Nepa fuſca: tail ending in two briſtles; ſcutel rugged; wing ſnowy. It inhabits the Eaſt Indies. The body of this ſpecies is brown; and the tail is as long as the body.

5. Nepa groſſa: tail ending in two briſtles, longer than the body; body ovate. It inhabits Tranquebar.

6. Nepa cinerea, the common water-ſcorpion: tail ending in two briſtles, half as long as the body; body ovate and brown. It inhabits this country, and many parts of Europe, chiefly on ſtagnant waters, meaſuring about an inch in length, and appearing, when the wings are cloſed, of a dull browniſh colour; but when the wings are expanded the body above appears of a bright red colour, with a longitudinal band down the middle; and the lower wings, which are of a tranſparent white, are decorated with red veins; from the tail proceeds a tubular bifid proceſs or ſtyle, nearly of the length of the body, and which appears ſingle on a general view, the two valves of which it conſiſts being generally applied cloſe to each other throughout their length. The animal is ſlow of motion, and is often found creeping about the ſhallow parts of ponds. In May, when the weather is warm and favourable, it depoſits its eggs on the ſoft ſurface of the mud at the bottom of the water. They are of a ſingular ſhape, reſembling ſome of the crowned ſeeds, having an oval body, and an upper part ſurrounded by ſeven radiating proceſſes or curved ſpines; the young, when firſt hatched, are not more than the eighth of an inch in length. This inſect flies only by night, when it wanders about the fields in the neighbourhood of its native waters. The larvæ and pupæ differ in appearance from the complete inſect in having only the rudiments of wings, and being of a paler or yellower colour.

The nervous ſyſtem of this inſect conſiſts of three ganglia. The firſt, which ſupplies the place of the brain, is ſituated in the head: it is formed of two approximated lobes, which are pyriform, and touch each other at their baſe. Their ſummits are directed obliquely forward towards the eyes, in which they terminate, and thus anſwer to the optic nerves by their anterior extremities. The middle and anterior part of theſe lobes alſo produce ſome filaments for the parts of the mouth. Poſteriorly, the brain detaches two cords, which embrace the œſophagus as they paſs below it. They unite at the origin of the breaſt in a tetragonal ganglion: each of the angles of which produces or receives ſeveral nerves. The anterior receives the two cords which come from the brain; the poſterior, the two which are the continuation of the medullary cord. Each lateral angle produces a faſciculus, compoſed of four nerves, which are directed to the muſcles of the breaſt and anterior feet: one of them enters the cavity of the coxa. The two nerves produced by the poſterior angle of the ſecond ganglion proceed in a parallel direction backward. Having arrived in the breaſt above the horny appendix, to which the muſcles of the coxæ of the intermediate and poſterior feet are attached, they ſwell into a large round ganglion, conſiderably more voluminous than the brain. A vaſt number of nerves are detached from the edges of this ganglion, like ſolar rays. The two moſt remarkable filaments are exceedingly long and ſlender: they extend from the breaſt nearly as far as the anus: they terminate by three minute branches in the parts of generation of the male, furniſhing, at the ſame time, ſome filaments to the adjacent parts. All the other filaments, which proceed from this third and laſt ganglion, are deſtined to the muſcles. We can very plainly diſtinguiſh thoſe that belong to the middle and intermediate feet, as they are ſomewhat larger than the others. This inſect is ſhown at fig. 2. and with the wings cloſed at fig. 3.

7. Nepa maculata, the ſpotted water-ſcorpion: tail ending in two briſtles; body black; thorax and ſcutel ſpotted with ferruginous. This is found in the Eaſt-Indies, and is about half the ſize of the preceding.

II. *Ranatra.* Antennæ palmate; lip very ſhort, and widely emarginate.

8. Nepa filiformis: tail ending in two briſtles, ſhorter than the body; body linear; legs teſtaceous; the thighs are annulate, and of a cinereous colour. It inhabits Tranquebar.

9. Nepa linearis: tail ending in two briſtles, as long as the body; thorax brown; fore-ſhanks with a ſpine down the middle. The inſects of this ſpecies have a highly-ſingular aſpect, bearing a diſtant reſemblance to ſome ſmaller inſects of the genera Mantis and Phaſma. It is about an inch and a half long from the tip of the ſnout to the beginning of the abdominal ſtyle or proceſs, which is itſelf of equal length to the former part; and the whole animal is extremely ſlender in proportion to its length. The legs alſo are long and ſlender; and the chelæ, or fore-legs, much longer in proportion than thoſe of the preceding ſpecies. The colour of the animal is dull yellowiſh brown, the back, when the wings are expanded, appearing of a browniſh red, and the under wings white and tranſparent. It inhabits the larger kind of ſtagnant waters, frequenting the ſhallower parts during the middle of the day, when it may be obſerved to prey on the ſmaller water-inſects, &c. Its motions are ſingular; often ſtriking out all its legs in a kind of ſtarting manner at intervals, and continuing this exerciſe for a conſiderable time. The eggs are ſmaller than thoſe of the N. cinerea, of an oval ſhape, and furniſhed with two proceſſes or briſtles divaricating from the top of each.

10. Nepa elongata: tail ending in two briſtles, flat, and longer than the body; body linear; thorax teſtaceous, with a brown dorſal line. It inhabits Tranquebar.

III. *Naucoris.* Lip projecting, and rounded.

11. Nepa cimicoides: abdomen ſerrate at the edge; head and thorax varied with yellow and brown. This ſpecies bears a reſemblance to the genus which precedes and follows it in the ſyſtematic arrangement: (ſee vol. vi. p. 833.) It is allied to the Notonecta by having the hind legs formed for ſwimming briſkly, and furniſhed with an edging of hairs on the inner ſide: it alſo bears a reſemblance to the generality of the Cimices, or bugs, in its broadly-ovate ſhape. The thorax and upper wings are pale brown; the lower wings tranſparent white; and the back, which appears only when the wings are expanded, is of a fine bluiſh black: the ſides of the abdomen are ſerrated: the under ſurface is of a pale yellowiſh brown, with blue-green thorax: the fore-feet, or chelæ, are very ſhort, and the abdomen is deſtitute of any lengthened proceſs. This inſect is delineated at fig. 4. and with the wings cloſed at fig. 5. where the reſemblance to a bug is very manifeſt.

12. Nepa æſtivalis: abdomen ſerrate at the edge; head and thorax white. It inhabits France, and is about half the ſize of the preceding.

13. Nepa nepæformis: edge of the abdomen entire. Inhabits the South-American iſlands.

14. Nepa curſitans; abdomen black, the edge entire; all the legs formed for running. It is a very ſmall inſect, and is found at Kiel.

NE'PA, or NEPE, a name by which the ſign or conſtellation Scorpio is ſometimes called.

NEPAU'L, NEPAL, or NAPAUL, a kingdom of Hindooſtan, conſiſting of an extenſive plain in a valley, encloſed in the great range of ſecondary mountains, which branch out towards the ſouth and weſt from the gigantic ridge of Himalaya and the lofty regions of Tartary. On the eaſtern ſide, the poſſeſſions of the Ghoorkhali, or preſent reigning family, are bounded by Bochtan, or the country of the Deb Rajah; to the ſouth-eaſt they touch upon our diſtricts of Rungamutty and Coochbehar; on the north-eaſt they are divided from Thibet by the alpine ridge in which the paſſes of Phullak and Kooti are ſituated. To the ſouthward the Nepaul territories are bounded by the purgunnahs of Durbungah, Tirhoot, and Ghemparum. To the ſouth-weſt is Bulrampore of Goruckpore, adjoining to which is the tributary principality of Bootwal. To the weſtward, the Nepaul borders touch on various parts of Oude; and to the north-weſt are divided from various diſtricts of Rohilcund by the Almorah hills. To the north-weſt they are bounded by the dominions of the rajahs of Serinugur and Siremor, and by parts of Thibet; all of them ſituated beyond the ſnowy ridge of Himmaleh. While the Nepaul territories include between their eaſtern and weſtern limits, as is ſeen in major Rennell's map, no leſs a ſpace than twelve geographical degrees, they extend only two degrees from north to ſouth, and for the moſt part exhibit a ſlip of even leſs than a degree in breadth. The extenſive plain of Nepaul, ſituated north-eaſt of Patna, at the diſtance of ten or eleven days' journey from that city, reſembles an amphitheatre covered with populous towns and villages: the circumference of the plain is ſaid to be about 200 miles, ſomewhat irregular, and ſurrounded by hills on all ſides, ſo that no perſon can enter or come out of it without paſſing the mountains. There are three principal cities in this plain, each of which was the capital of an independent kingdom; viz. KHATMANDU, now conſidered as the chief capital, (ſee vol. xi. p. 701.) PATTAN, (which ſee;) and BHATGONG. Beſides theſe three principal cities, there are many other large and leſs conſiderable towns or fortreſſes, one of which is Timi, and another Cipoli, each of which contains about 8000 houſes, and is very populous. See alſo KHIRTIPOOR. All theſe towns, both great and ſmall, are well built of brick; the houſes three or four ſtories high, with doors and windows of wood; the ſtreets are paved with brick or ſtone, having a declivity for carrying off the water; and in almoſt every ſtreet there are good wells of ſtone, from which the water paſſes through ſeveral ſtone-canals for the public benefit. In every town there are ſquare virandas, called Pali, well built, for the accommodation of travellers and the public; and there are many of theſe in different parts of the country for public uſe. On the outſide of the great towns are ſmall ſquare reſervoirs of water, faced with brick, with a good road to walk upon, and a large flight of ſteps for the convenience of thoſe who chooſe to bathe.

The moſt northerly part of Nepaul ſcarcely lies in a higher parallel of latitude than 27½; and yet this valley enjoys, in certain reſpects, the climate of ſome of the ſouthern parts of Europe. Snow, during winter, is ſprinkled on the tops of the ſurrounding mountains for ſeveral days, and it ſometimes falls in the valley below; and in this ſeaſon a hoar-froſt commonly covers the ground, and the ſtanding water of the pools and tanks freezes, but the rivers are never frozen. Nepaul ſeems to owe its favourable climate to its great elevation; its height above the level of the ſea, as indicated by the barometer, not being leſs than 4000 feet: the mean temperature, during Kirkpatrick's reſidence towards the cloſe of the year 1792, being, for a ſmall interval of eight days, 67°. The ſeaſons are much the ſame with thoſe of Upper Hindooſtan. The rain commences a little earlier, and ſets in from the ſouth-eaſt quarter: it is uſually very copious, and ends towards the middle of October, and at this time the rivers are very ſubject to overflow their banks. On the ſides of the mountains there is a conſiderable variety of temperature; and in three or four days the traveller may exchange, by moving from Noakote to Khenoo, the heat of Bengal for the cold of Ruſſia. The ſalubrity of the more elevated ſummits is indicated by the aſpect of the inhabitants. The guttural tumours, ſimilar to the goiters of the Alps, and called in Hindooſtan *ghaigha*, and in Nepaul *ganoo*, to which the inhabitants are ſubject, are aſcribed by many of them to the imagination of their pregnant women, who conſtantly ſee the protuberant pouches of monkeys, with which part of the country abounds, and which, according to a prevalent ſuperſtition, it would be an act of the greateſt impiety to diſlodge.

It was formerly thought that Nepaul contained gold mines; but, although this is not the caſe, it produces almoſt every other metal; its iron is admirable; but copper ſcarce and dear. Near Ghoorka there is ſaid to be a conſiderable maſs of rock-cryſtal; and limeſtone, as well as ſlate, abounds every-where. However, here are no lime-kilns; and the cement employed is mud, which is preferred for their buildings. The cattle, generally ſpeaking, are not much ſuperior to thoſe commonly met with in Bengal and the upper provinces. The honey is excellent; but the vegetables are of the worſt kind. A ſpecies of yam, called *tooral*, and a kind of wild aſparagus, denominated *kuraila*, form a conſiderable part of the ſubſiſtence of the poor.

The inhabitants conſiſt principally of the two ſuperior claſſes of Hindoos, and of a race called the *Newars*, who are probably of Tartar or Chineſe origin. The former are generally diſperſed; but the latter are confined almoſt entirely to the valley of Nepaul Proper. The *Dhenwars* and *Mhanjees* are the huſbandmen and fiſhers of the weſtern diſtrict; and the *Bhootias* occupy, generally ſpeaking, ſuch parts of the Kucha as are included in the Nepaul territories. The *Bhanras* are a ſort of ſeparatiſts from the Bhootias, and are ſuppoſed to amount to about 5000. They ſhave their heads, like the Bhootias; obſerve many of the religious rites, as well as civil cuſtoms, of theſe idolaters, in a dialect of whoſe language they are ſaid to preſerve their ſacred writings. The total population is eſtimated at about half a million.

As Nepaul has been governed for many centuries paſt by Rajapoot princes, and as Hindoos in their various claſſes have conſtituted their chief population, it is natural to expect that a general reſemblance ſhould ſubſiſt, with regard to cuſtoms and manners, between this portion of its inhabitants and the kindred ſects eſtabliſhed in the adjacent countries. The differences are ſlighter than might be expected, when it is conſidered that Nepaul is the only Hindoo country that has never been diſturbed by any Muſſulman power. The Hindoos, however, and the Newars, differ very conſiderably: the latter are rarely employed in their armies; their occupations are agriculture, arts, and manufactures; they are capable of great labour, and evince a very conſiderable degree of ſkill in their mechanical operations. They are, in general, of middle ſize, with broad ſhoulders and cheſts, very ſtout limbs, round and rather flat faces, ſmall eyes, low and ſomewhat ſpreading noſes, and open cheerful countenances. At Bhatgong ſome of the women have a florid tint upon their cheeks; but, for the moſt part, their complexion, like that of the men, is between a ſallow and a copper-colour. The Newar women (like the Nairs) have as many huſbands as they pleaſe, being allowed to divorce them often on the ſlighteſt pretences.

In a work lately publiſhed, called "Sketches in India, written in 1811–14," we meet with an account of a very ſingular claſs of people, in the hilly part of the country, which does not ſeem to be included under any of the denominations we have given from other authorities. "The moſt extraordinary objects I witneſſed in theſe mountains (ſays the author) were the Troglodytes, or dwellers in caves, with the natural excavations in which they reſided. Often while in the midſt of ſavage nature, and ſurrounded by nearly inacceſſible mountains, have I been aſtoniſhed by the appearance of theſe people, who, creeping from their holes, with ſmall ladders of ropes deſcend and mount with rapidity the moſt dangerous precipices. I had ſeveral times the curioſity to enter theſe ſingular dwellings, formed and faſhioned in the hard rock. In ſome I could ſtand upright, and take four or five ſteps each way. The generality, however, were very ſmall, and but miſerably ſupplied the convenience of a hut. I found their inhabitants invariably civil. They are, I ſurmiſe, of the ancient Gymnoſophiſts, or naked wanderers: not that all of them partook of this diſtinction, but that the generality bore a ſtrong reſemblance to this ſect, of which the members are met with oftener in the northern parts of India than elſewhere. The natives will, however, aſſure you, that conſiderably farther in the interior they exiſt totally uncivilized; and, without entertaining the remoteſt idea of a God or a future ſtate, alternately live in trees or caves, crawl as beaſts, and feed on roots and other ſpontaneous productions of the earth. But, if the human ſpecies exiſt at all in ſo degraded a ſtate, (and I think it very doubtful,) it ſurely cannot be in Thibet; or at leaſt if the remainder is in any way ſimilar to the parts through which my friend and myſelf travelled: for, even in the midſt of the ſecond range of mountains into which we penetrated, large villages were frequent, and every thing beſpoke civilization, if not much refinement. The ſale of the beautiful women born in theſe hills forms a lucrative trade to their relations and friends. Of matchleſs ſymmetry of body and regularity of features, their countenances in clearneſs and delicacy rival thoſe of Europeans. A hundred and ſome eighty rupees will purchaſe a fine girl of twelve or fourteen, juſt riſing to maturity. Such have I often ſeen both bought and ſold, even within the limits of the company's provinces; and the jealous reſtrictions impoſed on their traffic are eaſily eluded by the joy of the ſlave to eſcape from a ſtate of ſtarvation and the bittereſt diſtreſs, to the comforts, kind treatment, and ſuperfluities, attendant on European protection."

The popular religion of Nepaul differs in no reſpect from the Hindooiſm eſtabliſhed in Bengal, except ſo far as the ſecluded nature of the country may have tended to preſerve it in a ſtate of greater purity. Father Giuſeppe ſays, that the religion of Nepaul is of two kinds; the one ancient, profeſſed by many people who call themſelves *Baryeſus*; theſe pluck out all the hair from their heads; their dreſs is of coarſe red woollen cloth, and they wear a cap of the ſame; they are conſidered as people of the religious order; and they are prohibited by their religion from marrying, as it is with the lamas of Thibet, from which country their religion was originally brought; but in Nepaul they do not obſerve this rule, except at their own diſcretion. They have large monaſteries, in which each has a ſeparate apartment; they alſo obſerve particular feſtivals, the principal of which they call Yatra, which continues a month, or longer, at the pleaſure of the king. The ceremony conſiſts in drawing an idol, called Baghero, in a large and richly-ornamented car, covered with gilt copper; round the idol ſtand the king and the principal Baryeſus; and thus the vehicle is drawn almoſt every day through ſome one of the ſtreets by the inhabitants, who run about beating and playing upon every kind of inſtrument their country affords, which makes an inconceivable noiſe. The other religion, which is the moſt common of the two, is that of the Brahmins, or Hindooiſm, as already ſtated.

The government of Nepaul is deſpotic. The choutra is the prime miniſter of the rajah, to whom he is invariably a-kin. He tranſacts the buſineſs of the country; and for his ſervices he has, beſides his jaghires, eight annas on every kaith or rice-plantation throughout the country;

and theſe kaiths are ſubject to various other impoſitions. The law, and the adminiſtration of it, are in an equally-imperfect ſtate. The trade of Nepaul needs better regulations, in order to render it more extenſive. Some of the reſtraints by which it was ſhackled were removed by a treaty concluded with the Eaſt-India Company in 1792; but it ſtill languiſhes under ſeveral impolitic reſtrictions. The exports of Nepaul are—elephants, elephants' teeth, rice, timber, hides, ginger, terra japonica, turmeric, wax, honey, reſin, fruit, pepper, ſpices, ghee, lamp-oil, and cotton. The duties on articles paſſing between Thibet and Nepaul are enormous. The company import into Nepaul woollen goods, chintzes, ſhawls, raw ſilk, gold and ſilver lace, carpets, cutlery, cloves, ſandal-wood, alum, quickſilver, dyeing woods, tin, zinc, lead, ſoap, tobacco, coral, &c. &c. &c. The Newars, already mentioned, are almoſt the only artiſans: their cloths are coarſe; but in iron, copper, and braſs, and alſo in carpentry, they work well: they export ſome of their brazen articles to the ſouthward; and their cutlery is not contemptible. They gild extremely well; caſt bells of a large ſize; make paper, diſtil ſpirits, and prepare fermented liquors. The ſilver brought into Nepaul by way of Thibet muſt be carried to the mint, as no ſilver is allowed to paſs into Hindooſtan; in exchange for his ſilver, the merchant receives rupees, loſing from 10 to 12 per cent. by the tranſaction; 4 per cent. on account of coinage, and 8 per cent. for alloy. Gold has uſually been a monopoly in the hands of government, which is ſuppoſed to be rich. Their artillery is contemptible. Their troops are armed with matchlocks, and bows and arrows. The regular force conſiſts of from fifty to ſixty companies, each containing 140 fire-locks; but their diſcipline is very lax. They are, however, as colonel Kirkpatrick ſays, brave, and capable of ſuſtaining great hardſhips.

The pundits of Nepaul are not inferior to their brethren in ſuch branches of ſcience as are cultivated in Hindooſtan. Aſtronomy, in connexion with judicial aſtrology, is ſaid to be their favourite ſtudy. In the valley of Nepaul, and particularly at Bhatgong, which is repreſented as the Benares of the Ghoorkali territory, a ſingle private library contains 15,000 volumes. The Shanſcrit is conſiderably cultivated by the Nepaul pundits; and, beſides, there are eight vernacular languages ſpoken within the dominions of that kingdom. Beſides his own immediate eſtates, there is hardly any diviſion of the Ghoorkali conqueſts, in which the prince has not appropriated a ſhare to himſelf. Some of theſe eſtates are cultivated by huſbandmen, with whom he equally divides the produce; others are managed by agents of his own, and tilled by the neighbouring huſbandmen, who are obliged to dedicate a certain number of days in the year to his ſervice; and others are farmed out. Many of the kaith-lands yield three harveſts; one of wheat, one of rice, and one of an excellent vegetable called *tori*. The ſugar-cane is alſo cultivated in theſe lands. In the generality of them, land is reckoned to yield from twenty to thirty fold; in fertility not much exceeding that of the beſt arable land in this iſland. The plough is ſcarcely known among the Newars; the prejudice againſt the uſe of it originating in their reverence for the bullock, which they never approach but in the form of adoration. The expenſes of the military eſtabliſhment are for the moſt part diſcharged by aſſignments of land; though, in ſome inſtances, the ſoldier receives his pay either from the treaſury or the granary.

The kingdom of Nepaul is thought to be very ancient; becauſe it has always preſerved its peculiar language and independence; but the cauſe of its ruin has been the diſſention which ſubſiſts among its three kings. At length the king of Gorcha, taking advantage of diſſentions which prevailed among the other kings of Nepaul, attached to his party many mountain-chiefs, and, having poſſeſſed himſelf of the mountains which ſurround the plain of Nepaul, deſcended into the flat country; but, failing to ſubdue it by force of arms, he hoped to effect his purpoſe by cauſing a famine. Not ſucceeding in this barbarous mode of conqueſt, he fomented diviſions among the nobles of the three kingdoms of Nepaul, and he gained over to his party ſome of the principal of theſe, for which purpoſe he had about 2000 Brahmins in his ſervice. He then laid ſiege to Khirtipoor, a ſtrong town, conſiſting of about 8000 houſes, about a league from Khatmandu, which having long attempted in vain, he at laſt obtained by treachery. See KHIRTIPOOR. After the capture of this city, he proceeded againſt Pattan; but in the mean while he made himſelf maſter of Khatmandu, in 1768, and then compelled the inhabitants, with their king, to withdraw to the king of Bhatgong. Having gained Pattan, he got into his poſſeſſion the perſons of the nobility. At the commencement of the year 1769, the king of Gorcha regained the city of Bhatgong, by the ſame modes of violence and treachery by which he had ſucceeded in his other conqueſts; and, having thus in four years effected the conqueſt of Nepaul, he made himſelf maſter alſo of the country of the Ciratas to the eaſt of it, and of other kingdoms, as far as the borders of Coochbehar. After his deceaſe, his eldeſt ſon held the government of the whole country; but in about two years afterwards, when he died, a younger brother was requeſted to accept the government, who began his reign with many dreadful maſſacres.

Nepaul, like the other kingdoms of this mountainous region, remained excluded from the notice of Europeans by its ſurrounding mountains, till a recent period. Lord Cornwallis, among his comprehenſive views, projected a connexion with Nepaul: but the ſteps which he took were not followed up. No Engliſhman had hitherto paſſed beyond the range of mountains which ſeparates the valley of Nepaul from the north-eaſtern parts of Bengal; when, towards the cloſe of the year 1792, an opportunity was unexpectedly preſented to the Britiſh government in India, of removing the veil which had ſo long ſeparated the two countries. The court of Pekin, reſenting certain encroachments which had been made by the government of Nepaul upon the rights of the lama of Thibet, whom the emperor of China had for ſome time taken under his protection, (or, in other words, ſubjected to his yoke,) came to the reſolution of puniſhing the aggreſſor; and for this purpoſe detached an army, which paſſed the mountains of Thibet, penetrated nearly to Khatmandu, the capital of Nepaul, and, in the minority of the rajah, alarmed the regency into an application to the Britiſh government for their interference. That government now beheld, for the firſt time, the ſingular ſpectacle of a numerous Chineſe force occupying a poſition which, from the heights of Dhyboon, commanded a diſtant proſpect of the valley of the Ganges, and of the richeſt of the Eaſt-India Company's poſſeſſions. The neceſſity of conciliating the Chineſe government, and of watching over our intereſts on the other ſide of Aſia, prevented our military interference; but colonel Kirkpatrick was ſent as a mediator, to ſee if it were poſſible, by any diplomatic arrangements, to put an end to the differences which ſubſiſted between the two nations. The ambaſſador, however, arrived too late; the regency of Nepaul was intimidated by the danger; and conditions were entered into by the Chineſe, extremely unfavourable to the independence of the country. The Nepauleſe would very willingly have now diſpenſed with the viſit of the colonel: but the Engliſh government, which expected advantages from an improved connexion with the country, preſſed his reception; and the Nepaulians, who thought that they could not with a good grace, after he had come ſo far on their errand, abſolutely refuſe to admit him, ſent at laſt an invitation for him to proceed. His reſidence in the country extended only to a few weeks; and during a conſiderable part of that little time he was confined with a fever. He, however, made the very beſt uſe of the time and opportunities he could command; and the reſult was ſome very important information relative to a country heretofore ſcarcely known. From that gentleman's tleman's "Account of the Kingdom of Nepaul," not publiſhed in London till the year 1811, the greater part of this article is ſelected.

In reviewing this work in the Auguſt of the ſame year, the editor of the Edinburgh Review was inſpired to utter a prophecy: "The political ſituation of Nepaul is curious. Subdued it muſt be in reality, as it is at preſent by name. The queſtion is, By whom will it be ſubdued? If it falls under our dominion, the uſual routine is an ambaſſador, a treacherous treaty, a ſubſidiary force, a motion in parliament by Mr. Creevy, proviſion for directors' ſons in the ceded country, and the cuſtomary apparatus of methodiſt preachers. If this is not its fate, it muſt become a great tea-board; be vexed by ugly mandarins, and ſuccumb to the laws of the illuſtrious Fum-Fo. Unhappy country, that muſt fall by the aggreſſion of an emperor, or periſh by the Roman ambition of the chair and deputy-chair!"

Accordingly in about three years the war broke out. It was purſued with various ſucceſs, but at length terminated in our favour, as might have been expected; and a treaty was ſigned on the 2d of December, 1815, and ratified by the earl of Moira, governor-general, on the 9th. But, unfortunately, about this time the rajah died; the ſucceſſor refuſed to ratify; the war was renewed, but ſoon ended, and peace was finally ratified, after a campaign of not more than a fortnight's active duration, on the 4th of March, 1816. By the treaty, the rajah of Nepaul renounces all claim to the lands which were the ſubject of diſcuſſion between the two ſtates before the war, and acknowledges the right of the Eaſt-India Company to the ſovereignty of thoſe lands. The rajah alſo cedes to the company, in perpetuity, the low lands between the rivers Kali and Rapti, (with the exception of Bootwul Khaas,) and between the Rapti and the Gunduck; the low lands between the Gunduck and the Cooſah, in which the authority of the Britiſh government has been introduced, or is in actual courſe of introduction; all the low lands between the river Meilchee, including the fort and lands of Naggree, and the paſs of Nagarcote, leading from Morung into the hills; together with the territory lying between that paſs and Naggree. With a view to indemnify the chiefs and barahdars of the ſtate of Nepaul, whoſe intereſts will ſuffer by the alienation of the lands ceded as aforeſaid, the Britiſh government agrees to ſettle penſions, to the amount of two lacs of rupees per annum, on ſuch chiefs as may be ſelected by the rajah of Nepaul, and in ſuch proportions as he may fix. The rajah further engages never to take or retain in his ſervice any Britiſh ſubject, nor the ſubject of any European or American ſtate, without the conſent of the Britiſh government. And, to ſecure and improve the relations of amity and peace between the two ſtates, accredited miniſters from each ſhall reſide at the court of the other.

NEPE'AN I'SLAND, a ſmall iſland in the South Pacific Ocean, near the ſouth coaſt of Norfolk Iſland, about half a mile from Point Hunter.

NEPE'AN SOU'ND, a bay on the weſt coaſt of North-America, in the North Pacific Ocean. Lat. 52. 32. N. lon. 127. 30. W.

NEPE'AN TOW'NSHIP, lies in the eaſtern diſtrict of Upper Canada, being the eighth townſhip in aſcending the Ottawa river, and the firſt on the weſt ſide of the river Radeau.

NEPEN'THE, *ſ.* [νηπενθης, Gr. formed of the privative νη, without, and πενθος, ſorrow.] In antiquity, a kind of magic potion, which made perſons forget all their pains and misfortunes.—The *nepenthe*, mentioned in ancient authors, was the juice or infuſion of a plant now unknown: Homer ſays it was a plant of Egypt; and adds, that Helena made uſe of it to charm her hoſts, and make them forget their pains. *Chambers.*

Not that *nepenthes*, which the wife of Thone
In Egypt gave to Jove-born Helena,
Is of ſuch power to ſtir up joy as this. *Milton's Comus.*

There where no paſſion, pride, or ſhame, tranſport,
Lull'd with the ſweet *nepenthe* of a court;
There where no fathers, brothers, friends, diſgrace,
Once break their reſt nor ſtir them from their place. *Pope.*

NEPEN'THES, *ſ.* [a name adopted by Linnæus, or rather Breynius, from the ancient Greeks, which, being formed of the negative νη, and πενθος, grief, expreſſes a plant furniſhed with the power of driving away care, in which ſenſe Homer uſes the word. The borage and the elecampane have been ſuppoſed to poſſeſs this valuable property; and the above name has been applied to them, or to ſome potation in whoſe compoſition they had a ſhare. The *Nepenthes* of Linnæus is an herb, whoſe leaves bear a ſingular pitcher-like veſſel, into which a pure and ſweet water is diſtilled through their ſtalks, in great abundance; and this liquor might, in ſome circumſtances, prove a welcome refreſhment to travellers.] In botany, a genus of the claſs dioecia, order monadelphia; natural order uncertain, for Juſſieu obſerves that it has no affinity to any other genus. Generic characters—I. Male. Calyx: perianthium one-leafed coriaceous, coloured within, ſpreading, four-parted; ſegments roundiſh, minutely toothletted, almoſt equal. Corolla: none. Stamina: filaments one, columnar, cylindric, erect, a little ſhorter than the calyx; antheræ many (fifteen to ſeventeen), one-celled, connected into a convex peltate head, concave at the centre, round the upper part of the filament; three of them at the top; tranſverſe. II. Female, on a diſtinct plant. Calyx: as in the male, permanent. Corolla: none. Piſtillum: germen ovate, four-grooved, ſuperior, the length of the calyx; ſtyle none; ſtigma large, peltate, four-lobed, hollowed out into four excavations, permanent. Pericarpium: capſule oblong, columnar, truncate, crowned with the permanent ſtigma, quadrangular; the ſides grooved; four-celled, four-valved, gaping at the angles; partitions contrary. Seeds: numerous, oval, incloſed in long, membranaceous, angular, arils, acuminate at both ends, faſtened obliquely to the inner angle of each cell in a double row.—*Eſſential Character.* Calyx four-parted; corolla none. Male: Filaments one, with many antheræ connected into a peltate head. Female. Style none; ſtigma large, peltate, four-lobed; capſule four-celled, with many arilled ſeeds.

Nepenthes diſtillatoria, a ſingle ſpecies. This elegant plant riſes with a fungoſe thick round ſtalk, three or four feet high. Leaves alternate, ſeſſile, wide, oblong, ſmooth, with a very ſtrong nerve running along the middle, ending in a long tendril, generally twiſted, to which hangs a receptacle, or long cylindrical membranaceous ſmooth hollow bag, which, on being preſſed, yields a ſweet limpid pleaſant refreſhing liquor, in ſuch quantity that ſix or eight of them are ſufficient to ſlake the thirſt of a man. Flowers very numerous, ſilky or downy, in a ſpike on long peduncles. Seeds very numerous linear, oblong, narrowed to both ends, dirty ſtraw-colour, faſtened all round in a ſuberect poſition to the partition. Native of Ceylon, Amboyna, and Madagaſcar. Linnæus placed it in the claſs gynandria; he doubted, however, about the ſex, and thought it might be dioecous, as it proves to be.

M. Poiret has diſtinguiſhed the Madagaſcar plant as a ſeparate ſpecies, by the ſmoothneſs of the edge of the veſſel at the end of the leaf. In our ſpecimens from that country, as well as from Amboyna and Ceylon, the part in queſtion is uniformly crenate. Perhaps the cluſter of flowers being ſimple or compound may indicate a ſpecific difference, but we perceive gradations that lead us to heſitate. The lateral ribs of the leaves too vary in diſtinctneſs and direction. The pitcher at their ends is one of the moſt curious appendages to leaves. It holds two ounces or more of clear water, diſtilled through the highly vaſcular ſtalks, and, according to Rumphius, is the refuge of a ſmall aquatic ſhrimp.

NEP'ETA, *ſ.* [ſaid to be derived from *nepa*, a ſcorpion, becauſe it was ſuppoſed an efficacious remedy for the bite of that animal. Linnæus thought that the name originated from a town in Italy, between Rome and Viterbo.]

CATMINT; in botany, a genus of the claſs didynamia, order gymnoſpermia, natural order of verticillatæ, (labiatæ, *Juſſ.*) Generic characters—Calyx: perianthium one-leafed, tubular, cylindric; mouth five-toothed, acute, erect; upper toothlets longer; lower more ſpreading. Corolla: one-petalled, ringent; tube cylindric, curved inwards; border gaping; opening ſpreading, cordate, ending in two reflex blunt very ſhort ſegments; upper lip erect, roundiſh, emarginate; lower roundiſh, concave, larger, entire, crenulate. Stamina: filaments four, awl-ſhaped, beneath the upper lip, approximating, two of them ſhorter; antheræ incumbent. Piſtillum: germen four-cleft; ſtyle filiform, length and ſituation of the ſtamens; ſtigma bifid, acute. Pericarpium: none; calyx ſtraight, containing the ſeeds in its boſom. Seeds: four, ſubovate. If the ſegments of the throat be numbered with the lower lip, it will be three-parted.—*Eſſential Character.* Corolla; lower lip with an intermediate ſegment, crenate; throat reflex at the edge; ſtamina approximating. There are twenty-nine ſpecies.

1. Nepeta cataria, or common catmint: flowers in ſpikes; whorls ſubpedicelled; leaves petioled, cordate, tooth-ſerrate. Common nep, or catmint, has a perennial root, from which ariſe many branching ſtalks, two feet high and more, upright, pubeſcent. Leaves of a velvet-like ſoftneſs, wrinkled, aſh-coloured, and hoary, particularly underneath. Spikes compoſed of interrupted whorls terminate the ſtem, and come out in branches from the axils of the leaves. The flowers are ſubſeſſile, and ſeparated at the baſe by a ſmall lanceolate bracte; calyx downy, with green ribs; corolla white, with a tinge of red, and ſpotted with purple; tube nearly ſtraight; middle ſegment of the lower lip with ſix or ſeven (ſometimes more) equal teeth turned upwards, and ſet with a tuft of white briſtles at the baſe; ſtamens rather longer than the upper lip. Seeds ovate, three-ſided, blunt at both ends, crowned with a white ſtreak, dark brown and ſmooth when ripe. The whole plant has a ſtrong ſcent, between mint and pennyroyal. It is called *catmint*, becauſe cats are very fond of it, eſpecially when it is withered, when they will roll themſelves on it, tear it to pieces, and chew it with great pleaſure. Ray obſerves, that plants which he tranſplanted from the fields into his garden were always deſtroyed by the cats, unleſs he protected them with thorns till they had taken good root and came into flower; but that they never meddled with plants raiſed from ſeed. Hence the old ſaying;

> If you ſet it,
> The cats will eat it;
> If you ſow it,
> The cats don't know it.

Mr. Miller has confirmed this by his own experience; having frequently ſet a plant from another part of the garden, within two feet of others which came up from ſeeds, when the former was torn in pieces and deſtroyed by the cats, whilſt the latter remained unhurt. The true reaſon of this difference is aſſigned by Ray; that the cat is fond of it in a languid withering ſtate, or when the peculiar ſcent of the plant is excited by being handled or bruiſed in gathering or tranſplanting. Common catmint is a native of moſt parts of Europe, on banks and hedges, chiefly in a calcareous ſoil. It flowers from July to September. In German it is called *nepte katzennepte*, &c. in Dutch, *kattekruid*, or *nept*; in Daniſh, *katteurt*, or *ſiſenbrandt*; in Swediſh, *kattmynta*; in French, *chataire*, *cataire*, and *herbe aux chats*; in Italian, *gattaria*; in Spaniſh, *gatera*; in Portugueſe, *neveda dos gatos*; in Ruſſian, *koſchitza mehta*. An infuſion of catmint is deemed a ſpecific in chlorotic caſes: two ounces of the expreſſed juice may be given for a doſe. Sheep are ſaid to eat it, but all other domeſtic quadrupeds to refuſe it. Sheep might have been included in the number.

β. N. minor. The ſmaller catmint, which Miller makes a diſtinct ſpecies, grows naturally in Italy and the South of France. The ſtalks are more ſlender, and their joints farther aſunder; the leaves are narrower, and the whole plant whiter; the ſpikes of flowers are divided into whorls, the lower two inches apart, others an inch, and the upper ones half an inch.

2. Nepeta anguſtifolia, or narrow-leaved catmint: corymbs pedicelled, ſpiked; leaves lanceolate, wrinkled, tomentoſe, bluntly ſerrate. Stem erect, a foot high, branched; the whole plant tomentoſe-hoary. Leaves petioled, bluntiſh, half an inch long. It is by no means a variety of N. cataria, nor does it change its appearance when cultivated in a garden. The leaves are ſharp at the baſe, all blunt at the tip; the calyxes are acute; whereas the leaves of N. cataria are ſubcordate at the baſe; and the upper ones, as alſo the teeth of the calyx, are cuſpidate. Native of Arragon in Spain.

Miller has a ſpecies under the ſame name, the ſtalks of which do not branch ſo much as the common ſort; they are ſlenderer, and the joints farther aſunder; the leaves are ſmall, narrow, and almoſt heart-ſhaped, ſerrate, hoary, and on ſhort footſtalks. It grows naturally in Italy.

He has another ſpecies which he calls N. paniculata, which grows naturally in Sicily, and riſes with a ſtrong ſtalk near three feet high; the lower joints are four or five inches aſunder. Leaves long, narrow, heart-ſhaped, deeply ſerrate, ſitting pretty cloſe to the ſtalk. Flowers in panicles, of a pale purpliſh colour.

3. Nepeta criſpa, or curled catmint: flowers in whorls, forming an interrupted ſpike; leaves ſtalked, heart-ſhaped, toothed, rugoſe, hoary. All we know of this ſpecies is from Willdenow, who ſays that it is extremely beautiful. Stem more than a foot high, branched, aſcending. Leaves oppoſite, on longiſh ſtalks, ſcarcely an inch long, obtuſe, unequally toothed, undulated, and curled or criſped. Flowers compoſing a terminal interrupted cluſtered whorled ſpike, of a blue colour, few in a whorl.

4. Nepeta heliotropifolia, or turnſole-leaved catmint: flowers about five in a tuft, on ſtalks. Leaves ovate-oblong, entire, rather downy. Native of the Eaſt. Stem rather more than a foot in height, very much branched and forked. Leaves whitiſh-green.

5. Nepeta pannonica, or Hungarian catmint: cymes peduncled, many-flowered; leaves lanceolate-oblong, cordate, naked; lateral lobes of the corolla reflex. Root perennial, branched, woody, the ſize of a quill, or more, brown on the outſide, knobbed at the end. Stems ſeveral, from three to four feet in height, grooved, ſmoothiſh, with oppoſite branches forming a panicle. Leaves oblong, blunt, ſcarcely cordate, bluntly ſerrate, ſmooth, the lower ones on longer petioles, the upper ones on very ſhort ones; they are ſucceſſively ſmaller as they approach the racemes, till they become ſo ſmall, that the ends of the racemes ſeem to be leafleſs. Racemes axillary and oppoſite, containing about twenty flowers; corolla more or leſs red, in the cultivated plant very deep, and elegantly dotted; upper lip blunt, erect and bifid, with oblong flat ſegments; lower lip hairy on both ſides, with blue dots at the throat. It is ſo nearly allied to N. nuda, as ſcarcely to be diſtinguiſhed when they are not in flower. The branches are not ſo rod-like in the nuda; the corollas in that are almoſt white, without ſpots: but the principal difference is in the lower lip, the middle ſegment of which in the nuda is flat, with the ſides reverſed, but in this remarkably concave and bagging. Native of Hungary, Auſtria, and Siberia. Cultivated in 1683, by Mr. James Sutherland. It flowers from Auguſt to October.

6. Nepeta cærulea, or blue-flowered catmint: cymes peduncled, many-flowered, rough-haired; leaves oblong, cordate, villoſe, ſubſeſſile; lateral lobes of the corolla reflex. Introduced in 1777, by Caſimir Gomez Ortega, M.D. We do not know of what country it is a native. It flowers in May and June.

7. Nepeta violacea, or violet-coloured catmint: cymes

peduncled, many-flowered, hairy; leaves cordate, ſubpetioled, almoſt naked; lateral lobes of the corolla ſpreading. Stalks about two feet high, (Scopoli ſays the height of a man,) with a few ſlender branches coming out from the ſides. Leaves indented on their edges. Flowers in roundiſh whorls, peduncled, blue. There is a variety of it with white flowers. Native of Spain, Piedmont, Carniola, and Siberia. It was cultivated in the botanic garden at Chelſea in 1723; and flowers from July to September.

8. Nepeta Ucranica, or Ukranian catmint: flowers panicled; leaves lanceolate, ſerrate, ſeſſile, naked. Native of the Ukraine.

9. Nepeta incana, or hoary catmint: panicles axillary; leaves petioled, ovate, ſerrate, tomentoſe. Stem herbaceous, roundiſh at bottom, decumbent, naked, bluntly four-cornered above, erect, tomentoſe, undivided, a ſpan or a little more in height. Leaves acute, tomentoſe on both ſides, but whiter underneath, ſpreading, half an inch long, the upper ones gradually leſs. It differs from N. nepetella in having the flowers in axillary panicles, and the leaves ovate-oblong, not cordate. Native of Japan.

The Kew Catalogue has a ſpecies under the ſame name, the native place of which is not known. It was introduced in 1778 by Mr. Thomas Blackie, and flowers in Auguſt.

10. Nepeta nepetella, or ſmall catmint: cymes peduncled; leaves cordate, oblong-lanceolate, deeply ſerrate, tomentoſe. This is only one-third of the ſize of the common ſort. The leaves are very narrow, acutely ſinuate-toothed. Flowers looſely racemed, with about five flowers in the racemelets, and not thirty, as in N. violacea; corollas, when recent, red, not white or blue; antheræ blue. Native of the ſouth of Europe. Cultivated in 1758, by Mr. Miller. It flowers from July to September.

11. Nepeta nuda, naked or Spaniſh catmint: racemes whorled, naked; leaves cordate-oblong, ſeſſile, ſerrate. Stems two feet high, ſmooth, ſtrict, four-grooved, the older ones dark purple. Leaves like thoſe of Stachys paluſtris, blunt, veined, naked, rugged on both ſides. Flowers diſtinct; corollas whitiſh-ruſeſcent, with the beard of the palate white, and the throat dotted with purple.

Krocker deſcribes a plant under the name of *nuda*, but is doubtful whither he ſhould refer it, becauſe it has ſeveral characters of N. nuda, and ſeveral of Ucranica, and that authors diſagree ſo much in their characters. He ſuſpects that theſe two may be one and the ſame plant, and is rather inclined to ſuppoſe that his may be the Ucranica; the ſtem being four or five feet high; the leaves ſtrictly ſeſſile, rather lanceolate than cordate, bluntly ſerrate, not blunt at the end, but acuminate; corolla pale blue, not white-ruſeſcent, or dotted with red, but rather with white; and laſtly, the ſpikes being compoſed of rather long, oppoſite, many-flowered, peduncles, placed in whorls, panicled, naked, without any bracte between them. Native of the ſouth of Europe. Cultivated by Miller in 1758. It flowers from June to Auguſt.

12. Nepeta meliſſæfolia, or balm-leaved catmint: leaves on ſtalks, heart-ſhaped, ſerrated: whorls pedunculated, corymboſe; calyx long, ſtriated. Native of the iſland of Candia, where it flowers in July and Auguſt. Stem a foot and a half high, ſquare, downy. Leaves on ſtalks, heart-ſhaped, largely toothed, as in Eryſimum alliaria. Whorls ſtalked, forming a terminal cluſter; corolla blue, its under lip dotted with red.

13. Nepeta hirſuta, or hairy catmint: flowers ſeſſile, whorl-ſpiked; whorls involved in nap. Stalks about two feet high, branching from the bottom. Leaves heart-ſhaped, obtuſe, little indented, on pretty long petioles. Stalks terminated by long ſpikes of flowers in whorls, ſeparate, ſeſſile, wrapped in a hoary down; corolla white, appearing in July. Native of Sicily. According to Loureiro, it is alſo a native of Cochinchina. He deſcribes the ſtem as one foot high, upright, hairy, and pale. Leaves lanceolate, ſerrate, hirſute, ſeſſile.

14. Nepeta Italica, or Italian catmint: flowers ſeſſile, whorl-ſpiked; bractes lanceolate, the length of the calyx; leaves petioled. The ſtalks of this ſeldom riſe more than a foot and a half high, ſending out very few branches. Leaves ſhort, oval, heart-ſhaped. The plant is hoary and ſtrong-ſcented. Native of Italy. Cultivated in 1739 by Mr. Miller. It flowers from June to Auguſt.

15. Nepeta longiflora, or long-flowered catmint: cymes diſtant, ſtalked, few-flowered; leaves heart-ſhaped, obtuſe, notched, glandular beneath; floral ones all ſeſſile; tube of the corolla twice as long as the calyx. Native of Perſia. Stem a foot and a half high, ſquare, branched. Flowers a little drooping, ſtalked, of an azure blue.

16. Nepeta muſſini, or ſcolloped-leaved catmint: cymes ſtalked, lowermoſt diſtant; leaves heart-ſhaped, obtuſe, downy, notched, rugoſe, not glandular; floral ones moſtly ſtalked. Native of Siberia: it flowers from May through the whole ſummer. Stem rather ſhrubby, decumbent, branched, ſquare, with obtuſe angles. Flowers whorled, three to five on a ſtalk, of a very rich light-purple colour.

17. Nepeta multibracteata, or bracteated catmint: flowers ſeſſile, in whorled ſpikes; bractes lanceolate, longer than the calyx, downy; leaves ſtalked, hairy beneath. Found upon Mount Atlas. Stem erect, ſlightly branched, ſquare. Flowers whorled, forming a denſe ſpike; bractes very numerous and conſpicuous, violet-coloured. This is nearly allied in habit to N. Italica.

18. Nepeta reticulata, or netted catmint: ſpikes terminal; bractes, oblong, acute, with reticulated veins, coloured; leaves lanceolate, heart-ſhaped at the baſe; downy; lateral lobes of the corolla reflexed. Found upon Mount Atlas. Stem hairy, furrowed, obtuſely-ſquare. Flowers pale-purple; bractes large, frequently violet-coloured at the margin.

19. Nepeta tuberoſa, or tuberous-rooted catmint: ſpikes terminating; bractes oblong, acuminate, nerve-lined, coloured; leaves cordate, pubeſcent; lateral lobes of the corolla reflex. This has a thick knobbed root, from which come out one or two ſtalks, that often decline to the ground; they are about two feet and a half long, and ſend out two ſide-branches oppoſite. Leaves oblong, crenate, ſeſſile, deep green. The upper part of the ſtalk, for more than a foot in length, has whorls of flowers, the lower ones two inches aſunder, but nearer all the way up; they ſit very cloſe to the ſtalks, and are guarded by ſmall bractes: the corolla is blue. There is a variety which is procumbent; and that ſeems to be Mr. Miller's plant, for he ſays that it ſometimes has an erect ſtalk. Native of Spain and Portugal. Cultivated in 1683, by Mr. James Sutherland. It flowers from June to Auguſt.

20. Nepeta ſcordotis, or Cretan catmint: ſpikes terminating, ſeſſile; bractes ſubcordate, villoſe; leaves cordate, blunt. Root large, from which proceed many tomentoſe leaves, like thoſe of white horehound, ſpreading on the ground in a circle; from the middle of theſe riſe ſeveral ſtems, which are alſo very tomentoſe, like white horehound, and on the top of them are white flowers in a large thick ſpike. Seed black. The whole plant is larger and thicker than the common Scordium, for which they uſe it in Crete or Candia, where it grows abundantly on rocks, by way-ſides, and on the borders of fields.

21. Nepeta lanata, or woolly catmint: ſpikes terminating; bractes ovate, nerve-wrinkled, ſubſcarioſe; leaves oblong, cordate, villoſe, lateral lobes of the corolla ſpreading. The root conſiſts of various fleſhy roundiſh or fuſiform tubers, the firſt year forming the root-leaves, and the ſecond many flowering-ſtems. Theſe are viſcid, ſet with long white villoſe hairs, in height one foot or eighteen inches, either entirely erect, or procumbent at the baſe. Leaves bluntiſh, crenate, wrinkled, viſcid, the lower petioled, the upper ſeſſile, all having a ſtrong ſmell. The plant is more or leſs villoſe in different individuals and at different ages. Native place not known. The ſeeds were ſent by Willich to Jacquin; and he introduced them at Kew in 1774. It flowers in May and June.

22. Nepeta Virginica, or American catmint: heads terminating; ſtamens longer than the flower; leaves lanceolate. Stems two feet high. Leaves hairy, ſomewhat like thoſe of marjoram, but larger. Flowers in whorls, and terminating in a large roundiſh head; ſtamens longer than the corolla, which is of a pale fleſh-colour. Native of Virginia; flowers in Auguſt.

23. Nepeta Malabarica, or Malabar catmint: ſpike whorled; bractes filiform; leaves lanceolate, quite entire below. Native of Malabar; where it was found by Koenig.

24. Nepeta Amboynica, or Amboyna catmint: leaves heart-ſhaped, obtuſe, notched; bractes ovate. Native of Amboyna. Flowers whorled, of a violet and white colour.

25. Nepeta Madagaſcarienſis, or Madagaſcar catmint: leaves ſtalked, ovate or roundiſh, notched, rather hairy; cluſter terminal, naked. Native of the iſlands of Mauritius and Madagaſcar. Stem a foot high, herbaceous, ſlightly branched, downy. Flowers of a reddiſh-violet colour. The root is like a turnip in flavour, and is eaten by the natives.

26. Nepeta Indica, or Indian catmint. The ſame with Lavandula carnoſa. 27. Nepeta multifida, or perennial Siberian catmint: flowers in ſpikes; leaves pinnatifid, quite entire. Native of all Siberia beyond the river Jeniſea.

28. Nepeta botryoides, or annual Siberian catmint: flowers in ſpikes; lateral lobes of the corolla ſomewhat ſpreading; leaves pinnatifid; ſegments linear, almoſt equal. Stems ſeveral, erect, ſcarcely a foot high; branches oppoſite, erect. Spikes terminating, elongated, conical; in which are innumerable minute ſubſeſſile flowers, accompanied with briſtle-ſhaped bractes, arched upwards; corolla white, a little longer than the calyx. Native of Siberia. Cavanilles ſaw it in flower at Madrid. Introduced in 1772 by Meſſrs. Kennedy and Lee. It flowers in June and July.

29. Nepeta lavandulacea, or lavender-leaved catmint: ſpike compact; leaves ovate, gaſh-ſerrate, marked with lines. Stem erect, round, purple with white hairs, a ſpan or a foot in height. Leaves bluntiſh, deeply and bluntly ſerrate, like thoſe of Veronica officinalis; the lower ones quite entire. Flowers ſeſſile; calyx of a duſky bluiſh colour and hairy; corolla violet-coloured, very large. Native of Siberia.

30. Nepeta pectinata. See BYSTROPOGON pectinatum, vol. iii. p. 568.

Propagation and Culture. All theſe plants are hardy herbaceous perennials, except one or two that are biennials. If the ſeeds be permitted to fall, the plants will riſe without trouble; or, being ſown either in ſpring or autumn, will come up, and require only to be thinned where they are too cloſe, and kept clean from weeds. Upon a poor dry ſoil they will not grow too rank, but continue much longer and appear handſomer than in rich ground, where they grow too luxuriant, and have not ſo ſtrong a ſcent. See BYSTROPOGON, DRACOCEPHALUM, HYSSOPUS, LAVANDULA, and MELISSA.

NEPETEL'LA, *ſ.* in botany. See NEPETA.

NEPHA'LIA, feſtivals in Greece, in honour of Mnemoſyne, the mother of the Muſes.

NEPH'ELE, the firſt wife of Athamas king of Thebes, and mother of Phryxus and Helle. She was repudiated on pretence of being ſubject to fits of inſanity; and Athamas married Ino, the daughter of Cadmus, by whom he had ſeveral children. Ino became jealous of Nephele, becauſe her children would ſucceed to the throne before her's, by right of ſeniority, and ſhe reſolved to deſtroy them. Nephele was appriſed of her wicked intentions, and ſhe removed her children from the reach of Ino, by giving them a celebrated ram, ſprung from the union of Neptune and Theophane, on whoſe back they eſcaped to Colchis. Nephele was afterwards changed into a cloud, whence her name is given by the Greeks to the clouds. Some call her *Nebula,* which word is the Latin tranſlation of *Nephele.* The fleece of the ram, which ſaved the life of Nephele's children, is often called the *Nephelian fleece.*

NEPHE'LIUM, *ſ.* [from νεφελιον, Gr. a little cloud, ſpeck, or ſpot; but of the reaſon of its application to the plant in queſtion we can offer no conjecture.] In botany, a genus of the claſs monœcia, order pentandria, natural order of tricoccæ, (corymbiferæ, *Juſſ.*) Generic characters—I. Male flowers in a ſpiked raceme. Calyx: perianthium one-leafed, bell-ſhaped, five-toothed. Corolla: none. Stamina: filaments five, awl-ſhaped, longer than the calyx; antheræ blunt, two-parted at the baſe. II. Female flowers in the ſame raceme. Calyx: perianthium one-leafed, bell-ſhaped, four-toothed, with two oppoſite teeth more remote; ſhrivelling. Corolla: none. Piſtillum: germens two, ſuperior, roundiſh, muricated, larger than the calyx: ſtyles two to each, filiform, recurved, ſpringing up between the germens; ſtigmas thickiſh, blunt. Pericarpium: drupe ovate, hairy, with a cartilaginous rind, and a watery pulp; (capſules two, muricated, one-celled, one-ſeeded. *Gærtner.*) Seed: nut ſolitary.—*Eſſential Character.* Male. Calyx five-toothed; corolla none. Female. Calyx four-cleft; corolla none; germens two; with two ſtyles to each; drupes, or capſules, two, muricated, one-ſeeded.

Nephelium lappaceum, a ſolitary ſpecies; with leaves alternate, pinnate, two-paired, abrupt; leaflets obovate, the outer ones larger; raceme conſiſting of a few ſpikelets, erect, ſhorter than the leaves. The fruit, according to Gærtner, conſiſts of two capſules, one of which however is generally abortive, coriaceous, thick, ovate, turgidly lenticular, muricated on the outſide with awl-ſhaped flexile briſtles, within ſcrobicular-rugged, one-celled, opening at the inner edge. Seeds ſolitary, large, ovate, very ſlightly compreſſed, ſomewhat berried. Juſſieu ranges this plant with Ambroſia and Xanthium; but the inverted ſituation of the embryo alone, ſays Gærtner, is ſufficient to forbid this union, even if they agreed in all other circumſtances. He thinks that it approaches nearer to the cheſnut, becauſe it has two ſtyles to each capſule, and no albumen. A conſiderable affinity may be traced between the fruit of this plant and the Chineſe *lee-chee:* the habit of the leaves, the infloreſcence, pubeſcence, and the form of this calyx, are all evidently akin to the Sapindus edulis, or rather to the Sapindus longan, which is perhaps a variety of it. The preſent ſhrub is a native of the Eaſt Indies. See EUPHORBIA and SAPINDUS.

NEPH'EW, *ſ.* [*nepos,* Lat. *neveu,* Fr.] The ſon of a brother or ſiſter.—A *nephew,* according to the civil law, is in the third degree of conſanguinity; but, according to the canon law, in the ſecond. *Chambers.*—I aſk, whether, in the inheriting of this paternal power, the grandſon by a daughter hath a right before a *nephew* by a brother? *Locke.*

Immortal offspring of my brother Jove;
My brighteſt *nephew,* and whom beſt I love. *Dryden.*

The grandſon. *Out of uſe.*—With what intent they were firſt publiſhed, thoſe words of the *nephew* of Jeſus do plainly ſignify: After that my grandfather Jeſus had given himſelf to the reading of the law and the prophets, and other books of our fathers, and had gotten therein ſufficient judgment, he propoſed alſo to write ſomething pertaining to learning and wiſdom. *Hooker.*

Her fire at length is kind,
Prepares his empire for his daughter's eaſe,
And for his hatching *nephews* ſmooths the ſeas. *Dryden.*

Deſcendant, however diſtant. *Out of uſe:*

All the ſons of theſe five brethren reign'd
By due ſucceſs, and all their *nephews* late,
Even thrice eleven deſcents, the crown retain'd. *Spenſer.*

NEPH'ILIM, in mythological hiſtory, a name given both to giants and to perſons of diſſolute manners. In the book of Geneſis (chap. vi.) we read, that *the ſons of God,* that is, the ſucceſſors of Seth, had intercourſe with *the daughters of men*, i. e. with thoſe who deſcended from Cain; and from this intercourſe proceeded the Nephilim, who fell into the groſſeſt enormities, as their name imports. The Centaurs were alſo called Nephilim.

NE'PHIN, a mountain of Ireland, in the county of Mayo: ten miles north of Caſtlebar.

NEPHRAL'GIA, *ſ.* [from the Gr. νεφροι, the kidneys, and αλγος, pain.] Any painful affection of the kidneys, except that which is connected with inflammation of theſe glands, the preſence of which is indicated by a ſymptomatic fever, and conſtitutes *nephritis.* The abſence of fever, therefore, diſtinguiſhes nephralgia from nephritis.

The moſt frequent cauſe of nephralgia, or pain in the kidneys, is the preſence of ſmall ſtones, or concretions, in the pelvis of the kidney, or in the ureters leading to the bladder, or of the ſandy or gravelly matter irritating the ſame parts. For the nature of theſe ſubſtances, the ſymptoms by which their preſence is indicated, the diagnoſis between them, and the ſymptoms of other painful diſorders affecting the loins, and the proper remedies to be adminiſtered for their cure, ſee the article PATHOLOGY.

NEPHRIT'IC, or NEPHRITICAL, *adj.* [νεφριτικος, Gr. from νεφρος, the kidney.] Belonging to the organs of urine.—Mr. Harriſon hath been of late ſomewhat more than heretofore troubled with certain *nephritical* fits; but they are tranſient and light. *Wotton to Sir E. Bacon.*—A very valuable medicine, and of great account in divers caſes, particularly aſthmas, *nephritick* pains, nervous colicks, and obſtructions. *Bp. Berkeley's Siris.*—Troubled with the ſtone.—The diet of *nephritick* perſons ought to be oppoſite to the alkaleſcent nature of the ſalts in their blood. *Arbuthnot.*

NEPHRITIC STONE, in mineralogy, a kind of precious ſtone, ſo called from its ſuppoſed virtues againſt the ſtone and gravel in the kidneys. It is perhaps the Serpentinus nephriticus, or nephrite.—The *nephritick ſtone* is commonly of an uniform duſky green; but ſome ſamples I have ſeen of it that are variegated with white, black, and ſometimes yellow. *Woodward.*

NEPHRITIC WOOD, in botany. See HYPERANTHERA.

NEPHRIT'ICS, *ſ.* Medicines proper for the relief of the diſeaſes of the kidneys, and eſpecially, therefore, of the ſtone and gravel. See LITHONTRIPTIC, vol. xii.

NEPHRI'TIS, *ſ.* [from νεφρος, Gr. the kidney, with the termination *itis.*] Inflammation of the kidneys.

The local ſymptoms, which denote the preſence of inflammation in the kidneys, do not differ very materially from thoſe which belong to *nephralgia*, and which are principally the reſult of the irritation of calculus, or ſandy concretions, formed in the urinary paſſages. For, in fact, inflammation of the kidneys is not very common as an idiopathic diſorder, originating from the ordinary cauſes of inflammatory affections; but is uſually an effect of the irritation of calculi in the ſame paſſages, when long continued, or particularly ſevere in degree: in other words, nephralgia is liable to terminate in nephritis. See NEPHRALGIA.

The right diſtinction of this diſeaſe from the lumbago, from the mere ſpaſmodic nephralgia ariſing from the paſſage of a calculus along the ureter, and from inflammation of other viſcera contiguous to the kidneys, is of more importance in nephritis than in the more chronic nephritic complaints; becauſe the treatment required for its cure muſt be materially different. Thus, with reſpect to the ſpaſmodic pain accompanying the irritation of a calculus impacted in the ureter, a large doſe of opium will ſometimes at once relax the ſpaſm, and allow the concretion to paſs into the bladder, producing inſtantaneous relief; but, if actual nephritis were preſent, the opium would confer no benefit; on the contrary, it would tend to augment the inflammation, and to carry it on to ſuppuration. From lumbago, then, the nephritis may be diſtinguiſhed by the preſence of acute fever; by the pain being little increaſed by moving the muſcles of the back, but conſiderably aggravated by ſhaking or jolting motion, eſpecially when a calculus is preſent; and by the concomitant ſickneſs. From ſpaſm, excited by calculous irritation, it is diſtinguiſhed by the preſence of fever; and from colic, and inflammation of the inteſtines, which are ſometimes accompanied, more particularly the laſt, by ſickneſs and vomiting, and the laſt always by fever, it is diſtinguiſhed by the numbneſs of the thigh, and the pain and retraction of the teſticle in male patients.

A prediſpoſition to nephritis is obviouſly attached to peculiar conſtitutions, eſpecially to thoſe which have a gouty tendency, or a diſpoſition to calculous complaints; and theſe two maladies are ſo far connected, that they ſometimes alternate with each other, and ſome individuals of a gouty parentage have been obſerved to be affected with gout, while others have ſuffered from calculous complaints. Corpulency ſeems alſo to prediſpoſe to theſe affections of the kidneys; or the prediſpoſition may be produced, in caſes of this nature, from the conſtant ſtimulus given to the urinary paſſages by the uſe of much high-ſeaſoned food and fermented liquors. For the cure, ſee the article PATHOLOGY.

Sometimes, though very rarely, nephritic inflammation is ſaid to have terminated in gangrene, and ſometimes in ſcirrhus; but this laſt affection, by which the kidney is ſometimes enlarged to an enormous bulk, is perhaps more commonly the reſult of a chronic than of an acute inflammation of the kidneys, and is ſcarcely within the influence of medicine. *Cullen's Firſt Lines*, chap. xi. *Baillie's Morbid Anatomy.*

NEPHRO'DIUM, *ſ.* in botany. See POLYPODIUM.

NEPHROME'TRÆ, *ſ.* A name given by ſome authors to the muſcles of the loins, called by the generality of medical authors *pſoæ.*

NEPHROT'OMY, *ſ.* [from the Gr. νεφρος, kidney, and τεμνω, to cut.] The operation of extracting a ſtone from the kidney.

There are not many inſtances of nephrotomy being done when the kidney was ſuppoſed to be entire, nor are theſe well authenticated. The only example of the operation of nephrotomy deſerving notice, is that recorded in the Philoſophical Tranſactions for 1696. It is there ſtated, that Mr. Hobſon, the Engliſh conſul at Venice, having been a long while afflicted with pain in the kidneys, in conſequence of a calculus being lodged in one of thoſe organs, went to Padua, for the purpoſe of conſulting Marchettis, a very experienced phyſician, who told him that he knew of no other mode of relieving him, except that of making an inciſion, through which the extraneous ſubſtance that annoyed him might be extracted. There was no external ſign by which the preſence of the ſtone could be aſcertained; and Marchettis did not conceal from the patient the difficulty and the danger of the operation. Mr. Hobſon, however, ſhowed ſo much reſolution, and ſo ſtrong a deſire to ſubmit to any means of cure, that Marchettis could not decline the attempt. The parts were divided with a ſtraight biſtoury. The hemorrhage was ſo profuſe, that the extraction of the ſtone was unavoidably deferred to the next day. In ſhort, two or three calculi were then taken out, and the wound dreſſed. The ſubſequent ſymptoms were not ſerious; and Mr. Hobſon was ſoon well enough to return to Venice, although his wound was not completely healed, as a ſmall fiſtula ſtill continued, from which pus and urine were diſcharged. Some time afterwards, another ſtone preſented itſelf, and was eaſily taken out. The patient at length experienced a radical cure. Ten years had elapſed, when Mr. Hobſon related his caſe to Dr. Bernard, who afterwards communicated it to the Royal Society.

This ſingle inſtance, wherein an inciſion appears to have been made into one of the kidneys and ſeveral ſtones taken thereout, ought not to embolden other ſurgeons to venture upon an operation ſo difficult to perform, and ſo uncertain in its conſequences. When, indeed, a calculus, generated in either of the organs deſtined to the ſecretion of urine, makes its way wholly or partially out of them by producing an abſceſs that points externally, the opening of that abſceſs, and the extraction of the renal calculus thereout, may be ſafely undertaken; but ſuch an operation cannot properly be termed nephrotomy. *Phil. Tranſ. abr.* vol. iv. p. 117.

NE'PI, a town of Italy, in the Patrimonio, the ſee of a biſhop, united to Sutri. It contains ſix churches and five convents. It is twenty miles north of Rome, and fifteen ſouth-ſouth-eaſt of Viterbo. Lat. 42. 15. N. lon. 12. 24. E.

NE'PIA, a daughter of Jaſus, who married Olympus king of Myſia, whence the plains of Myſia are ſometimes called *Nepiæ Campi.*

NEP'ISET, a town of Eaſt Greenland. Lat. 60. 35. N. lon. 45. W.

NEPISIN'GUIS. See NIPISSING.

NE'PISS, a lake of Canada, on the borders of Main. Lat. 45. 40. N. lon. 70. 31. W.

NEP'OLIS, a town of Bohemia, in the circle of Koniggratz: three miles ſouth of New Biezow.

NEPOMUK', a town of Bohemia, in the circle of Pilſen: nine miles eaſt-north-eaſt of Klattau.

NEPON'SAT, a river of America, in the Maſſachuſetts, originating chiefly from Muddy and Punkapog ponds in Stoughton, and Maſhapog-pond in Sharon; and, after uniting with ſeveral ſtreams, meeting the tide in Milton, whence it is navigable for veſſels of 150 tons burden to Boſton-bay, at the diſtance of four miles. There are ſix paper-mills, and others of different kinds, on this ſmall river.

NE'POS (Cornelius), a Roman hiſtorian and biographer, flouriſhed in the time of Julius Cæſar and Auguſtus, and was the friend of Cicero and Atticus. He was born on the banks of the Po, probably at Hoſtilia in the diſtrict of Verona. Nothing more is known of his life. This writer compoſed ſeveral works, one of which is commemorated in ſome verſes addreſſed to him by Catullus, as compriſing an univerſal hiſtory in three books or tables. The only performance of his which has reached modern times is a collection of biographical ſketches, entitled "Excellentium Imperatorum Vitæ," and conſiſting of twenty-two articles of Greek and other foreign generals, with a fragment of the Life of Cato of Utica, and a more detailed Life of Atticus. Theſe pieces long paſſed under the name of Emilius Probus, who preſented them to the emperor Theodoſius in the fourth century; but the purity of the ſtyle, which is that of the beſt age of the Latin language, aſſigns them to the real author. They are elegant compoſitions, but too conciſe for purpoſes of accuracy, and not marked by any depth of reflection or force of moral painting. The editions of Cornelius Nepos have been extremely numerous, as it has been made a common ſchool-book.

NEP'OTAL, *adj.* [from the Lat. *nepotatus,* profuſe.] Extravagant; luxurious. *Not uſed. Bailey.*

NEPOTA'TION, *ſ.* Extravagance; luxuriousneſs. *Bailey.*

NE'POTINE, *adj.* Extravagant; riotous; luxurious. *Bailey.*

NE'POTISM, *ſ.* [*nepotiſme,* Fr. *nepos,* Lat.] Fondneſs for nephews.—To this humour of *nepotiſm* Rome owes its preſent ſplendour; for it would have been impoſſible to have furniſhed out ſo many glorious palaces with ſuch a profuſion of pictures and ſtatutes, had not the riches of the people fallen into different families. *Addiſon on Italy.*

NEPOT'SKOI, a town of Ruſſia, in the government of Archangel, on the coaſt of the White Sea: twenty-four miles weſt of Archangel.

NEPTUNA'LIA, *ſ.* Feſtivals celebrated by the ancients in honour of Neptune.

NEPTUNA'LIA, feaſts held among the ancients, in honour of Neptune.—The *Neptunalia* differed from the *Conſualia,* in that the latter were feaſts of Neptune, conſidered particularly as preſiding over horſes, and the manege; whereas the *Neptunalia* were feaſts of Neptune in general, and not conſidered under any particular quality. They were celebrated on the 10th of the calends of Auguſt. *Chambers.*

NEP'TUNE, in mythology, the god of the ſea, was the ſon of Saturn and Ops, and brother to Jupiter, Pluto, and Juno. He was devoured by his father on the day of his birth, and reſtored to life by means of Metis, who gave Saturn a certain potion. Pauſanias ſays, that his mother concealed him in a ſheepfold in Arcadia; and that ſhe impoſed upon her huſband, telling him that ſhe had brought a colt into the world, which was inſtantly devoured by Saturn. Neptune ſhared with his brothers the empire of Saturn, and received as his portion the kingdom of the ſea. This, however, did not ſeem equivalent to the empire of heaven and earth, which Jupiter had claimed; therefore he conſpired to dethrone him with the reſt of the gods. The conſpiracy was diſcovered, and Jupiter condemned Neptune to build the walls of Troy. (See LAOMEDON.) A reconciliation was ſoon after made, and Neptune was re-inſtituted to all his rights and privileges. Neptune diſputed with Minerva the right of giving a name to the capital of Cecropia, but he was defeated; and the olive which the goddeſs ſuddenly raiſed from the earth, was deemed more ſerviceable for the good of mankind, than the horſe which Neptune had produced by ſtriking the ground with his trident, as that animal is the emblem of war and ſlaughter. This deciſion did not pleaſe Neptune: he renewed the combat by diſputing for Trœzene; but Jupiter ſettled their diſputes by permitting them to be conjointly worſhipped there, and by giving the name of *Polias,* or the Protectreſs of the City, to Minerva, and that of King of Trœzene to the god of the ſea. He alſo diſputed his right for the iſthmus of Corinth with Apollo; and Briareus the Cyclops, who was mutually choſen umpire, gave the iſthmus to Neptune, and the promontory to Apollo.

Neptune, as being god of the ſea, was entitled to more power than any of the other gods, except Jupiter. Not only the ocean, rivers, and fountains, were ſubjected to him, but he alſo could cauſe earthquakes at his pleaſure, and raiſe iſlands from the bottom of the ſea, with a blow of his trident. The worſhip of Neptune was eſtabliſhed in almoſt every part of the earth; and, the Libyans, in particular, venerated him above all other nations, and looked upon him as the firſt and greateſt of the gods. The Greeks and the Romans were alſo attached to his worſhip; and they celebrated their Iſthmian games and Conſualia with the greateſt ſolemnity. He was generally repreſented ſitting in a chariot made of a ſhell, and drawn by ſea-horſes or dolphins. Sometimes he is drawn by winged horſes, and holds his trident in his hand, and ſtands up as his chariot flies over the ſurface of the ſea. Homer repreſents him as iſſuing from the ſea, and in three ſteps croſſing the whole horizon. The mountains and the foreſts, ſays the poet, trembled as he walked; the whales, and all the fiſhes of the ſea, appear round him; and even the ſea herſelf, ſeems to feel the preſence of her god. The ancients generally ſacrificed a bull and a horſe on his altars; and the Roman ſoothſayers always offered to him the gall of the victims, which in taſte reſembles the bitterneſs of the ſea-water. The amours of Neptune are numerous. He obtained, by means of a dolphin, the favours of Amphitrite, who had made a vow of perpetual celibacy; and he placed among the conſtellations the fiſh which had perſuaded the goddeſs to become his wife. He alſo married Venilia and Salacia, which are only the names of Amphitrite, according to ſome authors, who obſerve that the former word is derived from *venire,* alluding to the continual motion of the ſea; Salacia is derived from *ſalum,* which ſignifies the ſalt-ſea, and is applicable to Amphitrite. Neptune became a horſe to enjoy the company of Ceres. (See Arion.) To deceive Theophane, he changed himſelf into a ram. (See Theophane.) He aſſumed the form of the river Enipeus, to gain the confidence of Tyro, the daughter of Salmoneus, by whom he had Pelias and Neleus. He was alſo father of Phorcus and Polyphemus by Thooſſa; of Lycus, Nycteus, and Euphemus, by Celeno; of Chryſes, by Chryſogenia; of Anæus, by Aſtypalea; of Bœotus and Hellen, by Antiope; of Leuconoe, by Themiſto; of Agenor and Bellerophon, by Eurynome, the daughter of Nyſus; of Antas, by Alcyone, the daughter of Atlas; of Abas, by Arethuſa; of Actor and Dictys, by Agemede, the daughter of Augias; of Megareus, by Œnope, daughter of Epopeus; of Cycnus, by Harpalyce; of Taras, Otus, Ephialtes, Dorus, Aleſus, &c. The word *Neptunus* is often uſed metaphorically by the poets to ſignify *ſea-water*. In the Conſualia of the Romans, horſes were led through the ſtreets finely equipped, and crowned with garlands, as the god, in whoſe honour the feſtivals were inſtituted, had produced the horſe, an animal ſo beneficial for the uſe of mankind.

This deity was known in Egypt by the name of *Cenobus*, or *Canopus*, and was worſhipped as the *Numen Aquarum*, or Spirit of the Nile. His emblem was the figure of certain vaſes or pitchers, with which the Egyptians filtrated the water of their ſacred river, in order to purify and render it fit for uſe. From the mouth of each of theſe vaſes, which were charged with hieroglyphics, aroſe the head, and ſometimes the head and hands, of a man or woman. Such are the emblems which ſtill remain of the Egyptian Neptune, or Canopus; and it was by this emblem that the tutelar god of Egypt vanquiſhed the god of Chaldæa in the following manner, mentioned by Ruffinus in his Eccleſiaſtical Hiſtory. “The Chaldeans, who adored the fire, carried their god into various countries, that he might try his ſtrength in conteſts with other gods. He vanquiſhed, as we may eaſily conceive, the images made of gold, ſilver, braſs, and wood, &c. by reducing them to aſhes; and thus the worſhip of fire was everywhere eſtabliſhed. The prieſt of Canopus, unwilling, as became him, to admit the ſuperiority of ſtrange gods, contrived to make his god vanquiſh the god of Chaldæa in a pitched battle. The vaſes which were worſhipped as the emblems of Canopus, being uſed for filtering the waters of the Nile, were of courſe perforated on all ſides with very ſmall holes. This faithful prieſt, having ſtopped all the holes in one of theſe with wax, and painted the vaſe of different colours, for a reaſon which the reader will admit to be a good one, filled it up with water, and fitted to its mouth the head of an idol. This emblem of Canopus was then placed in a ſmall fire brought by the Chaldæans as the emblem of their god; and thus the gods of Egypt and Chaldæa were forced into battle. The conteſt, however, was of ſhort duration. The heat melting the wax, made way for the water to run out, which quickly extinquiſhed the fire; and thus Canopus vanquiſhed the god of the Chaldeans.” Ridiculous as this ſtory is, it is perfectly ſuitable to the genius of paganiſm, and the artifices of the pagan prieſthood; but we ſuſpect that the hiſtorian laboured under one miſtake, and ſubſtituted the Chaldæans inſtead of the Perſians.

NEPTU'NIA, *ſ.* in botany. See Mimosa.

NEPTU'NIAN, *adj.* Belonging to Neptune; belonging to the ſea. *Cole.*

NEP'VEU (Francis), a French Jeſuit, whoſe devotional and practical writings have been widely circulated and much eſteemed in the catholic communion, was born at St. Malo's in the year 1639. He entered the order in the year 1654; and, after he had finiſhed his ſtudies and taken the four vows, he occupied the chair of claſſical profeſſor for ſix years, and afterwards that of philoſophy for eight years, with great reputation. His talents occaſioned his being appointed to various important offices in the ſociety; and he died principal of the college of Rennes, but in what year is not known. He publiſhed numerous treatiſes conſecrated to the intereſts of piety and morality; and, among others, 1. On the Knowledge and Love of our Lord Jeſus Chriſt, 1681, 12mo. which has been frequently reprinted. 2. The Method of Prayer, 1691, 12mo. which, as well as the preceding piece, has been tranſlated into Italian. 3. Preparation for Death, 1693, 12mo. 4. Chriſtian Thoughts and Reflections for all the Days in the Year, 1699, 4 vols. 12mo. which has been tranſlated into Latin and Italian. 5. The Spirit of Chriſtianity, or the Conformity of a Chriſtian to the Example of Jeſus Chriſt, 1700, 12mo. 6. Chriſtian Conduct, or, Directions for practiſing the Principal Duties of the Chriſtian Life, 1704, 12mo. &c. *Gen. Biog.*

NE'QUIENT, *adj.* [from the Lat. *nequeo*, to be unable.] Unable. *Cole.*

NEQUITA'O, a town of South-America, in the province of Venezuela: twenty miles ſouth of Truxillo.

NEQUONQUI'QUA, a river of New Brunſwick, which runs into the St. John in lat. 46. 6. N. lon. 66. 55. W.

NER, [Heb. a lamp.] A Scripture-name.

NER, a town of Hindooſtan, in the circar of Aurungabad: thirty-eight miles eaſt of Aurungabad.

NE'RA, a river of Italy, which runs into the Tiber ſeven miles ſouth-weſt of Narni.

NE'RA, a valley of Moldavia: eight miles ſouth of Roman.

NE'RA, a town of the iſland of Banda.

NERAC', a town of France, and principal place of a diſtrict, in the department of the Lot and Garonne, on the Blaiſe, which here becomes navigable. It is divided into Great and Little Nerac. It is twelve miles weſt-ſouth-weſt of Agen, and ten north of Condom. Lat. 44. 8. N. lon. 0. 25. E.

NERA'I, a river of Hungary, which runs into the Danube two miles eaſt of Vipalanka.

NERAIN'SKOI SEREBRE'NOI ZAVO'ID, a town of Ruſſia, in the government of Irkutſk, on the Argun, near the borders of China: 128 miles eaſt-ſouth-eaſt of Nertchinſk. Lat. 50. 28. N. lon. 120. E.

NER'BA, a town of Saxony, in Thuringia, on the Unſtrutt: fifteen miles north-weſt of Naumberg.

NERBUD'DAH, a river of Hindooſtan, which riſes from a lake in the ſouthern part of the province of Allahabad, and, after a courſe of 550 miles, almoſt due weſt, runs into the Gulf of Cambray thirty-one miles north of Surat. On the 27th of December, 1817, this river, ſwelled by continual rains during the three preceding days, overflowed its banks and ſwept away forty-two villages. Many thouſand men, women, and children, loſt their lives by this calamitous event, which has deprived the ſurvivors of ſhelter, food, and raiment. A collection was made at Bombay for their relief.

NER'CHAU, a town of Saxony, in the circle of Leipſic: three miles north-north-eaſt of Grimma, and ſixteen eaſt of Leipſic.

NE'RE, for *ne were.* Were not:

He trembled ſo, that, *ne're* his ſquires beſide
To hold him up, he had ſunk down to ground. *Fairfax.*

NE'RE, a town of Hindooſtan, in the circar of Ellichpour: thirty miles eaſt-north-eaſt of Ellichpour.

NEREAL'LY, a town of Hindooſtan, in Viſiapour: twenty-five miles eaſt of Anamſagur.

NERECH'TA, a town of Ruſſia, in the government of Koſtroma: ſixteen miles ſouth-weſt of Koſtroma.

NE'REID, *ſ.* [*Nereis*, Lat. pl. *Nereides*, daughters of Nereus.] A ſea-nymph:

Her gentlewomen, like the *Nereids*,
So many mermaids, tended her i'the eyes,
And made their bends adornings. *Shakeſp. Ant. and Cleop.*

The Nereids were fifty in number, all the daughters of Nereus by the nymph Doris. Their names and genealogies are deſcribed in Heſiod. Homer gives their names, with ſome variation, and reckons only thirty-two of them. The ancient monuments, as well as medals, agree in repreſenting

preſenting the Nereids as young women riding upon dolphins and upon ſea-horſes, holding commonly in one hand Neptune's trident, and in the other a dolphin, and ſometimes a victory and a crown: ſometimes we ſee them half-women and half-fiſhes, conformable to this verſe in Horace's Art. Poet. "Deſinit in piſcem mulier formoſa ſuperne." Such we ſee them on a medal of Marſeilles, and upon ſome others.

The Nereids were implored like the reſt of the deities. They had altars chiefly on the coaſts of the ſea, where the piety of mankind made offerings of milk, oil, and honey, and often of the fleſh of goats. When they were on the ſea-ſhore, they generally reſided in grottos and caves, which were adorned with ſhells, and ſhaded by the branches of vines. Their duty was to attend upon the more powerful deities of the ſea, and to be ſubſervient to the will of Neptune. They were particularly fond of halcyons; and, as they had the power of ruffling or calming the waters, they were always addreſſed by ſailors, who implored their protection, that they might grant them a favourable voyage and a proſperous return. They are repreſented as young and handſome virgins; inſomuch that Caſſiope, the wife of Cepheus king of Ethiopia, having triumphed over all the beauties of the age, and daring to vie with the Nereids, they were ſo enraged that they ſent a prodigious ſea-monſter into the country; and, to appeaſe them, ſhe was commanded by the oracle to expoſe her daughter Andromeda, bound to a rock, to be devoured by the monſter. See ANDROMEDA.

NE'REIS, *ſ.* in helminthology, a genus of the order of molluſca, or gelatinous worms. Generic characters—Body long, creeping, with numerous lateral peduncles, or feet, on each ſide; feelers ſimple, but in certain caſes there are none; ſometimes no eyes, ſometimes two, and ſometimes four. Of this genus there are thirty-two ſpecies, divided into three ſections, according as the mouth of the worm is furniſhed with a claw or forceps, or with a proboſcis, or with a tube. Moſt of the ſpecies are found in the North Seas, but three or four are met with on our own coaſts.

I. Mouth furniſhed with a claw or forceps.

1. Nereis verſicolor: body ſubdepreſſed; penduncles pointed, and furniſhed with briſtles. It is about four inches long, and is found in European ſeas. The body has about eighty-five ſegments, growing ſlenderer behind; the colour of the worm is of an ochre yellow, with a dull red ſtreak down the middle; the tail, and anterior ſegments of the body, are of a dirty greeniſh hue, but towards the middle it is ſhining, with various irideſcent colours.

2. Nereis noctiluca: body blue-green, with twenty-three ſegments; ſcarcely viſible to the naked eye. This ſpecies is found in moſt ſeas; and the animals are of that kind which frequently illuminate the water, making it appear as if it were on fire: the animals are extremely minute, pellucid, and highly phoſphoreſcent, giving an uncommonly lucid ſplendour to the waves in an evening: by their extreme minuteneſs they eaſily eſcape obſervation, but may be detected by paſſing a ſmall quantity of the water through blotting-paper.

Barbut, in ſpeaking of this ſpecies of the Nereis, ſays, "I have obſerved with great attention a fiſh juſt caught out of the ſea, whoſe body was almoſt covered with them, and have examined them in the dark: they twiſt and curl themſelves with amazing agility, but ſoon retire out of our contracted ſight; probably their glittering dazzles the eye, and their extreme minuteneſs eludes our reſearches. It is to be obſerved, that when the unctuous moiſture, which covers the ſcales of fiſhes, is exhauſted by the air, theſe animals are not to be ſeen, nor are the fiſhes then noctilucous, the matter being, perhaps, their nouriſhment when living, as they themſelves afford food to many marine animals. They do not ſhine in the day-time, becauſe the ſolar-rays are too powerful for their light, however aggregate or immenſe their number."

3. Nereis fimbriata: body ſubdepreſſed; peduncles cirrate and glandular. It inhabits the Baltic; is about three inches long, and linear. The body is of a fulvous hue, with a blue line down the middle of the back and belly; the head is furniſhed with eight feelers; and the tail is terminated with two threads.

4. Nereis armillaris: body ſubdepreſſed; peduncles conic, with glandular cirri. This, like the laſt, is found in the North Seas, buries itſelf deep in the ſand, and is about an inch and a half long. The body is filiform, with three moniliform feelers on each ſide the head; it has about 120 articulations, all armed with a peduncle on each ſide the tail, ending in two long threads.

5. Nereis mollis: lateral faſcicles of hair above the peduncles. It is found in the ſeas about Norway.

6. Nereis pelagica: body above convex; peduncles cirrate and warty. Found in the European ſeas, among the roots of ulvæ, under ſtones, and in empty ſhells; is about ſeven inches long, and has a kind of flexuous motion.

7. Nereis tubicola: body ſubdepreſſed, and peduncles ſlightly cirrate and globular. It inhabits the Northern Seas. The body is linear, with five ſtraight feelers on the head: it forms for itſelf a rough tube of the indurated moiſture exuding from its pores. This ſpecies is ſhown at fig. 6. of the preceding Plate, as it appears in its tube; the naked worm is ſhown at fig. 7. and at fig. 8, the head and neck greatly magnified.

8. Nereis Norwegica: body convex; peduncles cirrate and feathered. It is found in the bays about Norway, and is the ſize of a gooſe-quill. The body has 120 ſegments.

9. Nereis pinnata: body convex; peduncles cirrate and pinnate. This alſo is found in the bays of Norway, on a bluiſh clay. The body is of a cheſnut colour, with a blue gloſs; the ſegments are from 106 to 122 in number; the head has five jointed feelers, and the tail ends in two thick filaments.

10. Nereis corniculata: body ſubdepreſſed, pinnate; the peduncles are furniſhed with a cirrus and long ſimple briſtle. It inhabits the Norway Seas, and is extremely minute and active. It is ſhown, magnified, at fig. 9. and the head, with the eyes and feelers, more highly magnified, at fig. 10.

11. Nereis puſilla: body depreſſed; peduncles cirrate, with jointed filaments. Found alſo in the Norway Seas.

12. Nereis inciſa: body convex; the ſegments diſtant; and the peduncles ſimple and cirrate. It inhabits the Greenland Seas, far from land, and among the roots of the larger ulvæ. It is about two inches and a half long.

13. Nereis aphroditoides: the body of this is depreſſed, and not grooved; the peduncles are cirrate, and furniſhed with papillæ. It inhabits the Greenland Seas, and is found among the mud at bottom; is an inch long.

II. Mouth furniſhed with a proboſcis.

14. Nereis cærulea: ſmooth, depreſſed, bluiſh-green, pellucid. This is found in the ſeas about our own coaſts. The body is ſhining, about four inches long, with a groove along the belly.

15. Nereis viridis: body depreſſed; the peduncles have lanceolate lamellæ, or ſcales. This is an inhabitant of the North Seas, and has been found at Tenby; it is from two to three inches long. The body is filiform, and of a graſs-green colour, with 130 equal ſegments.

16. Nereis maculata: body convex; peduncles with heart-ſhaped ſcales. It inhabits the North Seas, and is from two and a half to four inches long.

17. Nereis craſſa: body depreſſed; proboſcis cylindrical; peduncles red, with branched briſtles. Inhabits the ocean; is ſeen on floating fucus, and is four inches long.

18. Nereis ſtellifera: the body of this ſpecies is depreſſed, and the peduncles furniſhed with elliptic ſcales. It inhabits the North Seas, particularly in the bays of Norway. It has been repreſented on the HELMINTHOLOGY Plate III. fig. 8. vol. ix.

19. Nereis punctata: body ſlightly depreſſed; the peduncles furniſhed with very long cirri. This ſpecies is likewiſe found in the Northern Seas, in oyſter-ſhells, or under ſtones.

20. Nereis alba: body convex; front horned; peduncles bifid. Found in the ſeas about Norway, on a clayey bottom. The body of this ſpecies is white, annulate, and tapering behind; it has no eyes; and the proboſcis is membranaceous, very pellucid, and capable of being inflated to twice the width of the body; there are ſeventy-ſeven peduncles on each ſide.

21. Nereis flava: body depreſſed; peduncles with oblong-ovate ſcales. It is found in the Northern Seas, among the root of ulvæ, and is about two inches and a half long. The body is yellow, and is divided into about 140 ſegments.

22. Nereis longa: body ſlightly depreſſed, and furniſhed with conic papillæ inſtead of ſcales of the peduncles. It inhabits the ſhores of Greenland, with a clayey or ſandy bottom, near the mouths of rivers.

23. Nereis priſmatica: body triangular; peduncles diſtant, with a ſingle ſetigerous papilla cirrate above. This is found on the ſhores of Greenland, and is about half an inch long.

24. Nereis bifrons: body depreſſed; peduncles with a ſingle ſegiterous papilla cirrate above, the middle ones alſo branched. This alſo is found in the Greenland Seas; is an inch long, has fifty-ſix ſegments, and is continually moving.

25. Nereis cæca: body ſlightly convex; it has two very ſhort feelers, and the peduncles have double ciliate lamellæ. It inhabits the ſandy ſhores of Greenland, under ſtones, like the LUMBRICUS (which ſee). It burrows very deep, and is about eight inches long. The body is divided into from 86 to 100 ſegments.

26. Nereis ebranchiata: body round annular, and tapering both ways; peduncles cylindrical, ſhort and double, pinnate on each ſide; it has no feelers, and inhabits the German and Indian Seas. The body is of a bluiſh or greyiſh brown, and is divided into 269 ſegments.

27. Nereis lamelligera: body flattiſh, and tapering both ways; proboſcis ſtellate, with four fleſh-coloured ſpines; the peduncles are compreſſed and furniſhed with a ſemilunar ſcale above, and a larger ſemiheart-ſhaped one beneath. This is found in the Indian, Mediterranean, and alſo in the Northern, Seas, among aquatic plants; and is nearly two feet long. The body of this ſpecies is ſaid to be divided into from 200 to 550 ſegments; the head has four feelers.

28. Nereis ciliata: body depreſſed; mouth cylindrical, retractile; the anterior margin ciliate; it has no feelers.

III. Mouth furniſhed with a tube.

29. Nereis prolifera: body depreſſed; peduncles cirrate; front with a ſingle feeler. The head is orbicular, with three feelers; one iſſuing from behind the eyes, and two ſmaller ones briſtling from the anterior extremity of the head. Six other ſimilar feelers of unequal length proceed from the neck, three on each ſide; the ſhorteſt being neareſt to the head; the longeſt adhering to the firſt ſegment of the body.

Six eyes were beſtowed by the kindneſs of Providence upon this feeble and defenceleſs creature, to enable it to avoid deſtruction; four upon the head, looking like ſmall dots; the two poſterior ones ſmaller, and two under. No apparatus in the mouth either to cut or chew; and, inſtead of the proboſcis uſual to the ſpecies of the ſecond ſection, a ſmall blunt, thick, flexuous tube, is perceived through the ſkin, winding down as far as the ſeventh ſegment, and loſing itſelf in the inteſtines. The body is full of a mucid or mucus-like ſubſtance. The number of the ſegments, with feet annexed to each, is between 32 and 46 in perfect ſubjects, or thoſe in which, aided by a powerful microſcope, the obſerver can find no trace of diviſion. The foot is compoſed of a fleſhy obtuſe lobe, armed with a ſmall bunch of briſtles, and a feeler three times ſmaller than the frontal one. The tail is terminated by two hair-like feelers of a middle ſize.

A phenomenon not uncommon in the genus Naïs, but, known in no other Nereis, is to be obſerved in this ſpecies; viz. a generation through diviſion. A mother-nereid has been found with three fœtuſſes, of different ages, adhering lengthways to her body. The mother exhibited thirty ſegments; the youngeſt daughter, the neareſt to the mother's tail, had only eleven; the oldeſt and moſt remote had her eyes and feelers diſengaged, and ſeventeen ſegments; and the middle one had the ſame number. The two laſt by a gentle preſſure parted from the mother. In the eldeſt, the ſegments were diſtinguiſhed on the ſides by white ſpots upon black matter. Theſe ſmall bodies could be preſſed out, and would fall in the ſhape of eggs, marked with a pellucid point. But, are theſe eggs? and, if they are, could eggs be already conſpicuous in a ſubject ſtill adhering to its mother? and is this diminutive worm of ſo great importance in the ſecret myſteries of Nature, and its productions ſo neceſſary to ſome particular end, that propagation ſhould even precede birth? In the younger fœtuſſes dots are ſeen as in the other. Are they rudiments of eggs? Who can anſwer? This ſpecies is found (but not commonly) in the bays of Norway. It is ſhown, with two fœtuſſes adhering to it, as ſeen under the microſcope, at fig. 11. and one of the feet, with the feeler and bunch of briſtles, greatly magnified, at fig. 12.

IV. New Species deſcribed by Mr. Montagu in the Linn. Tranſ.

30. Nereis pinnigera: body long and ſlender, with numerous opaque white joints tranſverſely marked with yellow, and furniſhed at the ſides with long flat appendages that flow over the back: tentacula ſcarcely diſtinguiſhable, unleſs the longer appendages in front be ſuch: eyes four, chocolate-colour: the poſterior end ſuddenly decreaſes, and becomes very ſmall, as if that part had been newly formed; a circumſtance of no unreaſonable conjecture, as it is well known that many of the molluſca tribe are capable of reproduction. Length an inch and a half.

31. Nereis ſanguinea: body long, ſlightly depreſſed beneath, and acuminated towards each end, but much more ſo at the poſterior extremity. The number of joints exceeds two hundred and ſeventy; about forty of which at the poſterior end are of a much paler colour, and appear to be a reproduction; the reſt of the body is of a fine bronze, reſplendent with changeable priſmatic tints; the ſides furniſhed with tridentate peduncles, from the middle of which iſſue a flat faſciculus of hair of a pale colour, and one large black briſtle. About the twenty-eighth joint commence on each ſide branched cirri of a blood-red colour, which afterwards increaſe conſiderably in length; theſe originate from the upper part of each peduncle, and are uſually hexafid, but unite above the baſe; they are not retractile, but are generally carried erect and ſpread, giving the animal a beautiful appearance. The upper lip is bilobate, behind which are five ſhort tentacula, the middle one ſtanding in the future of the lip. Between the two outer tentacula on each ſide is a ſmall black eye. The firſt joint behind the head is broader than the reſt, and deſtitute of peduncles: the poſterior extremity is furniſhed with two ſmall terminal cirri. The mouth is large and placed beneath, concealing moſt formidable jaws, or complicated fangs, which where protruded occaſionally as the animal became ſickly, and very frequently in the agonies of death, when a few drops of ſpirits were added to the ſea-water: this apparatus conſiſts of three pairs of hooked fangs of a dark colour; one pair ſmooth, the others toothed, beſides a pair of broad plates on the lower part of the mouth, the ſtructure of which will be better underſtood by the accompanying figure. See fig. 15.

This is the largeſt ſpecies of Nereis yet diſcovered to inhabit the Britiſh ſhores, extending ſometimes to fourteen or fifteen inches in length, and large in proportion. It inhabits rocky ſituations, and is found lurking under the broken fragments; but is rare. While the animal was in a glaſs of ſea-water, the circulation of the colouring ſecretion through the ramifications of the cirri was a curious object, and appeared to be effected at the will of the animal; but, when it became ſickly, the circulation was ſlower, riſing up through the branches of the cirri gradually as in capillary tubes; and as ſoon as it expired all the colour from thoſe parts vaniſhed. This curious and beautiful worm is ſhown of the natural ſize at fig. 13. the peduncles magnified at fig. 14. and the fangs magnified at fig. 15.

32. Nereis maculoſa: body linear, with about thirty pairs of faſciculate peduncles complicated with a ſlender pencil of hairs above the broad faſcicles, and in ſome points of view appearing like a ſingle hair; above this iſſues a cirrus changeable in ſhape, but never longer than the peduncle, independent of the faſciculus: tentacula ſeven, the middle one larger, and placed in the centre of the forehead between the eyes, ſomewhat erect, and appears to be jointed. Eyes four, black, the hindmoſt pair ſmalleſt, and not viſible on the upper part; the others are large, and moſt conſpicuous beneath. Along the back are ſeven cordiform equi-diſtant yellow ſpots; the ground-colour white. Length about an inch. Rare. This is ſomewhat like N. corniculata; but the want of the bifid tentacula makes it diſtinct. This and the two preceding were diſcovered by Mr. Montagu on the ſouth coaſt of Devonſhire; and deſcribed by him, with ſeveral other new and curious marine animals, in the ixth and xith volumes of the Linnæan Tranſactions.

NE'RENBERG, a town in the late French department of the Sarre: twenty-ſix miles weſt of Coblentz, and thirty-two ſouth of Cologne.

NE'RESHEIM, a town of Germany, in the principality of Oëttingen; near it is a princely abbey, of the ſame name: twelve miles ſouth-ſouth-weſt of Oëttingen, and ſix ſouth-ſouth-weſt of Nordlingen.

NERE'SI, a town on the ſouth ſide of the iſland of Brazza, in the Adriatic, near the coaſt of Dalmatia. Its ſituation is not pleaſant, though it is the reſidence of the governor and a place of reſort, and the only good lands in the iſland are adjacent. The road to it from the ſea-ſhore is exceedingly rough and wild; the air continues rigid after the ſpring-ſeaſon, and the winter, they ſay, is intenſely cold. Nereſi has been more conſiderable in the times of incurſions and piracies; and hence it ſtill preſerves a kind of primacy, becauſe the principal highlanders retired thither; but now, ſince the places near the ſea may be ſafely inhabited, it has loſt much of its population, and deſerted houſes are falling into ruins on all ſides.

NERES'TABLE, a town of France, in the department of the Rhône and Loire: twelve miles ſouth-weſt of Roanne.

NE'RESTBAD, a town of Perſia, in the province of Kerman: ninety miles north of Maſtih.

NERE'TO, a town of Naples, in Abruzzo Ultra: thirty-ſix miles north-north-eaſt of Aquila.

NE'REUS, in mythology, a deity of the ſea, ſon of Oceanus and Terra. He married Doris, by whom he had fifty daughters, called the Nereids. (See Nereid.) Nereus was generally repreſented as an old man, with a long flowing beard, and hair of an azure colour. The chief place of his reſidence was in the Ægean Sea, where he was ſurrounded by his daughters, who often danced in choruſſes round him. He had the gift of prophecy, and informed thoſe that conſulted him of the different fates that attended them. Thus he acquainted Paris with the conſequences of his elopement with Helen; and it was by his directions that Hercules obtained the golden apples of the Heſperides; but the ſea-god often evaded the importunities of inquirers by aſſuming different ſhapes, and totally eſcaping from their graſp. The word *Nereus* is often taken for the ſea itſelf. Nereus is ſometimes called the moſt ancient of all the gods.

NERFU'A, a ſmall iſland in the gulf of Finland. Lat. 60. 12. N. lon. 28. 9. E.

NER'GAL, an idol of the Cuthites, who were a tribe of the Chaldeans or Perſians. The Jews repreſent it in the form of a cock; but, as the word ſignifies "the revealing or rolling lamp," it is more probable that it ſignifies fire, or the ſun. Two of Nebuchadnezzar's generals were, in honour of it, called Nergal-ſharezer. 2 *Kings* xvii. 30. *Jer.* xxxix. 3.

NERHELBE'NO, a town of Poland, in the palatinate of Kiev: forty-eight miles weſt-north-weſt of Kiev.

NE'RI, [Heb. my light.] A man's name.

NE'RI (Philip de), a ſaint in the Roman calendar, and founder of the celebrated Congregation of the Prieſts of the Oratory, was deſcended from a noble family at Florence, where he was born in the year 1515. He was ſent to one of his uncles, a merchant at St. Germain's in the kingdom of Naples, with the intention of being educated to buſineſs; but he early diſcovered a ſtronger inclination for reading and ſtudy, and was permitted to indulge it. After going through a courſe of claſſical literature, and making a conſiderable progreſs in philoſophy and divinity, he ſuddenly renounced the purſuit of learning, ſold his books, and gave himſelf up wholly to prayer and contemplation. At the age of nineteen he came to Rome, where he devoted much of his time to attendance on the ſick poor, and practiſed the moſt rigorous mortification and ſelf-denial, allowing himſelf no other food but bread, olives, and a few herbs. When he was twenty-ſix years old, he was ordained prieſt; and, from that time till his death, not a day paſſed without his either celebrating maſs or communicating. In the year 1550 he founded a fraternity for the relief of ſtrangers, pilgrims, and deſtitute ſick perſons; which led the way to the inſtitution of the Congregation of the Oratory. This celebrated ſociety was begun to be formally organiſed by him in 1564, and ten years afterwards was approved by pope Gregory XIII. Among the firſt members of this congregation was the famous Baronius, who by his advice was led to undertake his "Eccleſiaſtical Annals;" and the numerous eſtabliſhments, belonging to the order, which ſoon aroſe in Italy, and France in particular, have furniſhed many other eminent names, which have rendered very important ſervice to the intereſts of literature and ſcience. Neri died at Rome in 1595, when he was about eighty years of age. He was canonized by pope Gregory XV. in 1622. *Teiſſier's Eloges des Hommes Savants*, vol. ii.

NE'RI (Antonio), an Italian prieſt and excellent chemiſt, a native of Florence, flouriſhed about the beginning of the ſeventeenth century. He acquired great expertneſs in the art of glaſs-making, and reſided many years at Antwerp; but returned to Italy, where he ſpent the remainder of his days, ſometimes at Piſa, and ſometimes at Florence. He wrote, in the Italian language, a work on the art of glaſs-making, Dell' Arte Vetraria, lib. 7. Florence, 1612, 4to. which was tranſlated into Latin by Andrew Friſio, and publiſhed at Amſterdam, with the notes of Chriſtopher Meretti, 1668, 12mo. A German tranſlation was printed at Leipſic in 1678, and it was afterwards inſerted by Kunkel in his Complete Art of Glaſs-making. A new edition of Neri's work appeared at Venice in 1782. The diſcoveries of this chemiſt tended greatly to improve the art on which he treated; and were of great ſervice, in particular, to thoſe who attempted to make artificial precious ſtones. *Gen. Biog.*

NE'RI (Pompeio), a native of Florence, who became profeſſor of the law at Piſa, and was employed in ſtate-affairs by the duke of Lorraine, and the empreſs Maria Thereſa. He founded the Academy of Botany at Florence, where he died in 1776 at the age of ſixty-nine. He wrote Obſervations on the ancient and preſent ſtate of the Tuſcan Nobility; on the Impoſts of Milan; on the legal value of the Coin, and the difficulty of fixing and maintaining the ſame.

NERIABAD', a town of Hindooſtan, in Guzerat: fourteen miles ſouth of Mahmoodabad.

NERI'AH, [Heb. light.] A man's name.

NERI'CIA, or NERIKE, a province of Sweden, bounded on the north by Weſtmanland, on the eaſt by Sudermanland, on the ſouth by Eaſt and Weſt Gothland, and on the weſt by Warmeland. This province is about ſixty miles in length, and forty-eight in breadth. In moſt parts of it the ſoil is fertile, and produces corn and paſturage. This country yields iron and ſulphur mines, quarries of load-ſtone, alum, lime-ſtone, &c. conſequently it has iron-founderies, with ſulphur and lead works. Here are large woods, ſeveral high mountains, conſiderable rivers, and twenty-three lakes which abound in fiſh. Nericia is famous for ſeveral flouriſhing manufactures of all kinds of hard-ware; and it has always been remarkable for forging arms, &c. The chief occupations of the inhabitants are agriculture, working in the mines and forges, hunting, and fiſhing. Orebro is the principal town.

NERILKE'RY, a town of Hindooſtan, in Myſore: twelve miles eaſt of Seringapatam.

NE'RIN, a river of Dalmatia, which runs into the Narenza.

NERINGJIPET'TY, a pagoda of Hindooſtan, in Myſore: eight miles ſouth-ſouth-eaſt of Coveriporum.

NE'RIO AFFI'NIS, in botany. See BIGNONIA and CERBERA.

NE'RIS, a town of France, in the department of the Allier, with a medicinal ſpring: three miles ſouth-eaſt of Montluçon.

NERI'TA, *ſ.* in helminthology, the NERITE; a genus of teſtaceous worms. Generic characters—Animal a limax; ſhell univalve, ſpiral, gibbous, flattiſh at the bottom; the aperture is ſemiorbicular, or ſemilunar; pillar-lip tranſverſely truncate, flattiſh. Seventy-ſix ſpecies are enumerated as belonging to this genus, ſeparated into three diviſions, according as they are umbilicate, imperforate with toothleſs lips, or imperforate with lips that are toothed. The ſhells are generally ſmall, uſually poliſhed, and often banded.

I. Umbilicate.

1. Nerita canrena: ſhell ſmooth, with a ſlightly-pointed ſpire, and a gibbous bifid umbilicus. It inhabits India, Africa, and America, in almoſt innumerable varieties of ſize, colours, and marks; being white, yellowiſh, or bluiſh, with variouſly-diſpoſed ſpots, lines, and clouds. As theſe animals are collected and preſerved chiefly for the ſake of the ſhells, the moſt curious of them will be found repreſented under CONCHOLOGY, vol. v. The preſent ſpecies has been ſhown on Plate X. of that article, fig. 3, 4.

2. Nerita cancellata: ſhell with decuſſate ſtriæ and impreſſed dots; the ſpire ſubclavate; umbilicus gibbous and bifid. This ſpecies is found in ſeveral of the American iſlands. The ſhell is white with obſolete ſpots, with ſometimes a fulvous band and rays.

3. Nerita glaucina: ſhell ſmooth, gloſſy; ſpire rather obtuſe; umbilicus partly cloſed by the pillar-lip, which is gibbous and two-coloured. It inhabits the coaſts of Barbary, and is ſometimes found on our own ſhores. It is about two inches long.

4. Nerita vitellus: ſhell ſubglobular, with a perforated equal umbilicus. It inhabits the Indian Ocean. The ſhell is yellow, with white ſhades, and ſpots diſpoſed in rows, above with a duſky band; within and round the umbilicus it is white. This is delineated (from Knorr) on the preceding Plate, at fig. 16.

5. Nerita albumen: ſhell convex; umbilicus ſomewhat heart-ſhaped, with a flattened lobe. This ſpecies is found at the Cape of Good Hope, on the Barbary coaſt, and at the Nicobar and Molucca iſlands: it is, however, a very rare ſhell; ſmooth and broad, of a pale yellow colour, white and flat beneath.

6. Nerita mammilla: ſhell ovate, glabrous; umbilicus partly covered; aperture ovate. There are four different varieties of this ſpecies; found in India, and divers parts of America. It is more than two inches long.

7. Nerita leucozonias: ſhell ſubglobular and ſolid, of a bay colour, with white bands; the ſpire is ſomewhat depreſſed. It is more than an inch long.

8. Nerita ſpadicea: ſhell ſubglobular and ſolid, cheſnut-colour, but beneath white; the tip is bluiſh, throat with bands, one alſo on the back. Found in the iſland of Mauritius, and is rather large.

9. Nerita rufa: ſhell thin, rufous; umbilicus darker, with a white border; the back and baſe of the ſpire have a white band on each, the throat with a reddiſh band; pillar with a brown fillet.

10. Nerita fulminea: ſhell ſubglobular, white with angular tawny lines, and flattened lobe. There are three varieties; found, though but rarely, in Africa.

11. Nerita ſtercus-muſcarum: ſhell ſmooth, ſnowy, with rufous ſpots and ſpecks; the umbilicus is gibbous and bifid. It inhabits the Mediterranean and American ſeas; and is thought to be a variety of the N. canrena.

12. Nerita orientalis: ſhell ſubglobular, poliſhed, very ſmooth, the baſe of the ſpire a little wrinkled; pillar ſnowy. It is found in the Eaſtern Seas. There are two varieties: the ſhell of the one is of a buff-colour on each ſide, with a narrow white band in the middle; the other is entirely white.

13. Nerita cruentata: ſhell ſubglobular, white, with red ſpots and dots, the lip obtuſe and bluiſh, within bluiſh; umbilicus ſpiral.

14. Nerita rugoſa: ſhell wrinkled, within glabrous, pale teſtaceous; umbilicus bordered with white. It inhabits the American iſlands.

15. Nerita marochienſis: ſhell ſubglobular, ſmooth, light green, within browniſh, and livid at the tip; a little wrinkled at the angle of the whorls. It is found in Africa. The ſhell is ſometimes marked with feathered bands; the younger ones are thin and pellucid.

16. Nerita ſulcata: ſhell ſubglobular, obliquely plaited; ſpire with four whorls, mucronate; umbilicus bifid.

17. Nerita arachnoidea: ſhell white, reticulate, with reddiſh lines, and blackiſh at the tip; whorls convex; umbilicus nearly covered.

18. Nerita vittata: ſhell ſubglobular, brown, with a double white fillet in the middle, reticulate and denticulate on each ſide. This is an African ſhell.

19. Nerita melanoſtoma: ſhell thin, pellucid, ſmooth, oblong; the firſt whorl ventricoſe, flat, and very large, the others compreſſed; the umbilicus is half cloſed. There are five varieties of this ſpecies. It inhabits the Indian Sea, and is two inches long.

20. Nerita pallidula: ſhell ſemitranſparent horn-colour, the whorls rather prominent; aperture ſemilunar, and very patulous; the umbilicus is large. It inhabits the coaſt of Kent and Dorſet.

21. Nerita papilla: ſhell pellucid, thin, oblong, with decuſſate ſtriæ; of a dirty yellow colour; the aperture is ſuboval; the pillar white, and the umbilicus half cloſed. It inhabits the ſhores of Tranquebar.

22. Nerita clathrata: ſhell depreſſed, ovate; tranſverſely undulate, and longitudinally ribbed, the ribs flat, oblique, and ſemilunar; ſpire papillary. Found in a foſſile ſtate in Campania.

23. Nerita valvata: ſhell flattiſh, with a circinated aperture. It inhabits the North Seas. The inhabitant of the ſhell has two ſetaceous tentacula, bearing the eyes at the poſterior angle.

24. Nerita Iſlandica: ſhell globular, ſubacute, and rather thick; it has four whorls, ſeparated by very deep grooves. It is found in the North Seas.

25. Nerita affinis: ſhell globular, and rather thick, with a ſubmucronate ſpire, and three whorls. It inhabits New Zealand; and is probably a Trochus.

II. Imperforate, with toothleſs lips.

26. Nerita corona: whorls of the ſpire crowned with ſpines. It inhabits India and America, and is minute. The ſhell is ſometimes blackiſh, thinly ſtriate.

27. Nerita radula: ſhell grooved, with equal tubercles. It inhabits the Indian iſlands, and is the ſize of a walnut. This is repreſented, in two different poſitions, at the upper corners of CONCHOLOGY Plate V.

28. Nerita cornea: ſhell obſoletely ſtriate. It inhabits the Red Sea. The ſhell is fragile, brown, white, or pale violet, with longitudinal white or teſtaceous bands.

29. Nerita fluviatilis: ſhell rugged, ſpotted, ſtreaked, or reticulate. There are four varieties that inhabit the rivers of Europe and Barbary; the ſhell is not half an inch long.

30. Nerita littoralis: ſhell ſmooth, with a carious crown, and four whorls. It inhabits the ſea-rocks of Europe, and is the ſize of a horſe-bean. The ſhell is yellow or ferruginous, with or without bands, ſpots, or dots, of various colours.

31. Nerita lacuſtris: ſhell ſmoothiſh, horny or blackiſh, ending in an exquiſitely-fine point. It inhabits ſtill waters, and the warm ſprings of Europe; and very much reſembles the preceding.

32. Nerita Magdalenæ: ſhell with wide grooves, black, but within white, the lip yellowiſh; the lid is ſmooth, and two-toothed. It inhabits Magdalena-iſland in the Southern Ocean, and is more than half an inch long.

33. Nerita marginata: ſhell thin, with decuſſate ſtriæ, tuberculate, black, with ochraceous ſpots, ſubglobular; aperture margined outwardly.

34. Nerita dubia: ſhell thin, pellucid, ovate, poliſhed, dull yellow, varied with black; outer lip acute, inner glabrous. This is a very rare ſhell, and its place of reſidence is not known.

35. Nerita pellucida: ſhell ſmooth and pellucid, with three whorls.

36. Nerita alba: ſhell ſmooth, ſubpellucid, with two whorls. This is found with the laſt on the Pembrokeſhire coaſt; both are very minute.

III. Imperforate, with lips toothed.

37. Nerita pulligera: ſhell ſmooth, coarſe, with an excavated eye-like ſmall ſpire; inner lip ſmooth, crenulated.

38. Nerita undulata: ſhell thin, ſmooth, undulate; crown obtuſe; outer lip ſubſtriate and toothleſs; inner one a little denticulate.

39. Nerita aterrima: ſhell thick, opaque, globular, deep black with coloured lines, within white; outer lip glabrous, inner lip tuberculate, and wrinkled.

40. Nerita larva: ſhell ſmooth, ſubglobular, white, with yellowiſh-brown bands; crown obtuſe; lip ſlightly denticulate. It is found at Amboyna, though it is very rare.

41. Nerita pupa: ſhell ſmooth, roundiſh, milk-white, with tranſverſe parallel black ſtriæ on the whorls; the lip is flat, with hardly-viſible teeth.

42. Nerita bidens: ſhell ſmooth; inner lip two-toothed. The ſhell is the ſize of a pea, and is either black or reddiſh, obſoletely ſtriate, ſometimes of a pale yellow, with whitiſh clouds, and three black bands.

43. Nerita viridis: ſhell ſmooth and green; the inner lip crenulate in the middle. It inhabits Minorca and Jamaica.

44. Nerita virginiata: ſhell ſmooth, ovate; inner lip denticulate. Found in the rivers of India and South America; from two to ten lines long.

45. Nerita polita: ſhell ſmooth, with an obliterated crown; the lip toothed on each ſide. There are four varieties, found in the Indian and South Seas. The ſhell is ovate, ſolid, poliſhed, variouſly ornamented with ſpots, clouds, and bands, or varied with black and white.

46. Nerita peloronta: ſhell ſtriate; lips toothed, the inner one flattiſh and wrinkled. It inhabits the American iſlands. It reſembles the N. groſſa; but is of a red colour, the grooves are not ſo deep, the outer lip is not crenate, and the inner one not convex.

47. Nerita albicilla: ſhell ſtriate; lips ſlightly toothed, the inner one tuberculate. It is found in the Indian Ocean, and on the ſhores of the Cape of Good Hope.

48. Nerita hiſtrio: ſhell grooved and tranſverſely ſtriate; inner lip toothed.

49. Nerita plicata: ſhell grooved; lips toothed, the outer one with acute conic teeth on each ſide. This is found in divers parts of India.

50. Nerita groſſa: ſhell grooved; lips toothed, the inner one convex and wrinkled. It is found about the Molucca-iſlands. The ſhell is rounded, white, with black and cinereous veins; the crown is a little prominent; the firſt whorl has thirteen or fourteen ribs; outer lip crenulate outwardly and toothed within; inner lip white, with a yellow ſpot, and three or four teeth.

51. Nerita chamæleon: ſhell with twenty grooves; lips toothed, the inner one wrinkled and tuberculate. It inhabits the Indian Ocean. The ſhell is varied with alternate undulate black-and-white rays, or yellowiſh, undulate with black-and-white, ſubglobular; the ribs are unequal, and croſſed by very fine lines; the crown is depreſſed and lateral.

52. Nerita undata: ſhell with thirty grooves; lip toothed, the inner one wrinkled and tuberculate. It inhabits the Indian Seas.

53. Nerita exuvia: ſhell grooved; lips toothed; the inner one tuberculate. It is found on the Indian coaſts. See CONCHOLOGY Plate X. fig. 1, 2.

54. Nerita maxima: ſhell ſolid, thick, glabrous, with undulate black and yellowiſh rays; outer lip toothleſs; inner one a little concave, and four-toothed. The ſhell is very large, within and at the aperture ſnowy; inner lip ſmooth, and very broad.

55. Nerita textilis: ſhell marked with angular black lines, and ſixteen crenate ribs and grooves; the outer lip is crenate without, and toothed within; inner lip wrinkled above and tuberculate beneath; the palate is toothed.

56. Nerita atrata: ſhell deep black, glabrous, and very thinly ſtriate above; both lips white, the outer one very thinly grooved, and ſlightly toothed within, the inner one concave, wrinkled, and tuberculate. It inhabits the Atlantic, American, and South, ſeas.

57. Nerita Aſcenſionis: ſhell with ſixteen grooves; the ribs are ſpotted with white, and the crown is a little prominent; the outer lip is glabrous on each ſide; and the inner one a little concave, yellowiſh, and toothed. It inhabits Aſcenſion-iſland, and is a large ſpecies; the crown is generally worn down, rarely black; and the lid is thin and pellucid.

58. Nerita lineata: mouth of the ſhell and both lips white, whorls round, ſurrounded with black parallel ſtriæ, the ſpaces between the ſtriæ violet; outer lip ſtriate within. It is found in the Malacca-ſeas.

59. Nerita verſicolor: ſhell with blackiſh, bluiſh, red, and white, ſquare ſpots, and bands ſpotted with red and white; the inner lip is ſtriate within, and toothed on each ſide. It inhabits the Antille-iſlands. The ſhell is ſet with round whorls; the crown is a little prominent; inner lip wrinkled above, and four-toothed beneath, the middle teeth larger.

60. Nerita pica: ſhell white, radiate with black without, with tranſverſe, rounded, ſmooth, ſtriæ; inner lip wrinkled, and four-toothed. This is found in the Indian Seas. The crown is a little prominent; the outer lip crenate without, and ſtriate within.

61. Nerita coſtata: ſhell yellowiſh within, ſubglobular, ſurrounded with thicker ſtriæ; the interſtices ſnowy; both lips toothed, the outer one crenate without; inner one ſubconvex, wrinkled, and tuberculate. It inhabits the Nicobar-iſlands.

62. Nerita quadricolor: ſhell ſubviolet, with a yellowiſh tip; within it is white, with elevated black ſtriæ; both lips toothed; the outer one grooved within, inner one wrinkled. It inhabits the Red Sea.

63. Nerita Malaccenſis: ſhell grooved, yellowiſh within; crown a little prominent; outer lip unarmed, and crenulate outwardly; inner lip yellowiſh, ſmooth. This is found on the coaſt of Malacca.

64. Nerita Antillarum: ſhell ſubglobular, black; within it is white, grooved and ſtriate; the crown is obtuſe; both lips are wrinkled and denticulate. This is a very common ſhell in the Antilles.

65. Nerita flammea: ſhell ſubglobular, with crowded tranſverſe ſtriæ, white, with purpliſh undulate rays; both lips toothed. There are two other varieties: the one ſhaded with red, the rays inclining to black; the other with bands partly livid, partly dotted with red. They are found in the American iſlands.

66. Nerita fulgurans: ſhell ſubglobular, with crowded tranſverſe ſtriæ, deep black, with ochraceous rays; both lips ſlightly denticulate, the inner one tuberculate in the middle. It is found in the American iſlands.

67. Nerita teſſelata: ſhell obtuſe, tranſverſely ſtriate with white and black; lips denticulate. It is found in the ſeveral iſlands ſituated between Africa and America.

68. Nerita bifaſciata: ſhell blackiſh, with two grey bands; the crown white. It inhabits India. It is uncertain to what ſection it belongs.

69. Nerita litterata: ſhell ſubglobular, white, with various characters; the inner lip is crenulate and toothed. A variety of this ſpecies is marked with bands compoſed of parallel lines. It inhabits India.

70. Nerita violacea: ſhell ovate, ſolid, ſmooth; it is of a violet colour, dotted with white; the inner lip is denticulate beneath. A variety is marked with cheſnut ſpots, varied with black.

71. Nerita Senegalenſis: ſhell ovate, obtuſe, ſolid, and of a deep black colour, within it is white, grooved; both lips are toothed. This, as its ſpecific name imports, is found in Senegal; an inch broad, and about half as wide.

72. Nerita promontorii: ſhell black, ovate, pointed; with thirty grooves. This is an African ſhell, twice as broad as it is long, ſometimes varied with white; the crown is compoſed of three whorls; the left lip is wrinkled.

73. Nerita tricolor: ſhell variegated red, black, and whitiſh; the firſt with fifteen elevated ſtriæ; both lips toothed. This is found in Africa.

74. Nerita perverſa: ſhell ſurrounded with belts; ſpire contrary; aperture eight toothed. Hitherto it has been found in a foſſile ſtate only.

75. Nerita turrita: ſhell with alternate white and black bands, within white; crown very much elevated; the outer lip acute. This inhabits the Antille-iſlands, in freſh-waters.

76. Nerita aculeata: ſhell blackiſh, tranſverſely ſtriate; the ſtriæ are ſpinous; the inner lip is flattiſh, ſmooth, and ſlightly toothed. It inhabits the rivers of India; and reſembles the N. pulligera.

NER'ITOS, a mountain in the iſland of Ithaca; as alſo a ſmall iſland in the Ionian Sea, according to Mela. The word Neritos is often applied to the whole iſland of Ithaca, and Ulyſſes, the king of it, is called *Neritius dux*, and his ſhip *Neritia navis*. The people of Saguntum, as deſcended from a Neritian colony, are called *Neritia proles*.

NERI'TUM, in ancient geography, a town of Calabria; now called NARDO; which ſee, p. 581.

NE'RIUM, *ſ.* [derivation uncertain.] OLEANDER, or ROSE-BAY; in botany, a genus of the claſs pentandria, order monogynia, natural order of contortæ, (apocineæ, *Juſſ.*) Generic characters—Calyx: perianthium five-parted, acute, very ſmall, permanent. Corolla: one-petalled, funnel-form; tube cylindric, ſhorter than the border; border very large, five-parted; ſegments wide, blunt, oblique. Nectary, a crown terminating the tube, ſhort, lacerated into capillary ſegments. See BOTANY Plate VIII. fig. 26. Stamina: filaments five, awl-ſhaped, very ſhort, in the tube of the corolla; antheræ ſagittate, converging, terminated by a long thread. Piſtillum: germen roundiſh, bifid; ſtyle cylindric, the length of the tube; ſtigma truncate, ſitting on an orblet, faſtened to the antheræ. Pericarpium: follicles, two, round, long, acuminate, erect, one-valved, opening longitudinally. Seeds: numerous, oblong, crowned with down, placed imbricately.—*Eſſential Character.* Corolla with the tube terminated by a lacerated crown; follicles two, erect.

1. Nerium oleander, common roſe-bay, or oleander: leaves linear-lanceolate, in threes; tranſverſely nerved underneath; calycine, leaflets ſquarroſe; nectaries flat, three-cuſped. This riſes with ſeveral ſtalks to the height of eight or ten feet. The branches come out by threes round the principal ſtalks, and have a ſmooth bark, which in that with red flowers is of a purpliſh colour, but in that with white flowers is of a light green. The leaves, for the moſt part, ſtand by threes round the ſtalks, upon very ſhort footſtalks, and point upwards; they are three or four inches long, and three quarters of an inch broad in the middle, of a dark green, very ſtiff, and end in acute points. See BOTANY Plate VII. fig. 22. vol. iii. The flowers come out at the end of the branches in large looſe bunches, and are of a bright purple or crimſon colour, or of a dirty-white. The ſeed-veſſels are brown follicles, about four inches long. It flowers in July and Auguſt; and in warm ſeaſons the flowers are ſucceeded by pods, but the ſeeds ſeldom ripen well in England. In warm dry ſummers this plant makes a fine appearance; the flowers then opening in great plenty; but in cold moiſt ſeaſons the flowers often decay without expanding, unleſs the plants are placed in a green-houſe, or under a glaſs-caſe. That with white flowers is the moſt tender. Other varieties are the ſtripe-leaved; the broad-leaved double-flowered, the ſtriped double-flowered, and different ſhades of red, from purple to crimſon or ſcarlet. Juſſieu remarks, that Nerium oleander is not milky. It is a native of the Levant, Spain, Portugal, Italy, by the ſides of ſtreams, and near the ſea-coaſt. It abounds every-where in the iſland of Candia, or Crete, by rivers and torrents; and there the variety β, with white flowers, is chiefly found; in the mountains and plains about Antioch or Scanderoon, it is found abundantly; in Sicily, by all the torrents deſcending from Mount Etna; in many parts of Italy, as between Nice and Genoa, near Monte Baldo, &c. but particularly in all the low grounds of Magna Græcia, in the kingdom of Naples. Belon ſays, that in Crete and on Mount Athos the Rhododendron, which is this ſhrub, grows to a great ſize, inſomuch that in Crete it is ſometimes uſed for building-timber. It has the name Rhododendron, from the ſimilitude of its flowers in ſize and colour to a roſe: Rhododaphne for the ſame reaſon; and becauſe, as Gerard expreſſes it, "it makes a gallant ſhow, like the bay-tree." Hence alſo our Engliſh name *roſe-bay*; but it is now more commonly known by its officinal name *oleander*; which is alſo adopted into all the European languages, except the French, in which it is *lauroſe*, or *laurier-roſe*, that is, bay-roſe, or roſe-bay. The Italians have adopted *nerio* and *roſalauro*, as well as *oleandro*. It was cultivated by Gerard in 1596. The leaves of the oleander are acrid and poiſonous, therefore certainly not proper to be uſed internally without great caution. Oil, in which the leaves are infuſed, is recommended in the itch and other cutaneous diſorders, in preference to mercurial preparations, for children and delicate conſtitutions.

2. Nerium odorum, ſweet-ſcented roſe-bay, or oleander: leaves linear-lanceolate, in threes; calycine leaflets erect; nectaries many-parted; ſegments filiform. This riſes with ſhrubby ſtalks, ſix or ſeven feet high, covered with a brown bark. Leaves ſtiff, from three to four inches long, and not more than a quarter of an inch broad, of a light green, and the edges reflexed; they are oppoſite, or alternate, or by threes round the branches. The flowers are produced in looſe bunches at the end of the branches; they are of a pale red, and have an agreeable muſky ſcent. It grows naturally in India.

This has been confounded with the firſt ſpecies. It was cultivated in 1758, by Mr. Miller, and flowers from June to Auguſt. Probably the N. oleander of Thunberg and Loureiro is this ſpecies. The latter, however, aſſerts that his plant has ſcarcely any ſmell.

β. N. latifolium: leaves ſix inches long, and one inch broad in the middle, of a much thinner texture than thoſe of the firſt, and their ends are generally reflexed; they are of a light green, and irregularly placed on the branches by pairs, alternately, or by threes. The flowers are produced in very large bunches at the end of the branches, upon long peduncles; they have three or four rows of petals one within another. They are much larger than thoſe of the common ſort, and ſmell like thoſe of hawthorn. The plain flowers are of a ſoft red, or peach-colour; but in moſt they are beautifully variegated with a deeper red, and make a fine appearance. The uſual time of flowering is in July and Auguſt; but in a warm ſtove it will continue in flower till Michaelmas. The flowers being double, they are not ſucceeded by ſeeds. Both theſe are ſuppoſed to have a poiſonous quality; the young branches, when cut or broken, have a milky juice or ſap, and the larger branches, when burnt, emit a very diſagreeable odour. Mr. Miller ſays it grows naturally in both Indies, that it was firſt introduced into the Britiſh iſlands in America from the Spaniſh Main, and that it is called by the inhabitants of thoſe iſlands "South-Sea roſe." The beauty and ſweetneſs of the flowers engaged the inhabitants to cultivate the plants, and in many places to form hedges of them; but many of the cattle that browzed on them were killed, ſo that they are now only preſerved in gardens, where they make a fine appearance great part of the year.

N. odorum was cultivated by Mr. Miller in 1758. He ſays that the double Indian roſe-bay was not known here till the beginning of the laſt century. Dr. Patrick Browne ſays that the South-Sea roſe is cultivated in moſt gardens in Jamaica; that it generally bears large long double flowers, but that he has ſometimes found them ſimple and fertile, with all the characters of the genus.

3. Nerium ſalicinum, willow-leaved roſe-bay, or oleander: leaves linear-lanceolate, in threes, nerveleſs. This is allied to N. oleander, but differs in having the leaves blunt, ſomewhat veined underneath, but not with very abundant tranſverſe nerves.

4. Nerium obeſum, or bulbous oleander: leaves oblong-lanceolate, ſcattered, villoſe underneath. Trunk ſoft, reſembling a bulb under ground, the ſize of a man's head. Branches the thickneſs of the little finger, the ſame ſubſtance with the trunk, attenuated above; when flowering, woody and warted. Leaves at the ends of the branches approximating, ſubpetioled, often three inches long, mucronate, veinleſs; the younger ones ſoft on both ſides. Although the leaves are ſcattered, which is ſeldom the caſe in the contortæ, yet the form of the antheræ, and their coheſion with the ſtigma, prove it to be of this genus. By the corolla and naked throat it approaches to Echites, but the glands at the baſe of the germen are wanting; and, ſince the antheræ are tailed, it ſeems better to retain this plant among the Neriums, till we become acquainted with the fruit.

5. Nerium Zeylanicum, or Ceylon oleander: leaves lanceolate, oppoſite; branches ſtraight. Stems round, very dark purple, ſmooth, erect, ſwelling at the joints. Leaves oblong, acuminate, reſembling thoſe of myrtle, green on both ſides. Flowers at the ends of the branches. Native of the Eaſt Indies.

6. Nerium divaricatum, or divaricated oleander: leaves lanceolate-ovate; branches divaricating. This, according to Loureiro, is a middle-ſized tree; leaves waved, ſhining; flowers reddiſh yellow, with a reflex border. Native of the Eaſt Indies, Japan, and Cochin China.

7. Nerium antidyſentericum, or oval-leaved roſe-bay: leaves oblong-ovate; panicles terminating. This alſo is a middle-ſized tree, with brachiate branches. Leaves oppoſite, flat, quite entire, ſmooth. Flowers herbaceous or greeniſh white, in ſhort ſubterminating racemes. Segments of the crown oblong, alternately trifid and linear. The wood of this and the preceding ſpecies is proper for the turner, and to make cabinets and other elegant furniture. It is very white and of a fine grain, like ivory, only much lighter. It mixes admirably with ebony. It is reputed to be a ſpecific in the dyſentery. Native of the Eaſt Indies, Cochin China, and ſome parts of the Ruſſian empire. Introduced in 1778, by Patrick Ruſſell, M.D.

β. N. tinctorium is a middle-ſized tree, from the quality of its leaves called Nerium tinctorium, or dyer's roſe-bay, by Dr. Roxburgh. It comes neareſt N. antidyſentericum, the tree which yields the coneſſi-bark of our materia medica; codago pala of the Hortus Malabaricus, pala cadija of the Hindoos. They are both natives of the lower region of thoſe mountains which bound the Rajahmundry-circar on the north ſide, and are ſo much alike in moſt reſpects, the nectary excepted, that, without a perfect knowledge of both, the one may be miſtaken for the other; and it is probable that the bark of this new Nerium might have been gathered and ſold for coneſſi-bark; which with the Hindoos is eſteemed a ſpecific in moſt complaints of the bowels, and perhaps deſerves a better name than it has hitherto acquired in Europe.

This tree, the *thſil-ankaloo* of the Telingas, contains a mild milky juice, chiefly in the tender branches and young leaves, which flows out on being wounded. Nerium antidyſentericum contains a ſimilar juice. The trunk is very irregular in ſhape; when very old, it is from one and a half to two feet in diameter, but, when of that ſize, it is full of large rotten cavities; its height to the branches, when large, is from ten to fifteen feet; the bark of the old wood is ſcabrous, of the young pretty ſmooth and aſh-coloured. Wood remarkably white, cloſe-grained, very beautiful, coming near to ivory in appearance. Branches irregularly diſpoſed, being bent in various forms; branchlets oppoſite. Leaves numerous, oppoſite, on ſhort footſtalks, oval, pointed, pretty ſmooth, entire, pale green, when full grown from five to eight inches long, and from three to four broad. Flowers about an inch and a half in diameter when expanded, perfectly white, fragrant, and diſpoſed on lax globular panicles, at the extremity of the branches. The natives make ſcarcely any uſe of this tree, except for fire-wood; and the more it is cut down the more it increaſes, many ſhoots iſſuing from the old ſtumps. Theſe, in one year, acquire the height of eight or ten feet, and are thick in proportion; it caſts its leaves during the cold ſeaſon, (perhaps it may not do ſo in a ſtate of cultivation.) About the beginning of the hot ſeaſon, March and April, the young leaves begin to make their appearance, together with the flowers, by the end of May; thoſe that firſt began to be unfolded will have attained to their full ſize; about this time alſo it ceaſes flowering, and the ſeed-veſſels are fully formed, but the ſeeds are not ripe till January or February.

The colour the leaves ſometimes acquired in drying, firſt induced Dr. Roxburgh to think they were poſſeſſed of colouring matter; and the reſult of ſome experiments fully anſwered his expectations. The difficulty attending this operation reſults from the peculiar quality of the leaves of the plant; which, unlike the common indigo, will not communicate their colour to cold water; but in warm water they readily yield their colouring matter; and Dr. R. has given ample directions for conſtructing the vats, ciſtern, &c. that are requiſite in this operation, as well as a view of the Nerium Indigo-Works in Hindooſtan. The following paſſages may be ſufficient to afford a general idea of the proceſs: "The leaves of the Nerium tree, in theſe parts of India, begin to be fit for making indigo in the month of April; and, in May and June, I have found them to yield a better colour than in any other month. About the end of Auguſt the growth of the plant begins to draw to a cloſe for the ſeaſon; the leaves, acquiring a yellowiſh ruſty colour, ſoon fall off, without being ſucceeded by others, or in a trifling degree, till next ſeaſon; ſo that here, with the plants in a wild ſtate (which is the ſtate I always allude to in theſe obſervations), I can only reckon the length of the ſeaſon for making the indigo at four, or at moſt five, months in the year. The leaves, being collected, for inſtance, on the preceding day, are put into the coppers, or other veſſels, in ſufficient quantity, i. e. full, but not preſſed down; and then the veſſels are filled

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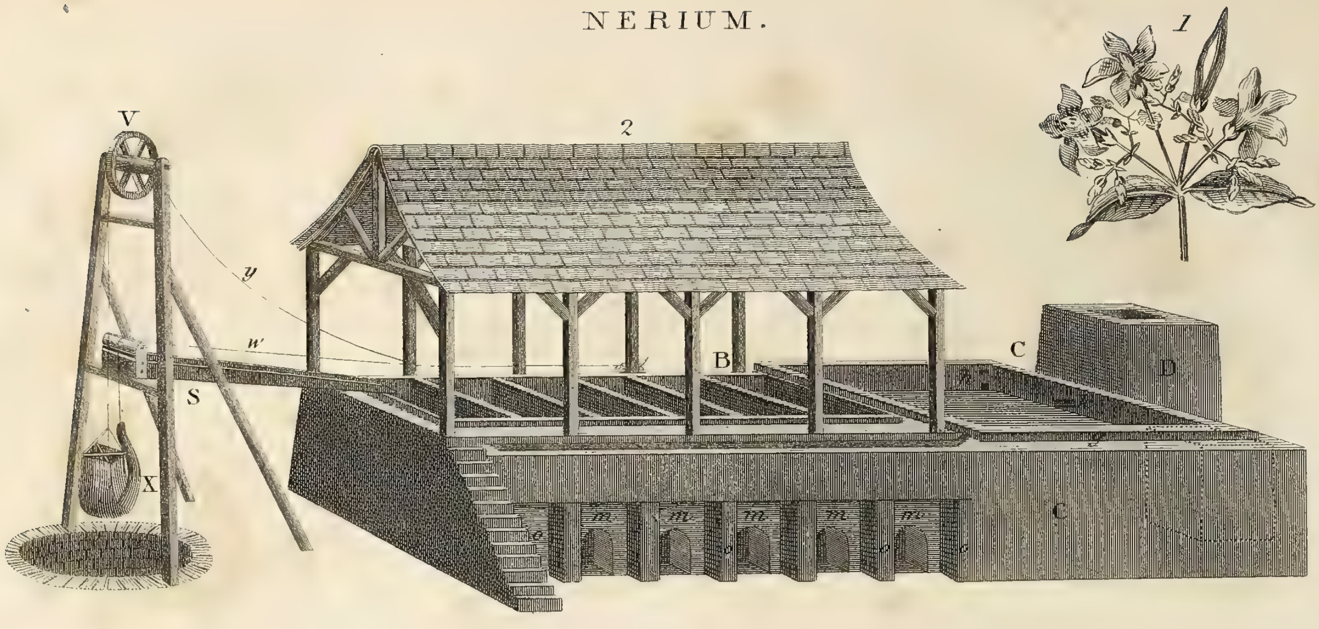

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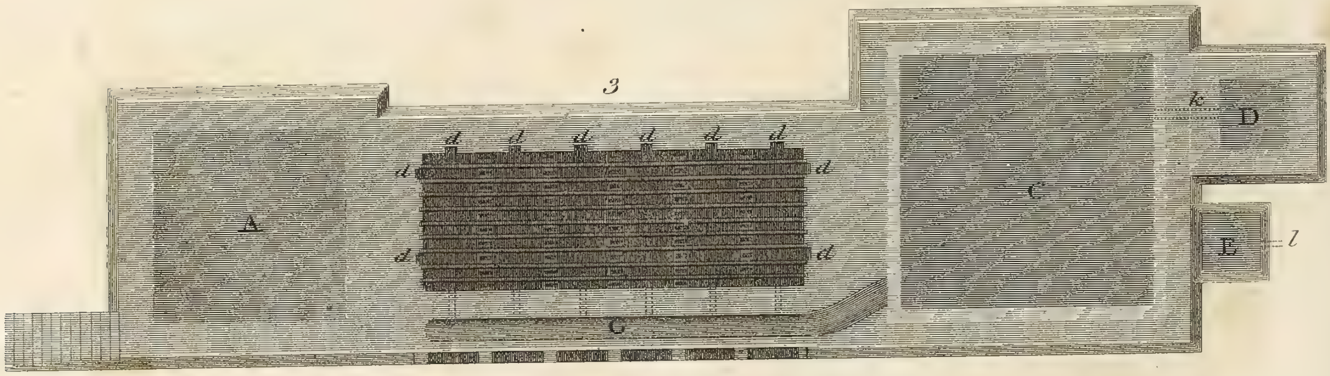

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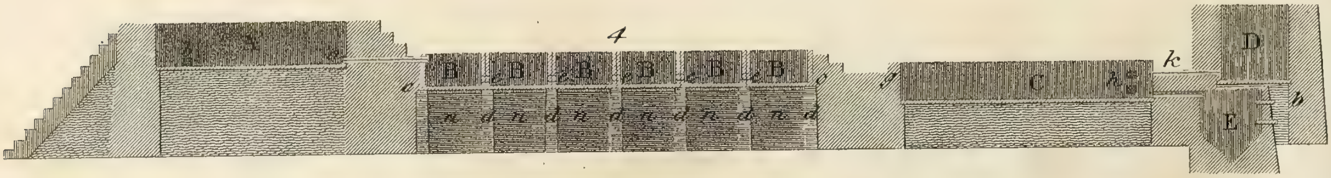

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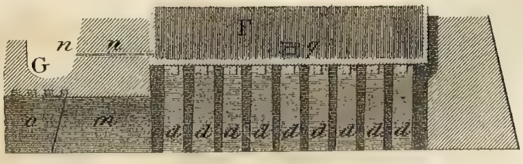

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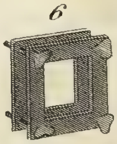

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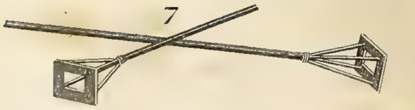

Dyer's Rose-bay and the Machinery for extracting Indigo from it.

Engraved for the Encyclopædia Londinensis 18[illegible]

filled with cold water, to within two or three inches of the top; and ſo much muſt be left, becauſe here the bulk enlarges by the heat, fully as much as the common indigo-vat does by fermentation. The fire is then lighted, which muſt be maintained rather briſkly till the liquor acquires a deep green colour when viewed in the veſſel; but, if taken up, and poured from one veſſel into another, it will appear of a pale but bright greeniſh colour: the leaves will then begin to aſſume a yellowiſh colour, and the heat of the liquor will be of about 150 or 160 degrees of Fahrenheit's ſcale. Little dependence can be placed on the copper or violet ſcum, as the leaves muſt be conſtantly agitated, and turned upſide down, to produce, as nearly as poſſible, an equal degree of ſcalding: if not, thoſe at the bottom would be much overdone before thoſe at the ſurface were ready. The motion anſwers another purpoſe, it ſerves to expel the fixed air, which greatly forwards the operation. The fires muſt be withdrawn, or ſuffered to die away, ſome little time before the liquor has acquired the above-mentioned appearance; and it is neceſſary to have all the different veſſels, that are to be let into the ſame agitation-vat, ready at the ſame time: a little practice will ſoon render this eaſy of performance. When they are ready, the whole is drawn off at once. A contrivance muſt be made to let the liquor paſs through a hair-cloth, (a coarſe *comly*, ſuch as the poorer claſſes of the natives wear in cold weather, anſwers remarkably well,) to prevent any of the leaves, &c. getting into the agitation-vat with it. As ſoon as the whole is run off, it muſt be, while hot, agitated in the common way for a few minutes; from five to twenty will generally be found ſufficient to produce the neceſſary degree of granulation. About from one-ſeventieth to one-hundredth part of ſtrong pure lime-water is then let in (the liquor being ſtill hot) from the lime-water ciſtern, which requires only to be ſufficiently mixed with the liquor, to produce, quickly, a very large grain, which ſoon precipitates. The ſupernatant liquor is then let off, and the reſt of the proceſs is exactly as in making the common fermented indigo. If the proceſs has been properly conducted, the ſupernatant liquor will run off of a clear Madeira-wine colour, which is a ſign that it retains none of the indigo; and the produce of indigo, when dry, will average about one pound from every two hundred and fifty pounds of the green leaves; but varies according to the ſeaſon and ſtate of the weather when gathered."

The quick and luxuriant growth of this tree, in its native ſoil, will be a great inducement to thoſe who wiſh to cultivate it, which can require little or no trouble; and the ſoil that it is always found wild in is the barren dry rocky hills, and lower region of mountains, which is totally unfit for every ſort of agriculture. The lower parts of the ſteep rocky mountains of St. Helena ſeem to be the very ſoil and ſituation it delights in; its ſize and quick growth will render it valuable there, if it be only for fire-wood; with that view Dr. Roxburgh ſent a pretty large quantity of ſeeds to the Planter's Society on that iſland.

It may be ſaid that we are already in poſſeſſion of a ſufficient number of good blues, conſequently that it is unneceſſary to attend to this new indigo. To obviate this objection, it may be obſerved, that the common indigo-plant is only to be brought to perfection by nice, expenſive, and labouring, culture; is liable to many accidents, from changes of weather, and other cauſes that no human foreſight can prevent: theſe are well-known facts to every one that cultivates indigo to any extent. This tree is not ſubject to theſe inconveniences; beſides, it requires not the ſmalleſt care, is found in the greateſt abundance, growing wild in the moſt barren tracts that can poſſibly be imagined, and requires only to be cut down once every year, to make it produce a large ſupply of young ſhoots, with very luxuriant leaves, the following ſeaſon; beſides, the colour that this indigo may give to cloth, &c. may be different from any other hitherto known; conſequently, may prove of conſiderable benefit to a commercial nation like Great Britain.

In the annexed Engraving, fig. 1. repreſents a ſmall branch of the nerium-plant in flower. Fig. 2. is a view of the nerium indigo-works, as practiſed at Hindooſtan; of which the following figures afford an analyſis and explanation.

Fig. 3. is the plan, taken at the grate, or iron bars which ſupport the coppers over the fire. The letters are the ſame as are explained under fig. 5.

Fig. 4. a longitudinal ſection expoſes to view the ſtructure of the works. A, a ciſtern for holding water in readineſs to fill the coppers. It is fifteen feet ſquare, and three deep. *a*, the channel for conducting the water from the ciſtern into the coppers, which is about two inches above the bottom, that any impurities may ſettle at the bottom; *b*, a channel for the impurities to be drawn off at, and for the ciſtern to be cleaned. To raiſe the water to fill this ciſtern, is an object of much conſequence: in ſeveral places amongſt the hills, where the Nerium grows, there are little rills of water, running upon ſuch a deſcent, as to render it only neceſſary to conſtruct the works on ſome low adjacent ſpot, that the water may be conducted, with little trouble, into the ciſtern. When no ſuch ſupply of water can be had, *pecotahs*, or a chain-pump made of four boards, (as deſcribed and figured in the Encyclopædia Britannica, article PUMP,) may be uſed; or, if the water is very low, it may be done with the funnel-like leather bucket, which is wrought by a pair of buffaloes, or bullocks, backing to lower the bucket, &c. To the mouth of the tube or pipe of this leather funnel-bucket, ſee X, fig. 2. is faſtened a cord *a*, which leads over a roller at leaſt the length of the body of the bucket below the wheel V, over which the rope *y* that raiſes it paſſes; and immediately above the trough S, by which the water is conducted to the ciſtern. The cord *w*, is of a length ſufficient to keep the mouth of the pipe rather above the ſquare mouth of the bucket, until it reaches the roller, which it paſſes over, leading it into the trough, while the bucket continues to aſcend, till its bottom is about the level with the trough; by which time the whole of the water will have made its eſcape within the trough. This method of raiſing a large quantity of water from a great depth, is in common uſe over many parts of Hindooſtan, where the wells are too deep for the *pecotah*, or lever. It is of great advantage to have the water in readineſs in this manner; for it not only forwards the work much, but alſo gives time for any impurities to ſettle at the bottom. In the perſpective view, the ciſtern A is omitted, to ſhow the other parts of the works on a larger ſcale. B, B, B, B, B, B, are the coppers, or ſcalding-veſſels. Here they are cut tranſverſely, reſting on the grate *c*, which is ſupported by the walls, and by the pillars *dddddd*; they are made to communicate with each other at the openings *eeeeee*; *f* ſhows the top of the walls which ſurround the veſſels; it is two or three inches lower than the edges of the coppers, to prevent duſt, &c. getting in, and ſufficiently broad for the workmen to walk about on, to attend the work; *n, n, n, n, n, n*, the fire-places. C, the agitation-vat, or beater, twenty feet ſquare, and three deep; one foot of which, *g*, may be called the border, being thinner, and prevents duſt and dirt getting in from the feet of the workmen, while walking about to agitate the liquor, &c. *h*, two ſcuppers for letting off the clear ſupernatant liquor from the fecula; *i*, another to draw off the fecula by. D, the lime-water ciſtern, which may be made with a border and lid to exclude the air, or arched, having an opening to put the lime and water in at, and for a boy to go in to clean it. The cloſer this can be ſhut, the better will the lime-water be; *k*, the ſcupper for letting the lime-water into the agitation-vat. E, the ſmall fecula-ciſtern for the fecula to further ſettle in; *l*, ſcuppers to let off the ſupernatant liquor, and over them the bags are hung till the liquor drops clear from them. Note, in this ſection the fecula and lime-water ciſterns ſeem one over the other, but by the plan, fig. 2, their real places are ſeen.

Fig. 5. a tranſverſe ſection, upon a larger ſcale than the former. It is through the middle of one of the coppers

F; and through the middle of one of the arched openings, *m m m m m*, fig. 2. which ſerves to feed the fire. This ſhows the channel G for carrying the ſcalded liquor from the boilers to the agitation-vat C, figs. 3 and 4. It is ſupported by four beams of wood extended between the abutments *n*; one of the ſcuppers, by which the liquor runs from the coppers to the channel G; *dddddd* are the pillars which ſupport the grate, or ſquare bars of iron; *q*, the opening which communicates with the next copper. To prevent any leakage at theſe communications, and to be able to ſeparate the veſſels, holes (fig. 6.) are made in the ſides of the two contiguous coppers correſponding with the four ſcrews. A thick ſquare piece of welted hide, with a ſquare hole correſponding with the holes in the ſides of the veſſels, is ſlipped in between them; and the two plates of iron are then placed one in each copper, and ſcrewed very tight together. Fig. 7 repreſents two of the beaters, each being a ſquare-headed churn-ſtaff, which anſwers exceedingly well to turn the leaves while ſcalding, and afterwards to agitate the liquor with.

Dr. Roxburgh obſerves, in concluſion, that, if workmen, for joining the ſheathing-copper, can be had, where the works are to be erected, it would be a great ſaving of copper, and otherwiſe more convenient, to have only one veſſel; the length may be made as much as may be neceſſary for the quantity of leaves that may grow in the vicinity of the place. If conſtructed in this manner, there will be no need of the channel G in front of the veſſels, one large ſcupper from the end of the veſſel next the agitation-vat is all that can be neceſſary. The other parts may remain as above mentioned. "I am now (ſays he) joining my fore-deſcribed ſix veſſels into one, by cutting out the diviſions, and joining them upon the grate; with the copper ſo got from the ſides cut out, I lengthen the now ſingle veſſel to be more than forty feet; which will require two additional fire-places, as I conceive a fire for every five feet in length little enough, when the veſſel is ten feet broad; which is a ſurface of fifty ſquare feet for each fire to act on."

8. Nerium coronarium, or broad-leaved roſe-bay: leaves elliptic; peduncles in pairs, from the forks of the branches, two-flowered. This is an elegant branched ſhrub, four feet high, milky, with an aſh-coloured bark. The younger branches are ſhining, green, compreſſed a little, oppoſite at the end. Leaves long, lanceolate, acute, quite entire, ſhining, on ſhort petioles, oppoſite. Flowers handſome, but without ſcent; perianthium green; tube of the corolla greeniſh yellow; border ſnow-white. It approaches to Gardenia, but ſeems rather to belong to this genus. Native of the Eaſt Indies. Cultivated in 1770 by Mr. James Gordon. It flowers moſt part of the ſummer.

9. Nerium ſcandens, or climbing roſe-bay: ſtem climbing; peduncles terminating, many-flowered; ſegments of the corolla very long. This is a large ſhrub with ſcandent branches. Flowers large, with a white tube and a very red border; tube of the corolla cylindric at bottom, pitcher-ſhaped at top; ſegments of the border, ſubulate-linear, very long, repand. Although the very long ſegments of the corolla cauſe this to be allied to Echites caudata, yet the throat having a nectary, whereas in Echites it is naked, and the contortæ being beſt diſtinguiſhed by their nectaries, it ranges moſt properly under this genus. The follicles being horizontal is no obſtacle, when other circumſtances agree. Native of Cochin China.

Propagation and Culture. Theſe plants are generally propagated by layers in this country; for, although they will ſometimes take root from cuttings, yet that being an uncertain method, the other is generally purſued; and, as the plants are very apt to produce ſuckers, or ſhoots from their roots, thoſe are beſt adapted for laying, for the old branches will not put out roots. When theſe are laid down, they ſhould be ſlit at a joint, in the ſame manner as is practiſed in laying carnations, which will greatly facilitate their taking root. If theſe branches are laid down in autumn, and are properly ſupplied with water, they will have taken root by that time twelvemonths, when they ſhould be carefully raiſed up with a trowel; and, if they have taken good root, they ſhould be cut off from the old plant, and each planted in a ſeparate ſmall pot, filled with ſoft loamy earth. Thoſe of the common ſort will require no other care, but to be placed in a ſhady ſituation, and gently watered as the ſeaſon may require, till they have taken new root; but the two other ſpecies ſhould be plunged into a very moderate hot-bed, to forward their taking root, obſerving to ſhade them from the ſun in the heat of the day. After the common ſort has taken new root, the plants may be placed in a ſheltered ſituation with other hardy exotics, where they may remain till the end of October, when they ſhould either be removed into the green-houſe, or placed under a hot-bed frame, where they may be protected from froſt in winter, but enjoy the free air at all times when the weather is mild. This ſort is ſo hardy as to live abroad in mild winters, if planted in a warm ſituation; but, as it is liable to be deſtroyed in ſevere froſt, the beſt way is to keep the plants in pots, or if they are very large in tubs; that they be ſheltered in winter, and in the ſummer removed abroad, placing them in a warm ſheltered ſituation. In the winter they may be placed with myrtles, and other of the hardier kinds of exotic plants, in a place where they may have as much free air as poſſible in mild weather, but ſcreened from ſevere froſt; for, if kept too warm in winter, they will not flower ſtrong, and, when the air is excluded from them, the ends of their ſhoots will become mouldy; ſo that the hardier they are treated, provided they are not expoſed to hard froſts, the better they will thrive.

The other two ſorts require a different treatment, otherwiſe they will not make any appearance; therefore the young plants, when they have taken new root, ſhould be gradually inured to bear the open air, into which they ſhould be removed in July, where they may remain till October, provided the weather continues mild; but during this time they ſhould be placed in a ſheltered ſituation, and upon the firſt approach of froſt they ſhould be removed into ſhelter; for, if their leaves are injured by froſt, they will change to a pale yellow, and will not recover their uſual colour till the following autumn. Theſe ſorts may be preſerved in a good green-houſe through the winter, and the plants will be ſtronger than thoſe which are more tenderly treated; but in May, when the flower-buds begin to appear, the plants ſhould be placed in an open glaſs-caſe, where they may be defended from the inclemency of the weather; but, when it is warm weather, the air ſhould at all times be admitted to them in plenty. With this management the flowers will expand, and continue long in beauty; and, while in flower, there are few plants which are equal to them, either to the eye or noſe, for their ſcent is very like that of the flowers of the white-thorn; and the bunches of flowers will be very large, if the plants are ſtrong. See ECHITES, PLUMERIA, and RHODODENDRON.

NER'LI (Filippo) an Italian hiſtorian, born in 1485, was a ſenator of Florence. One of his name, probably the ſame perſon, was governor of Modena for the church in 1326; and, attempting to return to Florence in 1527 with Guicciardini, was excluded from that city. He died in 1556. His work, entitled "Commentari de' Fatti civili occorſi nelle Città di Firenze del 1215 fino al 1537," remained in manuſcript till it was publiſhed in Florence with the date of Auguſta, in 1728. It is ſaid that Nerli has inſerted ſeveral miſrepreſentations in his hiſtory, a natural conſequence of the part he perſonally took in the tranſactions of his time. *Gen. Biog.*

NE'RO (Lucius Domitius), Roman emperor, who has left a name abhorred by all poſterity, was the ſon of Cneius Domitius Ahenobarbus, and Agrippina the daughter of Germanicus. He was born A.D. 37. Both his parents were notorious for their vices; and the father was ſo conſcious of his own and his wife's deteſtable diſpoſitions, that he affirmed, at his ſon's birth, that nothing could ſpring from himſelf and Agrippina but ſome monſter, born for the public calamity. That this prophecy was fulfilled, we ſhall have abundant occaſion to ſhow under the article ROME.

The NEROS were of the Claudian family, which, during the republican times of Rome, was honoured with twenty-eight conſulſhips, five dictatorſhips, ſix triumphs, ſeven cenſorſhips, and two ovations. They aſſumed the ſurname of Nero, which, in the language of the Sabines, ſignifies "ſtrong and warlike."

NER'OLY, *ſ.* A kind of odoriferous eſſence, drawn from the orange-flower. *Aſh.*

NE'RON, or NERON'DE, a town of France, in the department of the Rhône and Loire: twenty-four miles weſt of Lyons, and fifteen north-north-eaſt of Montbriſon. Lat. 45. 50. N. lon. 4. 19. E.

NERON'DOS, a town of France, in the department of the Cher: ſeventeen miles eaſt-ſouth-eaſt of Bourges, and ten north of Sancoins.

NERO'NIA, a name given to Artaxata by Tiridates, who had been reſtored to his kingdom by Nero, whoſe favours he acknowledged, by calling the capital of his dominions after the name of his benefactor.

NER'PIS, a town of Sweden, in Eaſt Bothnia: ten miles north of Chriſtianſtadt.

NER'STEIN, a town of France, in the department of Mont Tonnerre: one mile north of Oppenheim.

NER'STIN, a town of the duchy of Courland: eighteen miles ſouth-ſouth-weſt of Seelburg.

NERT'CHA, a river of Ruſſia, which runs into the Amoor near Nertchinſk.

NERTCHIN'SK, a town of Ruſſia, in the government of Irkutſk, on the Nertcha, near its union with the Amoor, built in the year 1658, on the borders of China. On the fort, which was the firſt beginning of the town, are thirty-two braſs guns, and one of iron. The town, beſides ſome public edifices, contains about a hundred and fifty houſes, moſt of which are very meanly built. The Chineſe caravans formerly paſſed through this place, but now they take another road. However, the Ruſſian envoys are received, and handſomely entertained by the Chineſe; and the like compliment is paid to thoſe of China, by the Ruſſians, in this town. A treaty of peace was concluded at Nertchinſk, between Ruſſia and China, in the year 1689. This town ſeems to derive its name from the two ſmall rivers, called *Nertcha* and *Shinke*, between which it lies. The adjacent country is indeed very mountainous, but yields excellent paſture for cattle. Lat. 51. 12. N. lon. 116. 44. E.

NERTCHIN'SKOI MOU'NTAINS, otherwiſe called the Mountains of Daouria, mountains of Ruſſia, which extend from the Baikal and the ſources of the Selenga and the Amoor, down the two ſides of theſe rivers; on the one ſide as far as where the Argoon falls into the Amoor, and on the other ſide up to the heads of the Niuſa and the Oldekon, where it annexes itſelf to the ſpurious range of Okhotz, or Krebet Stanovi. It conſequently includes the whole ſpace between the Selenga and the Argoon, takes the ſame direction with the courſe of the Amoor and the Ingoda from weſt to north-eaſt, and runs down to us from the Mongoley under the name of *Yablonoi Krebet*, or Apple Mountain. It has its greateſt elevations about the origin of the Amoor and the Ingoda, where it conſiſts of very rugged granite tops, high and ſteep. Between the courſe of the Ingoda and the ſources of the Khilok and Vitim it is much ſmaller, notwithſtanding which it ſeems to ſtand very high. It here forms a ridge, partly uniform in its progreſs, woody, and well-watered, and conſiſts for the moſt part of pure crumbled granite.

The part of this range incloſed by the Amoor and Argoon is properly called the Nertchinſkoi chain of ore-mountains, and is found to be the richeſt in minerals of any of the mountains hitherto explored in theſe regions. It produces beautiful kinds of granite, porphyry, jaſper, a great quantity of chalcedonies, carnelians, onyx, agate, hornſtone, large ſmoky topazes, aqua-marine, hyacinth, and topaz-coloured ſchorl, genuine topaz and beryl; granites, fine feldſpar, glandules, ſerpentine, aſbeſtus, nephrites, chalk-ſtone, ſlate, gypſum, excellent river ſpar; ſalt-lakes, vitriol-pyrites, alum-ore, native ſulphur, coals, warm ſprings; zinc, iron, and a remarkable quantity of lead-ore, containing ſilver and gold, of which, ſince the commencement of the laſt century, a great many mines have been opened, and of which ſeveral are ſtill in full work. Theſe regions alſo preſent numerous foreſts. The trees are Pinus ſylveſtris, larch, birch, firs, cedars, &c. The principal rivers here are the Selenga, the Khilok, the Vitim, the Olekma, the Karenga, the Niuſa, the Olekon, the Onon, the Indoga, the Amoor, the Argoon, &c. &c. *Tooke's View of the Ruſſ. Emp.*

NERTE'RIA, *ſ.* [from νερτερος, Gr. inferior, or lowly; in alluſion to the humble and proſtrate growth of the plant.] In botany, a genus of the claſs tetrandria, order digynia. Generic characters—Calyx: a ſuperior, very ſmall, undivided rim. Corolla: one-petalled, funnel-form, ſuperior; tube ſhort, enlarging gradually; border four-cleft, with ſharp ſegments bent back and ſhorter than the tube. Stamina: filaments four, equal, inſerted into the baſe of the corolla, filiform; antheræ oblong, two-lobed, erect. Piſtillum: germen inferior, oval, ſomewhat compreſſed, even; ſtyles two, filiform, ſlightly connate at the baſe, ſmooth; ſtigmas acute, reflex, divaricating. Pericarpium: berry globular, umbilicate at top, with a very ſmall round ſcar, two-celled. Seeds: ſolitary, roundiſh, acuminate at the baſe, flat on one ſide, convex on the other.—*Eſſential Character.* Corolla funnel-form, four-cleft, ſuperior; berry two-celled; ſeeds ſolitary.

Nerteria depreſſa, a ſingle ſpecies. Root fibrous, annual. Stems herbaceous, procumbent, rooting at the joints, branched, leafy, filiform, ſomewhat angular, ſmooth. Branchlets axillary, oppoſite, erect, one-flowered, ſhort. Leaves oppoſite, petioled, orbiculate-cordate, bluntiſh, quite entire, even; ſtem-leaves ſpreading, branch-leaves erect-appreſſed. Flowers ſolitary at the ends of the branchlets, ſeſſile, pale. Bractes two, oppoſite, acute, very ſmall; berry ſucculent, very ſmooth, red, the ſize of a pea. Found by Mutis very frequently in wet marſhy places of New Granada. It is alſo a native of New Zealand. See MANETTIA.

NER'VAL, *adj.* In anatomy, belonging to the bones of the hinder part of the head. *Aſh.*

NERVA'TION, *ſ.* [from *nerve.*] The act of joining firmly together, as by nerves and ſinews. *Bailey.*

NERVE, *ſ.* [*nervus*, Lat. *nerf*, Fr.] The organs of ſenſation paſſing from the brain to all parts of the body.—The *nerves* do ordinarily accompany the arteries through all the body; they have alſo blood-veſſels, as the other parts of the body. Wherever any *nerve* ſends out a branch, or receives one from another, or where two *nerves* join together, there is generally a ganglio or plexus. *Quincy.* See the article ANATOMY, vol. i. p. 527, 31, 95; 633, 7.

What man dare, I dare:
Approach thou like the rugged Ruſſian bear;
Take any ſhape but that, and my firm *nerves*
Shall never tremble. *Shakeſpeare's Macbeth.*

It is uſed by the poets for ſinew or tendon:

Strong Tharyſmed diſcharg'd a ſpeeding blow
Full on his neck, and cut the *nerves* in two. *Pope's Odyſſ.*

Force; ſtrength.—The *nerve* and emphaſis of the verb will lie in the prepoſition. *Abp. Sancroft's Sermons.*

To NERVE, *v. a.* To ſtrengthen.—Tremendous goddeſs, *nerve* this lifted arm! *Aaron Hill.*

NER'VELESS, *adj.* Without ſtrength.—The weſtern eloquence, in its turn, appeared *nerveleſs* and effeminate, frigid or inſipid, to the hardy and inflamed imaginations of the eaſt. *Warburton.*

There ſunk Thalia, *nerveleſs*, faint, and dead,
Had not her ſiſter Satire held her head. *Pope's Dunciad.*

NER'VI, a town of Genoa: five miles eaſt-ſouth-eaſt of Genoa.

NERVIEU'X ET GRENIE'R, a town of France, in the department of the Rhône and Loire: ten miles north of Montbriſon.

NER'VII, a warlike people of Belgic Gaul, who continually upbraided the neighbouring nations for ſubmitting to the power of the Romans. They attacked Julius Cæſar, and were totally defeated. Their country forms the modern province of Hainault.

NER'VINES, *ſ.* Medicines for the nerves.

NER'VIO, a river of Spain, in the province of Biſcay, called by the natives *Ybai-çabal*, which paſſes by Bilboa, and runs into the ſea two miles below that town.

NERU'KA, a port in the iſland of Cape Breton, where the French had a ſettlement.

NER'ULUM, in ancient geography, an inland town of Lucania; now *Lago Negro.*

NERVOS'ITY, *ſ.* Strength; vigour; nervouſneſs. *Bailey.*

NER'VOUS, *adj.* [*nervoſus*, Lat.] Full of nerves.—We may imagine what acerbity of pain muſt be endured by our Lord by the piercing his hands and feet, parts very *nervous*, and exquiſitely ſenſible. *Barrow.*—Well ſtrung; ſtrong; vigorous.—As "fine nervis eſſe" is a phraſe for debility, ſo to be *nervous* is taken to be valid and ſtrong. *Waterhous on Forteſcue*, 1663.

What *nervous* arms he boaſts, how firm his tread,
His limbs how turn'd. *Pope's Odyſſey.*

Relating to the nerves; having the ſeat in the nerves:

The venal torrent, murm'ring from afar,
Whiſper'd no peace to calm this *nervous* war;
And Philomel, the ſiren of the plain,
Sung ſoporifick uniſons in vain. *Harte.*

Having weak or diſeaſed nerves.—Poor, weak, *nervous*, creatures. *Cheyne.*

NER'VOUSLY, *adv.* With ſtrength; with force.—He thus *nervouſly* deſcribes the ſtrength of cuſtom. *Warton's Hiſt. E. P.*

NER'VOUSNESS, *ſ.* Vigour; ſtrength.—If there had been epithets joined with the other ſubſtantives, it would have weakened the *nervouſneſs* of the ſentence. *Dr. Warton's Eſſ. on Pope.*

NER'VY, *adj.* Strong; vigorous. *Not in uſe:*

Death, that dark ſpirit, in his *nervy* arm doth lie,
Which being advanc'd, declines, and then men die. *Shakeſp.*

NES, a river of Denmark, in the iſland of Zealand, which runs into the Baltic four miles ſouth of Neſtved.

NE'SA, a town of Perſia, in the province of Choraſan, on the borders of Charaſm; and ſerving as a frontier-town between the two countries. In the year 1221, it was taken by Gengiz Khan, after a ſiege of about fifteen days. The next day the inhabitants were drawn out into a plain, and ſhot with darts and arrows, like wild beaſts; ſtrangers, natives, and peaſants, without diſtinction, to the amount of 70,000. It is two hundred miles north of Herat, and 220 ſouth-weſt of Samarcand.

NESAC'TUM, in ancient geography, a town of Iſtria, at the mouth of the Arſia; now *Caſtel Nuovo.*

NES'BIT (Thomas), a Scotch antiquary, the ſon of the lord-preſident Neſbit, was born at Edinburgh in 1672. He was author of an excellent book on Heraldry, and a Vindication of Scottiſh Antiquities, which is ſaid to be ſtill in MS. in the advocate's library at Edinburgh. He died in 1725.

NES'BIT's HAR'BOUR, a harbour on the coaſt of New Britain, in North America, where, in 1752, the Moravians formed a ſettlement; but, being either expelled or killed, a ſecond attempt was made in 1762 under the protection of the Britiſh government, favoured by the Eſquimaux, and ſucceeded.

NES'CIENCE, *ſ.* [from *neſcio*, Lat.] Ignorance; the ſtate of not knowing.—Not vincible ignorance, or of things he might know, but invincible; not privative ignorance, or of things he ought to know, but mere *neſcience*; in brief, ignorance: ſimple ignorance, and not ſinful ignorance. *Walſall's Life of Chr.* 1615.—Many of the moſt accompliſhed wits of all ages have reſolved their knowledge into Socrates his ſum total; and, after all their pains in queſt of ſcience, have ſat down in a profeſſed *neſcience. Glanville's Scepſis.*

NES'CIOUS, *adj.* Ignorant, unknowing. *Aſh.*

NES'COPECK, a mountain of Pennſylvania, on the coaſt of the Suſquehanna River.

NES'COPECK CREE'K, a river of Pennſylvania, which runs into the Suſquehanna in lat. 41. 3. N. lon. 76. 17. W.

NE'SENBACH, a river of Wurtemberg, which paſſes by Stuttgard, and runs into the Neckar near Cronſtadt.

NESH, *adj.* [neꞅc, Sax.] Soft; tender; eaſily hurt. *Skinner.* The word is uſed in ſeveral parts of England, ſometimes with the pronunciation of *naiſh* or *naſh*; and it is old in our language.—For love his herte is tendre and *neſhe. Chaucer's Court of Love.*—The *neſh* tops of the young hazel. *Crowe's Leweſdon Hill.*

NESIGO'DA, a lake of Sileſia, in the principality of Oels: eight miles weſt of Militſch.

NESIRBAD', a town of Perſia, in Farſiſtan: ſixty-nine miles ſouth-ſouth-eaſt of Schiras.

NE'SIS, in ancient geography, now *Niſita*, an iſland on the coaſt of Campania, famous for aſparagus.

NESLE, a town of France, in the department of the Somme: ten miles ſouth of Péronne, and twenty-five eaſt of Amiens. Lat. 50. 12. N. lon. 3. 0. E.

NESLE, a town of Egypt, on the ſide of a canal, in a country remarkable for the forwardneſs of the harveſt.

NES'LOU, a ſmall iſland in the Perſian Gulf: 180 miles weſt-ſouth-weſt of Ormuz.

NES'MIEL, a town of Hungary: ſix miles ſouth-eaſt of Comorn.

NES'PA, a town of Mexico, in the province of Mechoacan, at the mouth of a river which runs into the Pacific Ocean in lat. 18. 50. N. lon. 103. 36. W.

NESPEREI'RA, a town of Spain, in the province of Galicia: twelve miles north of Tuy.

NESS, a termination added to an adjective to change it into a ſubſtantive, denoting *ſtate* or *quality*; as, *poiſonous, poiſonouſneſs*; *turbid, turbidneſs*; *lovely, lovelineſs*; from nıꞅꞅe, Saxon.—Alſo the termination of many names of places where there is a headland or promontory; from neꞅe, Sax. *nez*, Fr. a noſe.

NESS, a town of Norway, in the dioceſe of Aggerhuus: thirty-ſix miles north-north-weſt of Chriſtiania.

NESS, a river of Scotland, which runs from Loch Neſs to the Frith of Murray, a little below Inverneſs.

NESS (Loch). See Loch Ness, vol. xii. p. 865. See alſo the Monthly Magazine, vol. xlv. p. 213. where an attempt is made to account for its never freezing.

NES'SA, a river of Germany, which runs into the Werra five miles north-weſt of Eiſenach.

NES'SA, or Nesserland, an iſland in the north part of Dollart-bay, on the coaſt of Eaſt Frieſland, a little to the ſouth-eaſt of Emden. Lat. 53. 18. N. lon. 6. 59. E.

NES'SELROD, a town of the duchy of Berg: three miles ſouth of Solingen.

NES'SELWANG, a town of Bavaria, in the biſhopric of Augſburg: eleven miles ſouth-eaſt of Kempten, and forty-five ſouth of Augſburg.

NESSUA'R, a town of Hindooſtan, in Allahabad: nine miles weſt of Gazypour.

NES'SUS, in fabulous hiſtory, a celebrated Centaur, ſon of Ixion and a Cloud. He offered violence to Dejanira, whom Hercules had entruſted to his care, with orders to carry her acroſs the river Evenus. (See DEJANIRA.) Hercules ſaw the diſtreſs of his wife from the oppoſite ſhore of the river, and immediately let fly one of his poiſoned arrows, which ſtruck the Centaur to the heart. Neſſus, as he expired, gave the tunic he then wore to Dejanira, aſſuring her that from the poiſoned blood which had flowed from his wounds, it had received the power of calling a huſband away from unlawful loves. Dejanira received it with pleaſure; and this mournful preſent cauſed the death of Hercules. See HERCULES.

NEST, *ſ.* [neꞅꞇ, Sax. the paſt participle of neꞅan, to viſit frequently, to haunt. *Tooke.*] The bed formed by the bird for incubation and feeding her young.—If a bird's *neſt* chance to be before thee in the way, thou ſhalt not take the dam with the young. *Deut.* xxii. 6.

Th' example of the heavenly lark,
Thy fellow-poet, Cowley, mark:
Above the ſkies let thy proud muſick ſound,
Thy humble *neſt* build on the ground. *Cowley.*

Any place where animals are produced.—Redi found that all kinds of putrefaction did only afford a *neſt* and aliment for the eggs and young of thoſe inſects he admitted. *Bentley.*—An abode; place of reſidence; a receptacle. Generally in a bad ſenſe: as, a *neſt* of rogues and thieves:

Not farre away, not meete for any gueſt,
They ſpide a little cottage, like ſome poor man's *neſt.*
Spenſer.

Come from that *neſt*
Of death, contagion, and unnatural ſleep. *Shakeſpeare.*

A warm cloſe habitation, generally in contempt.—Some of our miniſters, having livings offered unto them, will neither for zeal of religion nor winning ſouls to God be drawn forth from their warm *neſts. Spenſer.*—Boxes or drawers; little pockets or repoſitories.

To NEST, *v. n.* To build neſts.—This poor dove, being driven thrice away by that horrible northern wind, which razed at length the dove-houſe and the city, did ſhe not *neſt,* and as it were hide her head, in ſecret holes? *Harmar's Tr. of Beza,* 1587.—The cedar ſtretched his branches as far as the mountains of the moon, and the king of birds *neſted* within his leaves. *Howell's Vocal Foreſt.*

NEST'-COCK, *ſ.* A fondling; one that has never been much from home.

NEST'-EGG, *ſ.* An egg left in the neſt to keep the hen from forſaking it:

Books and money laid for ſhew,
Like *neſt-eggs,* to make clients lay. *Hudibras.*

NES'TE, a river of France, which runs into the Garonne at Montreal.

NES'TES, before the revolution, a ſmall country of France, now in the department of the Higher Pyrenées. La Barthe was the capital.

NESTI'ER, a town of France, in the department of the Higher Pyrenées: four miles eaſt of La Barthe.

To NES'TLE, *v. n.* To ſettle; to harbour; to lie cloſe and ſnug, as a bird in her neſt.—Their purpoſe was, to fortify in ſome ſtrong place of the wild country, and there *neſtle* till ſuccours came. *Bacon.*—The king's fiſher wonts commonly by the water-ſide, and *neſtles* in hollow banks. *L'Eſtrange.*

Fluttering there, they *neſtle* near the throne,
And lodge in habitations not their own. *Dryden.*

To NES'TLE, *v. a.* To houſe as in a neſt:

Cupid found a downy bed,
And *neſtled* in his little head. *Prior.*

To cheriſh, as a bird her young:

This Ithacus, ſo highly is endear'd
To this Minerva, that her hand is ever in his deeds:
She, like his mother, *neſtles* him. *Chapman's Iliad.*

NES'TLING, *ſ.* A young bird in the neſt: in ſome parts, the ſmalleſt bird of the neſt, and call alſo *neſtle-cock.*—The chief object of children, looking after neſts, is the eggs, or *neſtlings,* not the bird which lays them. *Barrington's Eſſays.*—A receptacle; a neſt. *Not in uſe.*—They [the phyſicians] inquire not of the diverſities of the parts, the ſecrecies of the paſſages, and the ſeats or *neſtlings* of the humours. *Bacon's Adv. of Learning.*

NES'TLING, *adj.* Newly hatched; newly depoſited in the neſt.—I have taken four young ones from a hen ſkylark, and placed in their room five *neſtling* nightingales, as well as five wrens, the greater part of which were reared by the foſter-parent. *Barrington's Eſſays.*

NES'TON (Great), a ſmall market-town in the county of Cheſter, is ſituated cloſe upon the ſhore, on the ſouth-weſtern ſide of a peninſula formed by the eſtuaries of the Dee and Merſey. It is a place of very little importance, and chiefly ſupported by the number of perſons who reſort to it as a ſummer reſidence. The market-day is Friday. The manor here was at an early period in the poſſeſſion of the family of Montalt, and was bequeathed by Robert de Montalt to queen Iſabel in the reign of Edward III. This prince afterwards granted it to William Montacute, earl of Saliſbury; but, reverting to the crown ſoon after by attainder, it was given by Henry IV. to ſir John Stanley, anceſtor to the earls of Derby, by one of whom it was ſold to the Whitmores of Leighton, and from them paſſed, by female heirs, to the Savages and Moſtyns. The pariſh is of great extent; and contains the townſhips of Lidſham, Leighton, Little Neſton, Neſs, Raby, Thornton, Mayow, and Willaſton; the whole compriſing 625 houſes, and 1909 inhabitants, as appears from the parliamentary returns of 1811.

NES'TOR, a diſtinguiſhed Grecian chief in the time of the Trojan war, was king of Pylos in the Peloponneſus. He was one of the twelve ſons of Neleus, of whom all but himſelf were ſlain in the invaſion of the country by Hercules. Neſtor was preſerved from ſlaughter by his tender age, and by being educated among the Gerenians. He was very ſucceſsful in battle, while young, againſt the Eleans. He was placed by Hercules on the throne of Pylos; and, as king of that country, and of Meſſenia, he led his ſubjects to the Trojan war, where he diſtinguiſhed himſelf among the reſt of the Grecian chiefs, by eloquence, addreſs, wiſdom, juſtice, and an uncommon prudence in the adminiſtration of affairs. His character is repreſented by Homer as the moſt perfect of all his heroes; and Agamemnon is made to exclaim, that if he had ten ſuch generals as Neſtor he ſhould ſoon ſee the walls of Troy reduced to utter ruin. His wiſdom, the reſult of long experience, is diſplayed on ſeveral occaſions in the councils of the Greeks, and his honey-like eloquence is employed in conciliating the diſſentions between the leaders. The garrulity of old age, joined to the qualities of a veteran ſtateſman, and warrior, renders him a very natural and intereſting perſonage in the Iliad. After the Trojan war, Neſtor is ſuppoſed to have retired to Greece, where he enjoyed in the boſom of his family the peace and tranquillity which were due to his wiſdom and his old age. The manner and time of his death are unknown: the ancients are all agreed that he lived three generations of men; which length of time is ſuppoſed to be 300 years, though more probably only 90 years, allowing 30 years for each generation. From that circumſtance, therefore, it was uſual among the Greeks and the Latins, when they wiſhed a long and happy life to their friends, to wiſh them to ſee the years of Neſtor. He had two daughters and ſeven ſons: among the latter was Antilochus, a brave warrior, who periſhed before the walls of Troy.

NES'TOR, or LETOPIS NESTOROVA, a Ruſſian hiſtorian, born in the year 1056 at Bielozero, aſſumed the monaſtic habit in the 19th year of his age, and took the name by which he is known. When he entered the monaſtery, he cultivated the Greek language with diligence, though he is thought to have ſtudied it rather in the Byzantine hiſtorians than in the older claſſics. He is ſuppoſed to have died in 1115; the work by which he is chiefly known is a "Chronicle," containing, after a ſhort introductory account of the early ſtate of the world, taken from the Byzantine writers, a geographical deſcription of Ruſſia, and the adjoining countries; an account of the Sclavonian nations, their emigrations, diſperſion, and final ſettlement; and laſtly, a chronological ſeries of the Ruſſian annals from 858 to about 1113. This work lay in obſcurity, till Peter the Great ordered a tranſcript to be made of a copy of it found in the library of Konigſberg. Profeſſor Muller, in 1732, publiſhed a German tranſlation of the firſt part; but he erroneouſly aſcribed it to one Theodoſius. It was publiſhed at Peterſburg in the year 1767, and is valued as the earlieſt monument of Ruſſian hiſtory. The ſtyle of this work is ſimple and unadorned, ſuch as ſuits a mere recorder of facts; but his chronological exactneſs contributes to aſcertain the era and authenticity of the events which he relates. We may add further, on the authority of Mr. Coxe, that Neſtor was followed ſucceſſively by three annaliſts: the firſt was Sylveſter, abbot of the convent of St. Michael at Kiof, and biſhop of Periſlaf, who commences his chronicle from 1115, two years poſterior to that of Neſtor, and continues it to the year 1123; from which period a monk, whoſe name has not come down to us, carries the hiſtory to 1157; and another, equally unknown, to 1204. With reſpect to theſe performances, M. Muller informs us, that the labours of Neſtor and his three continuators have produced a connected ſeries of the Ruſſian hiſtory ſo complete, that no nation can boaſt of a ſimilar treaſure for ſo long and unbroken a period. See Coxe's Travels, vol. iii.

NESTO'RE, a river which runs into the Tiber ten miles ſouth of Perugia.

NESTO'RIAN, *ſ.* One of the followers of Neſtorius, whoſe hereſy was founded in the fifth century, and whoſe diſtinguiſhing tenet Hooker notices in the following example.—To gather therefore into one ſum all that hath hitherto been ſpoken touching this point, there are but four things which concur to make complete the whole ſtate of our Lord Jeſus Chriſt; his deity, his manhood, the conjunction of both, and the diſtinction of the one from the other, being joined in one. Four principal hereſies there are, which have in thoſe things withſtood the truth: Arians, by bending themſelves againſt the deity of Chriſt; Apollinarians, by maiming and miſinterpreting that which belongeth to his human nature; *Neſtorians*, by renting Chriſt aſunder, and dividing him into two perſons; the followers of Eutyches, by confounding in his perſon thoſe natures which they ſhould diſtinguiſh. *Hooker's Eccl. Pol.* v. § 54.

NESTO'RIANISM, *ſ.* The doctrine or tenets of the Neſtorians.

NESTO'RIUS, a celebrated biſhop of Conſtantinople in the fifth century, after whom his followers were called Neſtorians, was a Syrian by nation, and born at Germanicia towards the cloſe of the preceding century. He was educated in the monaſtery of St. Euprepius, in the ſuburbs of his native city, and became a diſciple of the famous Theodore of Mopſueſtia. Afterwards he was ordained preſbyter of the church of Antioch, and acquired a high character for learning, eloquence, and piety. With theſe qualities was connected an abundant portion of zeal and intolerance againſt all oppugners of the catholic doctrine of the trinity. In the year 428, on the recommendation of the emperor Theodoſius, he was choſen to fill the vacant ſee of Conſtantinople. On the day of his ordination, when he delivered his firſt ſermon before the emperor and the people of his dioceſe, he declared his reſolution vigorouſly to make war upon all heretics. "Give me," ſaid he, "O emperor, the earth free from heretics, and I in return will give you heaven." To this ſpiritual motive, he added one, which, though carnal, he poſſibly judged of equal force: "Conquer the heretics with me, and I will aſſiſt you in conquering the Perſians." Although this declaration was highly acceptable to the maſs of the people, who hated the heretics; yet, ſays Socrates the hiſtorian, the wiſer ſort condemned his pride and arrogance, and expreſſed their ſurpriſe, that a man who had ſcarcely "taſted the water of the city," ſhould avow his determination to perſecute thoſe who were not of his own opinion. Within five days after his ordination he began to execute his threatenings, and reduced the Arians to ſuch deſpair, by attempting to deprive them of the place in which they held their private aſſemblies, that they ſet fire to it themſelves, and many of the neighbouring houſes were conſumed along with it. From this circumſtance he generally obtained the name of the *incendiary*. He next endeavoured to ſuppreſs the Novatians, from the jealouſy, ſays Socrates, which he entertained of Paul, their biſhop, who was eminent for ſanctity of manners; but the emperor reſtrained his violence. He alſo carried on a perſecution againſt the Quartodecimans, in Aſia, Lycia, and Caria; in conſequence of which a ſedition was excited at Miletus and Sardis, that occaſioned the loſs of many lives. He ſo greatly harraſſed the Macedonians, by means of his inſtrument Antonius, biſhop of Germa, that, out of revenge, they conſpired againſt that prelate, and put him to death. Neſtorius, having obtained this advantage againſt them, prevailed upon the emperor to deprive them of all their churches at Conſtantinople, Cyzicum, and the villages about the Helleſpont. The Manichæans, likewiſe, and the Pelagians, ſuffered under his perſecuting hand. Theſe rigorous proceedings againſt heretics, might have ſecured to him in the orthodox calendar the title of ſaint, had he not become involved in a diſpute with ſome of his catholic brethren about *words*, which produced as much animoſity and as great diviſions in the catholic church, as if it had related to the moſt intelligible and the moſt important of *things*.

When Neſtorius came from Antioch to Conſtantinople, he brought with him one of his fellow-preſbyters, and a particular friend, named Anaſtaſius. This preſbyter, in one of his public diſcourſes, declaimed warmly againſt the title of *Mother of God*, which began now to be commonly given to the Virgin Mary; ſaying, that it was more proper to call her the *Mother of Chriſt*, ſince the Deity can neither be born nor die, and, of conſequence, the ſon of man alone could derive his birth from an earthly parent. Complaint of what Anaſtaſius had ſaid being brought to Neſtorius, he applauded the ſentiments which the preſbyter had advanced, and openly explained and defended them in ſeveral diſcourſes. But both he and his friend Anaſtaſius were keenly oppoſed by certain monks at Conſtantinople, who maintained that the ſon of Mary was *God incarnate*, and excited the zeal and fury of the populace to ſupport this doctrine againſt Neſtorius. Notwithſtanding all this, the diſcourſes of the latter were extremely well received in many places, and had the majority on their ſide. As ſoon as this controverſy came to the knowledge of Cyril, who at this time preſided over the ſee of Alexandria, and was at enmity with Neſtorius, he cenſured him in letters which he wrote to him on the ſubject. Upon this, Neſtorius was deſirous of explaining his meaning; but the haughty and turbulent Cyril would hearken to no explanations. He peremptorily required Neſtorius to acknowledge and confeſs the Virgin Mary to be the *Mother of God*, without any diſtinction or explanation; and, becauſe he would not comply, he defamed him all over the Eaſt, as a reviver of the hereſy of Paul of Samoſata, denying the real union between the divine and human nature in the perſon of Chriſt. He likewiſe excited the people at Conſtantinople againſt him, and ſpared no pains to diſcredit him with the emperor, and other great perſons at court. Neſtorius, being now ſenſible that Cyril was determined to keep no meaſures with him, reſolved, in his turn, to keep none with one, who, out of a jealouſy of his power and authority, was endeavouring to ruin him. He therefore aſſembled a council at Conſtantinople, in which, with the unanimous conſent of the biſhops preſent, he ſolemnly excommunicated the laymen, and depoſed the eccleſiaſtics, who rejected his doctrine.

He did not ſtop here; but cauſed ſeveral eccleſiaſtics, monks, and laymen, the friends of Cyril, to be apprehended, dragged to the public priſon, and there ſeverely ſcourged as diſturbers of the public peace, and ſowers of hereſy and ſedition. At the ſame time, Neſtorius wrote to Celeſtine, biſhop of Rome, endeavouring to gain him to his ſide, by explaining the doctrines which he held without the leaſt diſguiſe or equivocation; and adding, that by diſputing the title *Mother of God*, he only meant that the Logos was not born of the Virgin Mary. Cyril alſo wrote to Celeſtine that famous letter againſt Neſtorius which has reached our times; and prejudiced him to ſuch a degree againſt the biſhop of Conſtantinople, that he aſſembled a council at Rome, which condemned Neſtorius as the author of a new and very dangerous hereſy. In a council held at Alexandria, likewiſe, where Cyril's letter was recited, no leſs than twelve anathemas were hurled at the head of Neſtorius, and twelve propoſitions drawn up, which he was required to anathematize on pain of being depoſed. But, notwithſtanding the reſolutions of the councils of Rome and Alexandria, Neſtorius would not condemn propoſitions which he believed, and juſtly, to contain the orthodox doctrine of the church. In this determination he was ſupported by ſeveral reſpectable biſhops. John, biſhop of Antioch, was entirely in his intereſt; and Theodoret, biſhop of Cyrus, the hiſtorian, drew up twelve propoſitions in anſwer to thoſe of Cyril, the object of which was to ſhow that he confounded the two natures of Chriſt, and gave to his human nature the honour that was due to the Logos.

As there was no proſpect of an amicable iſſue to this abſurd and unintelligible controverſy about terms, the emperor called a council to aſſemble at Epheſus, in the year 431, which is the third general council in the annals of the church. Neſtorius and Cyril both arrived at Epheſus at the appointed time; but John of Antioch, with the biſhops of his patriarchate, who were ſuppoſed to favour Neſtorius, and many biſhops who were coming from Italy and Sicily, had not yet arrived. Of this circumſtance Cyril and his party determined to avail themſelves; and proceeded immediately to buſineſs, in oppoſition to the remonſtrances of Neſtorius, and the commiſſioner whom the emperor had ſent to aſſiſt at the council in his name. And, what was ſtill more inconſiſtent with juſtice and decency, Cyril himſelf, a principal party concerned, and the avowed enemy of the accuſed biſhop, *took the place of preſident.* Before an aſſembly ſo conſtituted, Neſtorius refuſed to appear, though ſummoned three times, declaring his reſolution to wait for the arrival of the oriental biſhops, who might be expected within four days. Upon this refuſal, the council met early on the following day, when Cyril received the depoſitions againſt Neſtorius, examined the witneſſes, gave his own conſtruction to the words of his opponent, and delivered his opinion the firſt. In that opinion the majority of the biſhops preſent, who were devoted to him, tumultuouſly concurred; and the ſame ſeſſion was cloſed with pronouncing a ſentence of depoſition and excommunication againſt Neſtorius. When the imperial commiſſioner proteſted againſt the precipitation and violence of their proceedings, they drove him by force out of the aſſembly; and to the remonſtrances of ſeventy-ſix biſhops, who abſented themſelves from the council, that they might not ſeem to give the leaſt countenance to the buſineſs of that day, they paid not the ſlighteſt attention. Five days afterwards, John of Antioch and the oriental biſhops came to Epheſus, and, having received information of what had paſſed, refuſed to aſſiſt at the council, unleſs the whole matter ſhould be inveſtigated anew. To ſuch a propoſal, as may readily be imagined, Cyril would not liſten; upon which the oriental biſhops, and others who had diſapproved of the ſteps taken by the council under the influence of the biſhop of Alexandia, formed themſelves into a ſeparate aſſembly. By this new council the proceedings of the other were unanimouſly declared null; the doctrine of Cyril was pronounced heretical; and a ſentence of depoſition and excommunication was paſſed againſt Cyril, and Memnon biſhop of Epheſus, who was one of his moſt zealous ſupporters.

On the other hand, Cyril, and the prelates who adhered to him, pronounced all the biſhops of the new council to be Neſtorians, and, with Neſtorius, depoſed, excommunicated, and anathematized. Open war being thus declared between the hoſtile aſſemblies, both parties made an appeal to the emperor, who gave orders for the baniſhment of Neſtorius, Cyril, and Memnon, as equally diſturbers of the peace of the church, and ſent a perſon high in office to perſuade all the biſhops to aſſemble in one council. Finding, however, that they were ſo exaſperated againſt each other that it was impoſſible to reconcile them, he ordered a certain number of deputies from each council to appear before him at Chalcedon, where he patiently heard them reſpectively defending their own principles, and combating thoſe of their opponents. At firſt he ſeemed favourable to the Orientals; but, being prepoſſeſſed againſt Neſtorius by his ſiſter Pulcheria, he ſuddenly changed his mind, and declared for Cyril's council. Immediately afterwards he reinſtated Cyril and Memnon in their ſees, and iſſued an edict, declaring Neſtorius juſtly depoſed. At firſt our ex-prelate was permitted to retire to the monaſtery in which he had been educated, where he continued four years, and by his behaviour gained univerſal reſpect. But his enemies were ſo preſſing in their ſolicitations to the emperor, to inflict a ſeverer puniſhment on ſuch an obſtinate heretic, that they obtained an order for his baniſhment to Petra in Arabia. Thinking his confinement to that place too mild a puniſhment, they afterwards perſuaded the emperor to direct that he ſhould be removed to Oaſis, a place in the deſerts between Egypt and Libya, where the greateſt criminals were uſually confined. It appears from Socrates that he was here in the year 439. Afterwards, the town being ſurpriſed by a people called Blemmyes, he was carried into captivity, though he ſoon obtained his releaſe. Upon this he withdrew to the city of Panopolis in the Thebais; whence he was ſoon dragged by a band of ſoldiers to Elephantina, at the extremity of that government, and from thence cruelly harraſſed from place to place, till nature ſunk under the fatigues which he was forced to undergo, and he died, but in what year is not known.

Such was the end of the famous Neſtorius, whoſe ſufferings muſt have been greatly aggravated by the reflection, that he was only treated by his enemies with the ſame unchriſtian ſeverity which in the day of his power he had ſhown towards others. If we examine ſuch of his writings as remain, we ſhall find that he was very unjuſtly condemned. It appears that he rejected the errors of Ebion, Paulus Samoſetenus, and Photinus; that he maintained in expreſs terms, that the divine Word was united to the human nature in Jeſus Chriſt in the moſt ſtrict and intimate ſenſe poſſible; that theſe two natures, in this ſtate of union, make but one Chriſt and one perſon; that the properties of the divine and human natures may both be attributed to this perſon; and that Jeſus Chriſt may be ſaid to have been born of a virgin, to have ſuffered and died; but he never would admit that God could be ſaid to have been born, to have ſuffered, or to have died. When we conſider that every perſon partakes of the ſubſtance of his mother, and that it is this which conſtitutes the parental and filial relation between them, it is indeed ſurpriſing that the expreſſion "Mother of God" ſhould ever have been admitted into the Chriſtian church, or that any man who underſtands the meaning of the words ſhould condemn Neſtorius for not having uſed them.

The perſecution of which he was a victim, however, did not put a ſtop to the progreſs of his diſtinguiſhing tenet, which from this time ſpread more than ever, and prevails in the Eaſt at the preſent day. In the tenth century, the Neſtorians in Chaldea, whence they are ſometimes called *Chaldeans*, extended their ſpiritual conqueſts beyond Mount Imaus, and introduced the Chriſtian religion into Tartary properly ſo called, and eſpecially into that country called *Karit,* bordering on the northern part of China. The prince of that country, whom the Neſtorians converted to the Chriſtian faith, aſſumed, according to the vulgar tradition, the name of *John* after his baptiſm, to which he added the ſurname of *Preſbyter,* from a principle of modeſty; whence it is ſaid his ſucceſſors were each of them called *Preſter John* until the time of Gengis Khan. But Moſheim obſerves, that the famous Preſter John did not begin to reign in that part of Aſia before the concluſion of the eleventh century. The Neſtorians formed ſo conſiderable a body of Chriſtians, that the miſſionaries of Rome were induſtrious in their endeavours to reduce them under the papal yoke. Innocent IV. in 1246, and Nicolas IV. in 1278, uſed their utmoſt efforts for this purpoſe, but without ſucceſs. Till the time of pope Julius III. the Neſtorians acknowledged but one patriarch, who reſided firſt at Bagdad, and afterwards at Mouſul; but, a diviſion ariſing among them, in 1551 the patriarchate became divided, at leaſt for a time, and a new patriarch was conſecrated by that pope, whoſe ſucceſſors fixed their reſidence in the city of Ormus in the mountainous part of Perſia, where they ſtill continue, diſtinguiſhed by the name of *Simeon;* and ſo far down as the laſt century, theſe patriarchs perſevered in their communion with the church of Rome, but ſeem at preſent to have withdrawn themſelves from it. The great Neſtorian pontiffs, who form the oppoſite party, and look with a hoſtile eye on this little patriarch, have ſince the year 1559 been diſtinguiſhed by the general denomination of *Elias,* and reſide conſtantly in the city of Mouſul. Their ſpiritual dominion is very extenſive, takes in a great part of Aſia, and comprehends alſo within its circuit the Arabian Neſtorians, and alſo the Chriſtians of St. Thomas, who dwell along the coaſt of Malabar. It is obſerved, to the laſting honour of the Neſtorians, that of all the Chriſtian ſocieties eſtabliſhed in the Eaſt, they have been the moſt careful and ſucceſsful in avoiding a multitude of ſuperſtitious opinions and practices that have infected the Greek and Latin churches. About the middle of the ſeventeenth century, the Romiſh miſſionaries gained over to their communion a ſmall number of Neſtorians, whom they formed into a congregation, or church; the patriarchs or biſhops of which reſide in the city of Amida, or Diarbekir, and all aſſume the denomination of *Joſeph.* Nevertheleſs the Neſtorians in general perſevere to our own times in their refuſal to enter into the communion of the Romiſh church, notwithſtanding the earneſt entreaties and alluring offers that have been made by the pope's legate to conquer their inflexible conſtancy. *Moſh. Eccl. Hiſt.*

NESTO'SA, a town of Spain, in the province of Biſcay: twenty-one miles weſt-ſouth-weſt of Bilbao.

NES'TVED, a town of Denmark, in the iſland of Zealand, on the river Nes, near the ſouth coaſt. The river divides the town into two unequal parts, which are called Great and Little Neſtved, and then runs into the Baltic. This gives the inhabitants an opportunity of carrying on ſome little trade. Here are two pariſh-churches. There were ſeveral convents in this town; and a piece of money is ſtill extant which was coined here. It is twenty-two miles eaſt-ſouth-eaſt of Corſoer, and thirty-eight ſouth-weſt of Copenhagen. Lat. 55. 15. N. lon. 11. 51. E.

NES'TUM, the ancient name of a town in Sicily, now called *Noto.*

NES'TUS, or NES'SUS, in ancient geography, now *Neſto,* a ſmall river of Thrace, riſing on Mount Rhodope, and falling into the Ægean Sea above the iſland of Thaſos. It was for ſome time the boundary of Macedonia on the eaſt, in the more extenſive power of that kingdom.

NES'TY, a town of Nepaul: eighteen miles north-north-eaſt of Nogarcot.

NET, *ſ.* [Sax. from the Germ. *neten,* to ſow. *Serenius.*] A texture woven with large interſtices or meſhes, uſed commonly as a ſnare for animals. See BIRD-CATCHING, vol. iii.—Impatience entangles us like the fluttering of a bird in a *net,* but cannot at all eaſe our trouble. *Taylor's Holy Living.*

Poor bird! thou'dſt never fear the *net* nor lime,
The pitfall nor the gin. *Shakeſpeare's Macbeth.*

Any thing made with interſtitial vacuities.—He made *nets* of chequered work for the chapiters upon the top of the pillars. 1 *Kings,* vii. 17.

The vegetative tribes,
Wrapt in a filmy *net,* and clad with leaves. *Thomſon.*

To NET, *v. n.* To knit a net; to knot.—Ideal viſits I often pay you, ſee you poſting round your ſylvan walks, or ſitting *netting* in your parlour, and thinking of your abſent friends. *A. Seward's Letters.*

NET, *adj.* [from *netto,* Ital.] Pure; clear; genuine:

Her breaſt all naked, as *nett* ivory
Without adorne of gold and ſilver bright
Wherewith the crafteſman wonts it beautify,
Of her dew honour was deſpoyled quight. *Spencer.*

Clear; denoting the total of a receipt of ſalary or income after certain deductions.—The *net* revenues of the crown, at the abdication of K. James, without any tax on land, &c. amounted to ſomewhat more than two millions. *Bolingbroke on Parties.*—Clear; denoting the weight of any commodity, after allowances have been made for tare and tret.

To NET, *v. a.* To bring as clear produce.

NET'-WORK, *ſ.* Any thing reticulated or decuſſated at equal diſtances, with interſtices between the interſections.—A large cavity in the ſinciput was filled with ribbons, lace, and embroidery, wrought together in a curious piece of *net-work. Addiſon's Spectator.*—Whoever contemplates with becoming attention this curious and wonderful *net-work* of veins, muſt be tranſported with admiration. *Blackmore.*

Nor any ſkill'd in workmanſhip emboſs'd;
Nor any ſkill'd in loops of fingering fine;
Might in their diverſe cunning ever dare
With this ſo curious *net-work* to compare. *Spencer.*

NE'THAN, a river of Scotland, which riſes near Leſmahagow, in Lanerkſhire, and runs into the Clyde about five miles below Lanerk.

NETHANI'AH, [Heb. the gift of God.] A man's name.

NETHE, a river of Brabant, which runs into the Dyle ſix miles north-weſt of Malines.—A ſmaller river, called the *Little Nethe,* unites with the Nethe at Liere.—The Two Nethes gave name to a department of France, now annexed to the kingdom of the Netherlands, and compoſed of the marquiſate of Antwerp and lordſhip of Malines.

NETHE'NUS, (Matthias), a learned German proteſtant divine, was born in the duchy of Juliers, in the year 1618. He officiated ſome time as miniſter at Cleves; and in the year 1646, accepted an invitation to become profeſſor of divinity at the univerſity of Utrecht. Afterwards he removed to occupy the theological chair, and to diſcharge the functions of paſtor, at Herborn, where he died in 1686, about ſixty-eight years of age. He was the author of various well-written works on theological and controverſial topics: but we are only furniſhed with the ſubjects of his treatiſe "De Interpretatione Scripturæ," 1675, 4to. and of another piece "De Tranſubſtantiatione." *Gen. Biog.*

NETH'ER, *adj.* [neoðeꞃ, Saxon; *neder,* Dutch. It has the form of a comparative; but is never uſed in expreſſed, but only in implied, compariſon; for we ſay the *nether* part, but never ſay this part is *nether* than that; nor is any poſitive in uſe, though it ſeems compriſed in the word *beneath. Nether* is not now much in uſe.] Lower; not upper.—No man ſhall take the *nether* or the upper millſtone to pledge; for he taketh a man's life to pledge. *Deut.* xxiv. 6.

A beauteous maid above, but magic arts
With barking dogs deform'd her *nether* parts. *Roſcommon.*

Being in a lower place:

Numberleſs were thoſe bad angels, ſeen
Hovering on wing under the cope of hell,
'Twixt upper, *nether*, and ſurrounding, fires. *Milton.*

Infernal; belonging to the regions below.—The gods with hate beheld the *nether* ſky. *Dryden's Æneis.*

No leſs deſire
To found this *nethe.* empire, which might riſe
In emulation oppoſite to heaven. *Milton.*

NETH'ER CER'NE, a village in Dorſetſhire, one mile and a half from Cerne Abbas.

NETH'ER STOW'EY. See STOWEY.

NETH'ERBURY, a village in Dorſetſhire, two miles ſouth of Beaminſter. The pariſh is ſix miles and a half long, and three and a half broad, abounding with orchards. It has ſome good quarries of ſtone, and manufactures of wool and flax. It is a prebend to Sarum. Here is a charity-ſchool; and a large handſome church, built on an eminence, with a large high tower.

NETH'ERBY, a village of England, in Cumberland, abounding in antiquities; ſuppoſed to have been a Roman ſtation: twelve miles north of Carliſle.

NETH'ERHALL, a village in Cumberland, near Egremont.—Alſo a village in Eſſex, near Parndon, at the conflux of the rivers Lea and Stort.

NETH'ERHAM, a village in Somerſetſhire, ſouth of Axbridge, with a fair on the 15th of Auguſt.

NETH'ERINGTON, a village in Wiltſhire, near Saliſbury.

NETH'ERLANDS, or the SEVENTEEN PROVINCES, a country of Europe, bounded on the north by the German Sea; on the eaſt by Eaſt Frieſland, the biſhopric of Munſtér, county of Bentheim, duchy of Cleves, archbiſhopric of Cologne, and duchy of Juliers; on the ſouth by the biſhopric of Liege, and by France; and on the weſt by the German Sea, and part of France. It extended from lat. 49. 25. to 53. 30. N. and from lon. 2. 30. to 7. 20. E. reaching near 300 miles in length from north to ſouth, and 200 in breadth from eaſt to weſt.

The name given to this country by the Romans was *Belgium;* by the Spaniards it is called *Pays-baxo;* by the French *Pays-bas;* by the Germans *Nierdelande;* and by the Engliſh *Netherlands*, or Low Countries. The modern name it owed to its ſituation with reſpect to High Germany. Some authors have called it *Lower Germany*, but improperly, as it never made a part of that country. In the time of the Romans, who gained poſſeſſion of this country with great difficulty, the inhabitants were Pagans, the original population conſiſting of Celts, who were ſupplanted by the Belgæ; and it is not certain when Chriſtanity was firſt introduced into this country: towards the end of the third century, the eccleſiaſtics ſent hither by pope Marcellin made many converts; but, during the latter end of the fifth century, a biſhopric was erected at Tournay; and, as Chriſtianity began to flouriſh, churches were built at Cambray, Arras, Terouane, Maeſtricht, and other towns. In the year 608, St. Amand preached at Ghent; and in the latter end of the ſeventh century St. Wildebrord, with his companions, preached the goſpel in Holland, Zealand, and Utrecht. In the beginning of this century the Vandals committed great enormities in the Netherlands; and in the year 451, Attila, king of the Huns, invaded the country with an army of 600,000 men, and burnt moſt of its towns. In 445, Clodio, king of France, made himſelf maſter of Cambray and Tournay, and ſubdued the country as far as the Meuſe. After the irruption of the Franks, this country formed *Neuſtria*, or the New Kingdom, (the ancient kingdom of the Franks being on the eaſt of the Rhine,) partly belonging to the province of Flandria, and partly to that of Lotharingia, or Lower Lorraine. Soon after this period it was divided into provinces, forming as many different ſtates; and the number of provinces has been generally reckoned ſeventeen, viz. the duchies of Brabant, Limburg, Luxemburg, and Gueldres; the marquiſate of the empire of Antwerp; the comtés of Flanders, Artois, Hainault, Namur, Zutphen, Holland, and Zealand; and the lordſhips of Malines, Utrecht, Overiſſel, Frieſland, and Groningen; to which is added Cambreſin; ſo that, in fact, there would be eighteen; but, Guelderland and Zutphen being politically united to the Dutch ſtates, they were called ſeventeen; and the United States were always called the Seven, although, according to the above ſtatement, they are, in reality, eight.

In the middle of the ninth century aroſe the powerful houſe of the earls of Flanders; and the counts of Hainault commence about the ſame epoch. The dukes of Lower Lorraine and Brabant are little known till the end of the tenth century. Theſe, together with other large inheritances, gradually fell under the power of the dukes of Burgundy, who, in the fifteenth century, enjoyed dominions worthy of the regal title. During theſe two laſt epochs, the Netherlands became the great mart of commerce in the weſt of Europe, and were diſtinguiſhed by opulence and the arts.

Towards the end of the fifteenth century, Mary, the only daughter and heireſs of Charles duke of Burgundy, married Maximilian of Auſtria, ſon of the emperor Ferdinand III. and brought him in marriage the duchies of Brabant, Limburg, and Luxemburg; the counties of Flanders, Burgundy, Hainault, Holland, Zealand, and Namur; and the lordſhip of Frieſland. Philip of Auſtria, ſon to Maximilian and Mary, married Jane, the daughter of Ferdinand king of Arragon, and of Iſabella queen of Caſtile, by which means their ſon Charles inherited not only almoſt all Spain, and the great countries then lately diſcovered in America, but alſo thoſe noble provinces of the Netherlands; and was choſen emperor, under the name of CHARLES V. Towards the latter end of the year 1527, he added to his dominions the temporalities of the biſhopric of Utrecht, on both ſides of the Iſſel; and Henry of Bavaria, being diſtreſſed, through war with the duke of Guelderland, and the continued rebellion of his own ſubjects, ſurrendered to the emperor the temporalities of his dioceſe, which was confirmed by the pope, and the ſtates of the country. In 1536, Charles V. bought of Charles of Egmont the reverſion of the duchy of Guelderland, and of the county of Zutphen, in caſe that prince ſhould die without iſſue. The ſame year, the city of Groningen took the oath of allegiance, and ſubmitted to Charles V. and in 1543 he put a garriſon into the city of Cambray, and built a citadel there. Having thus united the Seventeen Provinces, as it were, in one body, he ordered that they ſhould continue for ever under the ſame prince, without being ever ſeparated, or diſmembered; for which purpoſe he publiſhed, in November 1549, with the conſent and at the requeſt of all the ſtates of the provinces, a perpetual and irrevocable edict or law; by which it was enacted, that in order to keep all thoſe provinces together, under one and the ſame prince, the right of repreſentation, with regard to ſucceſſion of a prince, or princeſs, ſhould take place for ever, both in a direct and a collateral line, notwithſtanding the common laws of ſome provinces to the contrary. Charles had even a mind to incorporate theſe provinces with the Germanic body, and to make of them a circle of the empire, under the title of the Circle of Burgundy, in order thereby to engage the princes of the empire to concern themſelves for the preſervation of thoſe provinces. But the Netherlanders, always jealous of their liberty, did not ſeem to like that incorporation; and, when they were demanded to pay their ſhare towards the expenſes of the empire, they refuſed it; whereupon the princes of the empire refuſed, in their turn, to take any part in the wars in Flanders, and looked upon thoſe provinces as by no means belonging to the Germanic body.

Philip of Auſtria, and his ſon Charles, who were born in the Netherlands, had for theſe provinces that natural affection which men uſe to have for their native country; and, knowing how jealous the inhabitants were of their liberty, and of the privileges granted to them by their former princes, they took great care to preſerve them, and ſuffered willingly that the ſtates, who were the guardians of the people's liberty and privileges, ſhould in a manner ſhare the ſupreme authority with them. Philip II. ſon to the emperor Charles V. had not the ſame affection for the Netherlands, nor thoſe generous ſentiments which his father had endeavoured to inſpire him with. Being born in Spain, of a Portugueſe woman, he had no regard but for his native country; and, when he removed out of the Netherlands, he left them to the weak government of a woman, to the proud and haughty ſpirit of cardinal Granville, and to the wild ambition of ſome lords of thoſe provinces, who, availing themſelves of the imprudent conduct and continual blunders of the council of Spain, found their private intereſt in the diſturbances they could not fail to produce. Philip II. alſo, inſtead of the mild and moderate meaſures which his predeceſſors had ſucceſsfully employed, on many occaſions, as beſt ſuiting the genius and temper of the people, had recourſe to the moſt violent and cruel proceedings; which, far from curing the evil, ſerved only to exaſperate it the more, and render it incurable. The Spaniards, whom he ſent thither, being born and educated in an abſolute monarchy, jealous of the liberties and envious of the riches of the people, broke through all their privileges, and uſed them almoſt after the ſame manner as they had done the inhabitants of their new and ill-gotten dominions in America.

This treatment occaſioned a general inſurrection. The counts Hoorn, Egmont, and the prince of Orange, appeared at the head of it; and, Luther's reformation gaining ground about the ſame time in the Netherlands, his diſciples joined the malcontents: whereupon king Philip introduced a kind of inquiſition in order to ſuppreſs them, and many thouſands were put to death by that court, beſides thoſe that periſhed by the ſword; for theſe perſecutions and encroachments had occaſioned a civil war, in which ſeveral battles were fought. The counts Hoorn and Egmont were taken and beheaded: but the prince of Orange, retiring into Holland, with the aſſiſtance of England and France preſerved Holland and ſome of the adjacent provinces, which entered into a treaty for their mutual defence at Utrecht in 1579; and theſe were afterwards ſtyled the United Provinces; they were ſeven in number, viz. Holland, Zealand, Frieſland, Groningen, Overiſſel, Guelderland united with Zutphen, and Utrecht. The ten Catholic provinces were, Flanders, Brabant, Artois, Hainault, Namur, Luxemburg, Limburg, Upper Guelderland, the marquiſate of Antwerp, and the county of Malines or Mechlin. Several of theſe were retained by the Spaniards, until the duke of Marlborough gained the victory of Ramillies; after which Bruſſels the capital, and the greateſt part of theſe provinces, acknowledged Charles VI. afterwards emperor, as their ſovereign; but after his death they were wholly conquered by the French except part of the province of Luxemburg, and afterwards reſtored by the peace of Aix-la-Chapelle in 1748, except a few that were retained by the French. Before the revolution in France, the greater part of the fore-mentioned Catholic provinces belonged to the houſe of Auſtria: the Dutch, however, occupied ſome diſtricts of Flanders, Brabant, Upper Guelderland, and Limburg; the French poſſeſſed Artois, with certain portions of Hainault, Namur, Luxemburg, and Flanders; and Upper Guelderland belonged to the king of Pruſſia, the emperor, and the Dutch.

In conſequence of the revolution, Flanders, Auſtrian Brabant, Hainault, Upper Guelderland, Limburg, Luxemburg, the biſhopric of Liege, Antwerp, the circle of the Lower Rhine, the duchy of Juliers, and the territory extending along the left bank of the Rhine to the influx of the Meuſe, were annexed to the French dominions by the treaty of Campo Formio, A.D. 1797.

The ſtadtholder of the United Provinces was expelled, and made his eſcape to England in 1795; and theſe provinces, therefore, as well as the Auſtrian Netherlands, were under the dominion of France till the memorable year 1814. In 1801, the deſignation of United Provinces was dropped, and that of Batavian Republic was ſubſtituted. In 1806, this republic was declared a kingdom, and divided into nine departments, after the French faſhion. See the article HOLLAND, vol. x. p. 238, 9. In the year 1809, it was hinted that there were very good reaſons why Holland ought to become a part of the French empire: theſe hints were acted upon, and carried into effect, on the 1ſt of January, 1811, when the whole of that country was declared to be an integral part of the French empire. See the article LONDON, vol. xiii. p. 198, 233.

In the year 1813, when a ſeries of dreadful battles and ſanguinary defeats was to annihilate the power of Napoleon, and deliver all Europe from his dominion, the liberation of Holland was of courſe not neglected. It will be ſeen under the article LONDON, p. 351. that the ſtadtholder, immediately upon his return to the Hague, iſſued a proclamation ſigned "William prince of Orange;" but that, ſoon after, he was ſaluted with the title of "William the Firſt, Sovereign Prince of the Netherlands." Whence this alteration originated has not been made public; but we may learn from the paſt hiſtory of Holland, that the zealous friends of the houſe of Orange have always been vigilant to take occaſion of the dangers and neceſſities of the ſtate, to enhance an authority, perhaps too limited for the exertion of the powers requiſite for the executive head of any commonwealth. Accordingly, ſoon after the entrance of his ſerene highneſs into Amſterdam, the general commiſſaries of the national government iſſued an addreſs to the inhabitants, in which they announced the change in the ſupreme authority in the following terms: "It is not William VI. whom the people of the Netherlands have recalled, without knowing what they have to hope or expect from him. It is William I. who, as ſovereign-prince, by the wiſh of the Netherlanders, appears as ſovereign among that people, which once before has been delivered by another William I. from the ſlavery of a foreign deſpotiſm. Your civil liberty ſhall be ſecured by laws, by a conſtitution giving a baſis to your freedom, and be better founded than ever."

The next thing to be done was to frame a repreſentative conſtitution for theſe united ſtates. This was performed in about three months; and on the 2d of March, 1814, it was declared, that the conſtitution ſo framed would be "ſubmitted, for mature conſideration, to a numerous aſſembly of perſons, the moſt conſiderable and beſt qualified to come to a determination upon this weighty buſineſs, on the 28th of the ſame month." On the day appointed for the meeting of theſe notables, or leading men, the members repaired to the new church at Amſterdam, where his royal highneſs the prince of Orange, accompanied by his two ſons, arriving at half-paſt eleven, opened the buſineſs with a ſpeech. Mr. Van Maanen, firſt preſident of the high-court of juſtice of the United Netherlands, then addreſſed the aſſembly, and explained ſuccinctly the principles of the conſtitution. His royal highneſs next delivered the plan of the conſtitution to the preſident, and returned to his palace amidſt the acclamations of the people; and about two in the afternoon, a general diſcharge of artillery announced the acceptance of the conſtitution. The majority in its favour is ſaid to have been 458 to 25. On the following day his royal highneſs took the oath to the conſtitution, and on that occaſion again addreſſed the aſſembly. He obſerved, that exactly four months had elapſed ſince his return to the Netherlands, during which period the progreſs made in the reſtoration of the ſtate had much ſurpaſſed all that could have been expected. Foreign powers had not only by words, but by deeds, manifeſted their ſatisfaction at the recovery of independence by the Netherlands, and the conferring of the ſovereignty upon his houſe. The devotion of the country to the good cauſe had enabled him, notwithſtanding the exhauſtion of its finances, to raiſe more than 25,000 troops, for the moſt part well armed and equipped; whilſt its unanimity had been diſplayed by the prompt organization of the militia, the levy in maſs, the national guards, and now by the acceptance of the conſtitution. He concluded with promiſing to apply himſelf to the immediate enforcement of that conſtitution, and carrying into effect all the requiſite arrangements.

In the beginning of May, all the places which belonged to Holland in 1795 were delivered up to the Dutch troops; and the Auſtrian general St. Vincent aſſumed the military government of the former Auſtrian Netherlands. On May 2d, the day appointed for the firſt meeting of the ſtates-general of the United Provinces at the Hague, the members of that body met in the palace of the ſovereign-prince, and took the oaths preſcribed by the conſtitution. The aſſembly then proceeded to the hall of the Binnenhof, allotted for their ſittings, to which the ſovereign, accompanied by his youngeſt ſon, repaired, and addreſſed them in a ſpeech in which he deſcribed the ſtate of the country, and laid before them the neceſſity of their ſerious attention to retrieve its loſſes, and reſtore its ancient conſequence and proſperity. He ſpoke of the generous friendſhip towards the country teſtified by foreign powers, and eſpecially by Great Britain; and gave hopes of a ſpeedier recovery from the injuries it had ſuſtained than could be expected by many of its fellow-ſufferers. The miniſter of finance afterwards laid before the ſtates-general an account of the expenditure and revenue of the United Provinces, from which it appeared, that reckoning the ordinary and extraordinary expenſes for the year 1814 at 63,500,000 guilders, there would be a deficiency of revenue amounting to more than 25,000,000. He then aſſigned reaſons for expecting a conſiderable diminution of charges, and increaſe of revenue, in future years, which turned upon the ſpoliations and loſſes of income which the ſtate had incurred, in conſequence of the war, and the French occupation of the country. As one proof of the ſacrifice made under the rule of Bonaparte of every other intereſt to his warlike projects, it may be mentioned that the dykes of Holland, ſo eſſential to the very exiſtence of the country, had been ſuffered to fall into ſuch a ſtate of dilapidation, that a large additional expenditure would be required for their repair in the preſent year.

An adjourned ſitting of the ſtates-general was opened on June 15, by a meſſage from the prince-ſovereign, congratulating them upon the concluſion of a peace between the allied powers and France, in which the re-eſtabliſhment of the ſtates of the United Provinces was confirmed and guaranteed by the moſt powerful ſovereigns of Europe. In anſwer to this communication, an addreſs was voted by the aſſembly, expreſſing ſatisfaction in the event, and grateful acknowledgments to his royal highneſs for his exertions in bringing it to effect.

In the grand ſettlement of Europe, which became the object of the allied powers after they had expelled from his throne the perſon whoſe ambitious plans had ſo long been employed in overthrowing all former barriers, and eſtabliſhing his own irreſiſtible predominance, there were few points more important, and, at the ſame time, of more difficult arrangement, than fixing the future condition of the ten Belgic provinces, uſually diſtinguiſhed by the name of the Catholic Netherlands. Modern hiſtory is filled with the wars and negociations of which the diſputed poſſeſſion of theſe rich and fertile countries was the ſource; and to prevent them from falling under the dominion of France, and preſerve them to the houſe of Auſtria, was a leading principle of the policy which formed the armed confederacies in the reigns of William III. and Anne. When at length ſecured to Auſtria, they proved but an uneaſy and unfruitful acceſſion to that power, on account of their remoteneſs from the ſeat of ſovereignty, the diverſity of their intereſts, and the conſtitutional privileges of which they were juſtly jealous. The infraction of theſe privileges by the emperor Joſeph, and the violence with which he urged eccleſiaſtical reforms, altogether repugnant to the feelings of a people ſingularly attached to their religion, occaſioned a ſtorm of reſiſtance and diſaffection, which induced that ſovereign to form plans for exchanging his dominions in the Low Countries for an equivalent in Germany; but, like the reſt of his multifarious projects, they failed in the execution. Theſe provinces were among the firſt conqueſts of the French in their revolutionary war; they had been declared integral parts of the French empire, which, by the occupation of the ſeven provinces, had obtained a moſt important addition in this quarter. When France was to be reduced to her former limits, and Holland reſtored to its priſtine independence, the diſpoſal of the Catholic Netherlands became a matter of immediate urgency. On the principle of reſtitution, there could be no doubt that they reverted to the Auſtrian dominion; and we have juſt ſeen that temporary poſſeſſion of them was given to an Auſtrian general, as military governor. But the preſent emperor of Auſtria had the ſame reaſons with his predeceſſor, Joſeph, for wiſhing to get rid of a detached territory which had long been rather a burden than an advantage, and the future defence of which could only be ſecured by a ſtrong and expenſive line of fortreſſes. It is therefore probable, that a change in the occupation of theſe provinces was early deliberated in the councils of the allied powers, though difficulties would occur in aſſigning their new poſſeſſor.

Hints had been thrown out in the public papers of the Low Countries, of an intended union of the ten provinces to the ſtate with which they had the greateſt natural affinity; but it was not till the end of July that matters were fully prepared for an open diſcloſure of the deſign, and the meaſures for bringing it to effect. On the 30th of that month, the prince of Orange, ſovereign of the Netherlands, came to Bruſſels, where he was waited upon by lord Lynedoch and the ſuperior officers of the Engliſh and Belgian troops, and had a long conference with the governor-general, baron de Vincent. On the next day, after attending divine ſervice, he gave audience to the members of the adminiſtration of the public boards, and the principal civil officers, and received addreſſes expreſſive of confidence and attachment. On the 1ſt of Auguſt, a proclamation was publiſhed by baron de Vincent, in which he acquainted the people of Belgium, that, the time fixed by the high allies for giving up the general government into the hands of the ſovereign-prince of the Netherlands being arrived, he was to take leave of them. He briefly dwelt upon the advantages that would accrue to them from that union, with a people already connected with them by a common origin, and common induſtry and virtues, which was deſtined by the general intereſt of Europe; and aſſured them that it would be rendered indiſſoluble, and that their new condition would be ſecured by the firmeſt guarantee that human power could give.

On the ſame day an addreſs to the Belgians, by the prince of Orange, was publiſhed. After informing them that the allied ſovereigns intended to give to Europe a political ſyſtem which would aſſure a long period of proſperity and repoſe to its nations, his royal highneſs ſaid, "The new deſtination of your beautiful provinces is a neceſſary part of this ſyſtem; and the negociations which are going to be opened at Vienna will have for their object to cauſe it to be recogniſed, and to conſolidate the extenſion of Belgium on a baſis conformable to your intereſts, to that of your neighbours, and of all Europe." He then announced his being called to the government of their country during the ſhort interval before this deſirable union, and expreſſed his wiſh of being aſſiſted by the moſt eſtimable characters among them, and his reſolution to bend all his attention to their welfare. This change in the preſent adminiſtration and future proſpects of the Belgian provinces ſeems to have been received with great ſatisfaction at Bruſſels, which enjoyed the expectation of becoming one of the capitals of the United Low Countries, and, by the concourſe of civil and military authorities and diſtinguiſhed ſtrangers, was daily reſuming the ſplendour and gaiety by which it was characteriſed when the ſeat of an Auſtrian court. The country, as far as the Maeſe, was evacuated by the Ruſſian and Pruſſian troops. Engliſh corps, and Germans in Britiſh pay, poured into Bruſſels and the other principal towns; and it appeared that Great Britain meant to take upon itſelf the chief ſhare in ſecuring the Belgian frontier till the final adjuſtment of the affairs of Europe.

About the cloſe of Auguſt, an arrangement was ſigned by the prince-regent of England and the prince-ſovereign of the Netherlands, in which it was ſtipulated, that Great Britain ſhould retain the Cape of Good Hope, Demerara, Eſſequibo, and Berbice; and that Batavia, and all the reſt of the conqueſts made upon the Dutch during the late war, namely, Surinam, Curaçoa, and St. Euſtatia, ſhould be reſtored to them. Ceylon, as being ceded to England before the war, remains in her poſſeſſion.

The prince-ſovereign of the Netherlands having returned to the Hague, on November 7th he opened the firſt ordinary ſeſſion of the ſtates-general with a ſpeech. He began with recounting the happy auſpices under which their ſitting commenced. "Perfect tranquillity reigns in every part of the country, though ſcarcely regenerated; the organization of the principal branches of the adminiſtration is proſecuting, conformably to the regulations of the fundamental laws, without obſtacle or even difficulty; every-where the ſpirit of induſtry and commerce manifeſts itſelf more and more, which we had reaſon to fear might have been totally extinguiſhed and annihilated during ſo many unhappy wars." His royal highneſs then proceeded to touch upon particulars relative to their ſituation. He regretted that, till the termination of the Congreſs, he could not inform them with certainty of the extent of the territory of the ſtate, and of its poſſeſſions beyond ſea, but adverted to the arrangements with the crown of England, which had enabled him to take meaſures for the re-occupation of the moſt conſiderable part of their ancient foreign dominions. He ſpoke with great ſatisfaction of the ſtate of the public finances, by which, at the end of 1814, fixteen months of the intereſt of the national debt, and the vaſt expenſes required by the re-eſtabliſhment of ſo many branches of the adminiſtration, might be wholly paid, all the accounts of government-ſervices ſince his acceſſion to power be liquidated, and a conſiderable ſum left in the treaſury applicable to the expenſes of the next year. On the whole, the view given by his royal highneſs of the ſtate of the country was ſuch as might gratify every patriot.

On the 8th of December, the ſecretary of finance, Mr. Falck, preſented to the ſtates an eſtimate of the expenditure for the year 1815, which amounted to 51,000,000 of guilders. He acquainted them, that by care and economy the expenſes of the laſt year had been reduced 3,700,000 guilders below the eſtimate, and that there would remain in the treaſury, at the end of the year, a ſum of about ten millions and a half. He gave reaſons for perſiſting, at the preſent time, in making extraordinary exertions; and recommended the continuance of the exiſting taxes, with the exception of ſome alteration in that on patents. The ſtates-general, after deliberating on the report, and on the plan of a law with which it was accompanied, paſſed a reſolution, approving of the ſame; and the patience with which neceſſary burdens are borne in this country, and the wiſe frugality diſplayed in the adminiſtration of its revenues, are equally deſerving of the applauſe and imitation of other ſtates.

In the new political ſyſtem of Europe which the Congreſs of Vienna had in view, few circumſtances are more worthy of attention than the union of the ſeventeen provinces of the Low Countries under one government The year 1814 cloſed with manifeſt preparations for ſuch a deſign. We have ſeen that the prince of Orange had been placed by the allied powers at the head of the government of the ten catholic provinces; and the numerous ſtrong places of that country had been occupied by garriſons compoſed for the moſt part of Britiſh and Hanoverian troops, with a mixture of Dutch and Belgic, obviouſly intended as a protection againſt French arms and French influence. The final development of the plan was, however, profeſſedly reſerved to the termination of the Congreſs. Long before this period, that aſſembly came to a deciſion on this momentous ſubject; and a letter from the prince-ſovereign of Holland to the ſecretary-of-ſtate at Bruſſels, dated February 23, 1815, announced, that by the unanimous conſent of Auſtria, Ruſſia, England, France, and Pruſſia, all thoſe parts of Belgium, which formerly belonged to the firſt of thoſe powers, had been placed under his ſovereignty, with the exception of ſome portions of the territory of Limburg and Luxembourg. With ſuch an aſſignment of territory, the prince of Orange acquired the regal title; and, in a ſpeech delivered to the Dutch ſtates-general, on the 16th of March, he declared his reſolution of taking poſſeſſion of the ſupreme authority over all the United Netherlands, and at the ſame time of inveſting himſelf with royalty. An addreſs was returned by the ſtates, expreſſive of their entire ſatisfaction, as well with the Belgic union as with the new title aſſumed by the ſovereign.

While the congreſs was yet ſitting, namely, on the 26th of February, Napoleon had quitted Elba, and landed on the French coaſt on the 1ſt of March; on the 20th he entered Paris in triumph, every ſoldier ſent againſt him having joined the ſmall band of troops he had brought over with him. This recovery of the ſupreme power in France by Napoleon was an event peculiarly menacing to the ſtability of the Belgic throne, ſince it could not be doubted, that, if he ſhould eſtabliſh his authority, the firſt employment of the French arms would be to regain the influence of that nation in the Low Countries. The moſt active efforts were therefore immediately made to place the frontier on the French border in a ſtate of defence. All the Britiſh and Hanoverian forces were collected together, which were ſtrengthened by ſtrong reinforcements from England, and ſeveral corps from Heſſe, Brunſwick, and other ſmall ſtates in Germany; and to theſe were added all the Dutch and Belgian troops. This army was placed under the command of the duke of Wellington, who was recalled from Vienna for that purpoſe. The Pruſſian army, under marſhal Blucher, alſo aſſembled in this country for co-operation. In ſhort, here all the force was collected; and here the battles were fought which obliged Napoleon to abdicate for the ſecond time, and which deprived him of his imperial and regal title.

When Napoleon landed at Cannes, he exultingly cried, "There is an end of the Congreſs!" This, however, proved not to be the caſe. They continued their deliberations; and, on the 1ſt of June, (before the commencement of general hoſtilities,) they completed and publiſhed their General Treaty, commonly called the Act of Congreſs. As this treaty is of the higheſt importance, and will be conſulted by preſent and future generations, we ſhall inſert the whole of thoſe articles which relate to the newly-formed kingdom of the Netherlands, though the reader will have obſerved that theſe articles had been already acted upon a conſiderable time before they were formally promulgated.

Article LXV. The ancient United Provinces of the Netherlands and the late Belgic Provinces, both within the limits fixed by the following article, ſhall form, together with the countries and territories deſignated in the ſame article, under the ſovereignty of his Royal Highneſs the Prince of Orange-Naſſau, Sovereign Prince of the United Provinces, the Kingdom of the Netherlands, hereditary in the order of the ſucceſſion already eſtabliſhed by the act of the conſtitution of the ſaid United Provinces.

The title and the prerogatives of the royal dignity are recogniſed by all the powers in the Houſe of Orange-Naſſau.

LXVI. The line compriſing the territories which compoſe the kingdom of the Netherlands, is determined in the following manner:—It leaves the ſea, and extends along the frontiers of France on the ſide of the Netherlands, as rectified and fixed by Article III. of the Treaty of Paris, of the 30th of May 1814, to the Meuſe; thence along the ſame frontiers to the old limits of the Duchy of Luxembourg. From this point it follows the direction of the limits between that Duchy and the ancient Biſhopric of Liege, till it meets (to the ſouth of Deiffelt) the weſtern limits of that canton, and of that of Malmedi, to the point where the latter reaches the limits between the old departments of the Ourthe and the Roer; it then follows theſe limits, to where they touch thoſe of the former French canton of Eupen, in the Duchy of Limburg; and, following the weſtern limit of that canton, in a northerly direction, leaving to the right a ſmall part of the former French canton of Aubel, joins the point of contact of the three old departments of the Ourthe, the Lower Meuſe, and the Roer; parting again from this point, this line follows that which divides the two latter departments, until it reaches the Worm (a river falling into the Roer), and goes along this river to the point where it again reaches the limit of theſe two departments, purſues this limit to the ſouth of Hillenſberg (the old department of the Roer), from whence it re-aſcends to the north, and, leaving Hillenſberg to the right, and dividing the canton of Sittard into two nearly-equal parts, ſo that Sittard and Suſteren remain on the left, it reaches the old Dutch territory; from whence, leaving this territory to the left, it goes on following its eaſtern frontier to the point where it touches the old Auſtrian principality of Gueldres, on the ſide of Ruremonde, and, directing itſelf towards the moſt eaſtern point of the Dutch territory, to the north of Swalmen, continues to incloſe this territory. Then, ſetting out from the moſt eaſtern point, it joins that part of the Dutch territory in which Venloo is ſituated; that town and its territory being included within it. From thence to the old Dutch frontier near Mook, ſituated above Genep, the line follows the courſe of the Meuſe, at ſuch a diſtance from the right bank, that all the places within a thouſand Rheniſh yards (*Rheinlandiſche ruthen*) from it ſhall belong, with their territories, to the Kingdom of the Netherlands; it being underſtood, however, as to the reciprocity of this principle, that the Pruſſian territory ſhall not at any point touch the Meuſe, or approach it within the diſtance of a thouſand Rheniſh yards.

From the point where the line juſt deſcribed reaches the ancient Dutch frontier, as far as the Rhine, this frontier ſhall remain eſſentially the ſame as it was in 1795, between Cleves and the United Provinces. This line ſhall be examined by a commiſſion, which the governments of Pruſſia and the Netherlands ſhall name without delay, for the purpoſe of proceeding to the exact termination of the limits, as well of the Kingdom of the Netherlands, as of the Grand Duchy of Luxembourg, ſpecified in Article LXVIII. and this commiſſion, aided by profeſſional perſons, ſhall regulate every thing concerning the hydrotechnical conſtructions, and other ſimilar points, in the moſt equitable manner, and the moſt conformable to the mutual intereſts of the Pruſſian ſtates and of thoſe of the Netherlands. This ſame arrangement refers to the fixing of limits in the diſtricts of Kyſwaerd, Lobith, and in the whole territory as far as Kekerdom.

The *enclaves* of Huiſſen, Malburg, Lymers, with the town of Sevenaer and lordſhip of Weel, ſhall form a part of the Kingdom of the Netherlands; and his Pruſſian Majeſty renounces them in perpetuity, for himſelf, his heirs, and ſucceſſors.

LXVII. That part of the old Duchy of Luxembourg which is compriſed in the limits ſpecified in the following article, is likewiſe ceded to the Sovereign Prince of the United Provinces, now *King of the Netherlands*, to be poſſeſſed in perpetuity by him and his ſucceſſors, in full property and ſovereignty. The Sovereign of the Netherlands ſhall add to his titles that of *Grand Duke of Luxembourg*, his majeſty reſerving to himſelf the privilege of making ſuch family-arrangement between the princes his ſons, relative to the ſucceſſion to the grand duchy, as he ſhall think conformable to the intereſts of his monarchy and to his paternal intentions.

The Grand Duchy of Luxembourg, ſerving as a compenſation for the principalities of Naſſau Dillenburg, Siegen, Hadamar, and Dietz, ſhall form one of the ſtates of the Germanic Confederation: and the King of the Netherlands ſhall enter into the ſyſtem of this confederation, as Grand Duke of Luxembourg, with all the prerogatives and privileges enjoyed by the other German Princes. The town of Luxembourg, in a military point of view, ſhall be conſidered as a fortreſs of the Confederation. The Grand Duke ſhall, however, retain the right of appointing the governor and military commandant of this fortreſs, ſubject to the approbation of the executive power of the confederation, and under ſuch other conditions as it may be judged neceſſary to eſtabliſh, in conformity with the future conſtitution of the ſaid confederation.

LXVIII. The Grand Duchy of Luxembourg ſhall conſiſt of all the territory ſituated between the kingdom of the Netherlands, as it has been deſignated by Article LXVI. France, the Moſelle as far as the mouth of the Sure, the courſe of the Sure as far as the junction of the Our, and the courſe of this laſt river as far as the limits of the former French canton of St. Vith, which ſhall not belong to the Grand Duchy of Luxembourg.

LXIX. His majeſty the King of the Netherlands, Grand Duke of Luxembourg, ſhall poſſeſs in perpetuity for himſelf and his ſucceſſors, the full and entire ſovereignty of that part of the Duchy of Bouillon which is not ceded to France by the treaty of Paris; and which, therefore, ſhall be united to the Grand Duchy of Luxembourg.

Diſputes having ariſen with reſpect to the ſaid Duchy of Bouillon, the competitor who ſhall legally eſtabliſh his right, in the manner hereafter ſpecified, ſhall poſſeſs, in full property, the ſaid part of the duchy, as it was enjoyed by the laſt duke, under the ſovereignty of his majeſty the King of the Netherlands, Grand Duke of Luxembourg. This deciſion ſhall be made by arbitration, and be without appeal. For this purpoſe there ſhall be appointed a certain number of arbitrators, one by each of the two competitors, and others, to the number of three, by the courts of Auſtria, Pruſſia, and Sardinia. They ſhall aſſemble at Aix-la-Chapelle, as ſoon as the ſtate of the war and other circumſtances may admit of it, and their determination ſhall be made known within ſix months from their firſt meeting. In the interim, his majeſty the King of the Netherlands, Grand Duke of Luxembourg, ſhall hold in truſt the property of the ſaid part of the Duchy of Bouillon, in order that he may reſtore it, together with the revenues of the provincial adminiſtration, to the competitor in whoſe favour the arbitrators ſhall decide; and his ſaid majeſty ſhall indemnify him for the loſs of the revenues ariſing from the rights of ſovereignty, by means of ſome equitable arrangement. Should the reſtitution fall to prince Charles of Rohan, this property, when in his poſſeſſion, ſhall be regulated by the laws of the ſubſtitution which conſtitutes his title thereto.

LXX. His majeſty the King of the Netherlands renounces in perpetuity, for himſelf, his heirs, and ſucceſſors, in favour of his majeſty the King of Pruſſia, the ſovereign poſſeſſions which the houſe of Naſſau-Orange held in Germany; namely, the principalities of Dillenburg, Dietz, Siegen, and Hadamar, with the lordſhip of Beilſtein, ſuch as thoſe poſſeſſions have been definitively arranged between the two branches of the Houſe of Naſſau, by the treaty concluded at the Hague on the 14th of July, 1814. His majeſty alſo renounces the principality of Fulda, and the other diſtricts and territories which were ſecured to him by the 12th article of the principal Receſs of the extraordinary Deputation of the Empire of the 25th of February, 1803.

LXXI. The right and order of ſucceſſion, eſtabliſhed between the two branches of the Houſe of Naſſau, by the act of 1783, called *Naſſauiſcher Erbverein*, is confirmed, and transferred from the four principalities of Orange Naſſau to the Grand Duchy of Luxembourg.

LXXII. His majeſty the King of the Netherlands, in uniting under his ſovereignty the countries deſignated in the 66th and 68th articles, enters into all the rights, and takes upon himſelf all the charges and all the ſtipulated engagements, relative to the provinces and diſtricts detached from France by the treaty of peace concluded at Paris the 30th of May, 1814.

LXXIII. His majeſty the King of the Netherlands, having recogniſed and ſanctioned, under date of the 21ſt July, 1814, as the baſis of the union of the Belgic Provinces with the United Provinces, the eight articles contained in the document annexed to the preſent treaty, the ſaid articles ſhall have the ſame force and validity as if they were inſerted, word for word, in the preſent inſtrument.

The population of the kingdom of the Netherlands, as thus conſtituted, amounts to 5,451,000 perſons.

On the 18th of July, a proclamation was iſſued by the king, notifying the union of the United Provinces with Belgium, as agreed upon by the allied powers, and accepted by himſelf, with the leading articles of that union. The firſt of theſe is, that the two countries ſhall form one ſtate, governed by the conſtitution already eſtabliſhed in Holland, modified by conſent, according to the new ſtate of things. It declares, that the Belgian provinces ſhall be duly repreſented in the ſtates-general, which are to be held alternately in a town of Holland, and in one of Belgium; but ſays, that, before the introduction of the fundamental law, his majeſty has reſolved to convince himſelf of the aſſent of his ſubjects, for which purpoſe he has convoked deputies, or notables, from each diſtrict, to be the organs of the general opinion. The conſtitutional plan was laid before a ſpecial aſſembly of the ſtates-general of the United Netherlands on the 8th of Auguſt; and its unanimous acceptance was announced on the 19th, by a deputation which waited on the king.

By the new conſtitution of the Netherlands, the prerogative of the ſovereign is conſiderably greater than in England; ſince, in addition to the power of making war and peace, diſpoſing of the naval and military force, and conferring titles of nobility, he poſſeſſes the ſupreme direction of the colonies; and all this without being counterpoiſed in any effectual manner by the influence of parliament. The Belgic or Dutch Peers have their title only for life, and cannot enter the houſe until the age of forty; characteriſtics which will bring to the recollection of our readers the council of elders in the French conſtitution of 1795. Another feature, unfavourable to the independance of either lords or commons, is their acceptance of a pecuniary indemnity for their expenſes; in other words, of an annual ſalary of between 200l. and 300l. a-year. The peers may vary in number from forty to ſixty; while the commons are fixed to one hundred and ten, of whom fifty-five are from the Dutch provinces, and a ſimilar number from thoſe of Flanders. The following are the proportions.

Dutch Departments.		*Flemiſh Departments.*	
Guelderland	6	South Brabant	8
Holland	22	Limburg	4
Zealand	3	Liege	6
Utrecht	3	Eaſt Flanders	10
Frieſland	5	Weſt Flanders	8
Overiſſel	4	Hainault	8
Dutch Brabant	7	Antwerp	5
Groningen	4	Namur	2
Drenthe	1	Luxembourg	4
	55		55

The mode of electing deputies is not, as with us, by the direct act of the conſtituents, but by the agency of intermediate bodies. Firſt is named a college or council of electors, who appoint the town-council; after which, the latter, or the electors juſt mentioned, proceed to chooſe what are called the Provincial States, or permanent county-meeting; whoſe juriſdiction is very extenſive, compriſing all the details of police and local economy of the public education, the execution of the laws relative to public worſhip, and, in general, all provincial affairs not falling under the legiſlative operation of the ſtates-general, or national repreſentatives. Here lies a material difference between our forms and thoſe of the Netherlands; the latter continuing in a great meaſure that federal plan, that habit of leaving to each province the management of its local concerns, (as in North-America,) which with us has given way to the general juriſdiction of parliament. Bills for making canals, harbours, or bridges, for incloſing commons, improving towns, &c. do not, as in England, require the ſanction of the national repreſentatives; all ſuch buſineſs being ſettled by the Provincial States. The members of the Commons' Houſe of Parliament in the Netherlands are choſen for three years, and a third part is renewed in every year; ſo that the annual election can never exceed thirty-ſix or thirty-ſeven members. In the Netherlands and in France, no bill can be brought into parliament but by the miniſters of the crown; and we have to mention the want of another very important privilege, the right of petitioning in conjunct bodies; it being a law that petitions muſt be drawn in the name of an individual, and not in that of a collective number.

One great difficulty, which might be foreſeen in effecting a coaleſcence of the whole Netherlands under one form of law and government, aroſe from the very different feelings concerning religion which prevailed in the two portions of the country. The ſeven Dutch provinces were in a great meaſure indebted for their proſperity to that principle of general toleration in which they long ſtood diſtinguiſhed among the nations of Europe, and which was fundamental in their political ſyſtem. The ten Flemiſh provinces, on the contrary, from the time of their ſeparation from the others, adopted in its extreme the excluſive maxim of the Roman-catholic church, and acquired the character of ſome of the moſt bigoted and intolerant members of that community. The attempts of the emperor Joſeph to enforce a toleration of different religions were reckoned among his moſt heinous violations of the Belgic rights, and were finally defeated with the reſt of his projects. It might be ſuppoſed, that the great political changes ſince his time, and particularly the long ſubjection of thoſe provinces to France, would have produced a change in men's opinions on this ſubject: and this was probably the caſe with reſpect to the body of the laity; but, among the high clergy, whoſe prejudices and intereſts combined in the ſupport of the ancient ſyſtem, there exiſted all the former repugnance to admit a principle equally hoſtile to both. The operation of theſe combined motives was remarkably manifeſted by the publication of an addreſs from certain of the Belgian prelates to the king of the Netherlands, dated July 28. Beginning with the king's aſſurance, in his proclamation, of confirming to the catholic church its eſtabliſhment and privileges, they affirm that theſe are inconſiſtent with an article in the plan of the new conſtitution, by which equal favour and protection are promiſed to all religions. They next endeavour hiſtorically to prove the incompatibility of ſuch a toleration with the canonical laws and fundamental principles of the catholic church. They ſay, "We are bound, ſire, inceſſantly to preſerve the people entruſted to our care from the doctrines which are in oppoſition to thoſe of the catholic church. We could not releaſe ourſelves from this obligation without violating our moſt ſacred duties; and, if your majeſty, by virtue of a fundamental law, ſhould protect in theſe provinces the public profeſſion and ſpreading of theſe doctrines, we ſhould be in formal oppoſition to the laws of the ſtate." In a kind of menace, they proceed to inform the king, that ſuch regulations, if confirmed, could only lead to a renewal of the troubles which deſolated theſe provinces in the ſixteenth century; and that they muſt, ſooner or later, alienate the hearts of his faithful ſubjects in this part of his kingdom, “ with whom attachment to the catholic faith is ſtronger and more lively than in any other country in Europe.” From theſe purely-religious complaints, they turn to another of a civil nature: “ The clergy of theſe provinces have obſerved, not without pain, that your majeſty has been perſuaded to exclude them from the aſſemblies in which the great intereſts of the ſtate were diſcuſſed; that the plan of the new conſtitution contains honourable diſtinctions for the nobility; and that the clergy, one of the firſt claſs in the ſtate, are deprived of them; that they will not even have the right of being repreſented in the provincial aſſemblies; that their influence on the acceptance of the new conſtitution is carefully removed, ſo that the moſt diſtinguiſhed members of the clergy are not, according to the expreſſions of your majeſty's proclamation, among the perſons moſt worthy of the confidence of their fellow-citizens; laſtly, that they are not allowed to inſcribe their diſſenting votes on the liſts of the notables.” This addreſs, which contains many other remarks of a ſimilar nature, was ſigned by the biſhops of Ghent, Namur, and Tournay, and the vicars-general of Liege and of Malines. An eccleſiaſtical proteſt of this kind was capable, at a former period, of lighting up a dangerous flame. At the preſent, it was more likely to throw diſcredit upon the religion of which it was the advocate, as being radically intolerant, and admitting no union with other forms of Chriſtianity. It does not appear to have produced any alteration in the reſolutions formed by the ruling powers relative to the ſyſtem of religious affairs for the Netherlands. The king, on September the 10th, iſſued an ordinance with the following preamble: “ Conſidering that it is juſt and expedient to recur to the advice of functionaries profeſſing the catholic religion, for every meaſure of adminiſtration relative to the public exerciſe of that religion, and eſpecially for what regards the relations between the clergy of our kingdom and the holy ſee; and deſiring to confirm, by a ſpecial and permanent inſtitution, our reſolution to remove every thing which might tend to weaken the real guarantee which the conſtitution ſecures to the liberty of all forms of worſhip, or which might in any degree affect the dogmas and the diſcipline of the Roman-catholic religion, or hinder thoſe who profeſs it from freely exerciſing their faith as heretofore, we have decreed,” &c. From this formula, it will appear, that only protection, and not maſtery, and ſtill leſs an excluſive power, is given to the Roman church in Belgium. The ſubſequent articles contain the appointment of a committee of the council of ſtate, conſiſting of three or four catholic members, to which is to be referred every thing relating to catholic worſhip.

On September the 21ſt, the ceremonial of the inauguration of the King of the Netherlands was performed at Bruſſels, with all due ſolemnity, and with every external mark of general ſatisfaction. His majeſty in his ſpeech took notice of the union, under the ſame ſovereign and laws, of the ſeventeen provinces in the reign of the emperor Charles V. and congratulated the aſſembly on the proſpect of its renewal, after a ſeparation of nearly three centuries. He was replied to in an appropriate ſpeech by the preſident of the firſt chamber; after which, the conſtitution was read, and the king pronounced the oath with peculiar energy. The proceſſion then repaired to the church of St. Gudule, at the door of which the king was received by the very reverend M. Mille, entitled chief prieſt and *pleban*, who addreſſed to him a diſcourſe entirely free from any of the ſentiments of the prelatic addreſs above mentioned, and claiming only the protection for the catholic religion guaranteed by the conſtitution. The firſt ſitting of the ſtates-general at Bruſſels opened on the 25th, and one of the earlieſt of its acts was a donation to the duke of Wellington, as prince of Waterloo, of an eſtate on the very theatre of his triumph. The ſeſſions, in which every thing paſſed with unanimity, was ſoon after cloſed.

In October was officially publiſhed the boundary-treaty between the King of the Netherlands and the Emperor of Auſtria, concluded at Vienna, on May the 31ſt. It marks out topographically all the limits between the ſeventeen Belgic provinces and their neighbours, compriſing alſo a part of the ancient Duchy of Luxembourg, to be poſſeſſed in perpetuity by the Sovereign of the Netherlands, as a compenſation for ſome principalities in Germany, which are to form one of the ſtates of the German Confederation. The King of the Netherlands alſo renounces, for himſelf and his ſucceſſors, in favour of the King of Pruſſia, the ſovereign poſſeſſions of the houſe of Naſſau-Orange in Germany.

The ſeſſion of the ſtates-general at the Hague was opened on October the 16th, by a ſpeech from the king; the principal object of which was, to prepare the public mind for thoſe great financial ſacrifices which the unforeſeen events of the year had rendered neceſſary, and which darkened the favourable proſpects of the former year. In a ſhort ſpace of time it had been requiſite to arm whole lines of fortreſſes, to double the national army, and to maintain the ſtill more numerous armies of the allies. It was intimated that the means of providing for all theſe expenſes would be the moſt ſerious ſubject for the aſſembly's deliberations; and a hope was expreſſed, that an introduction of taxes of the ſame kind throughout the kingdom, would put an end to the difficulties at preſent experienced. Some conſolation was derived from the revival of various branches of induſtry, in conſequence of the return of peace, and the renewed connexion with the colonies; and hope for the future was ſuggeſted, as a reſult of the new guarantees for general tranquillity, to be expected from the treaty of the aſſociated ſovereigns. The addreſs, in anſwer to the ſpeech, drawn up by the ſecond chamber, and approved by the firſt, expreſſed entire ſatisfaction with all the meaſures ſuggeſted by his majeſty to recover the nation from its difficulties, and promiſed their cordial co-operation in bringing his plans to effect. At a ſitting of the ſecond chamber, a report was made by the miniſter of finance, in which the deficit was ſtated at forty millions of guilders, for which it was propoſed to provide by an iſſue of exchequer-bills, to be liquidated, in the courſe of ten years, by an additional fifteen per cent. upon a number of exiſting taxes. At the ſitting on October 24, a communication was made to the chamber of a convention concluded between the Kings of Great Britain and of the Netherlands, relative to the ceded Dutch colonies in the Weſt Indies, in which various advantages were ſtipulated for the trade of the Netherlands. The Belgians were at this time highly gratified with the recovery of their valuable works of art from the muſeum of the Louvre.

A very important event to the new kingdom of the Netherlands, was announced to the ſtates-general, on December 13, in a meſſage from the king. This was a contract of marriage between William-Frederic prince of Orange, heir-apparent to the crown, and the Grand Ducheſs Anna Pawlowna, ſiſter of the emperor of Ruſſia. His majeſty, among the deſirable conſequences of ſuch an union, mentioned the new ſupport which it offered to the intereſts of the commercial part of the nation in the north of Europe; and the guarantee it afforded, to the whole kingdom, of the durable kindneſs of a court which had ſo powerfully contributed to its foundation. He then preſſed the conſent of the ſtates to the marriage, as required by the conſtitution. This was unanimouſly given; and the union took place on the 21ſt of February, 1816. The iſſue of this marriage is a ſon and heir.

It gives us great pleaſure to record, that, on the 4th of May, 1818, a treaty was concluded between this country and the king of the Netherlands, for the abolition of the ſlave-trade. This treaty has been ſince duly ratified and exchanged. By the firſt article, the king of the Netherlands engages, within eight months from the date thereof, or ſooner if poſſible, to prohibit all his ſubjects from taking any part in the trade of ſlaves; and, in the event of the meaſures hereafter to be adopted being found inſufficient for that purpoſe, his majeſty further engages to adopt ſuch others as may appear beſt calculated to ſecure it. The ſecond article provides for the right of mutual ſearch, on the part of both the contracting powers; and the third explains the mode in which that right ſhall be exerciſed.

For ſome particulars relative to the climate and produce of this kingdom, ſee the articles FLANDERS and HOLLAND.

The manners and cuſtoms of the Netherlanders partake of thoſe of their neighbours, the Dutch and French, the phlegm of one being tempered by the vivacity of the other. The lower claſſes have been fond of religious pageantry, and much addicted to the ſuperſtitious obſervances of the catholic ſyſtem. The three chief cities of what were called the Auſtrian Netherlands are, Bruſſels, Ghent, and Antwerp. The other principal towns are, Mans, Bruges, Namur, Luxembourg, Roermond, and Limburg. The ſea-coaſt of Flanders, the maritime province, conſiſts chiefly of ſandy hills and downs, and has few inlets, moſt of the rivers flowing into the Scheldt. The two ports that deſerve particular notice are, the Sluys and Oſtend. The Netherlands exceed every country in Europe, not only in the number, but in the great extent, of its cities, towns, and villages. (See FLANDERS, vol. vii. p. 442.) The chief edifices are cathedrals, churches, and monaſteries. The canals of this country are very numerous, and ſome of them ancient. They interſect the provinces in all directions, ſuch are thoſe of Bruſſels, Ghent, Antwerp, Oſtend, &c. but of late years they have been much neglected. The manufactures and commerce of the Netherlands, which were formerly ſuperior to any in the weſt of Europe, have much declined, partly becauſe other powers entered into competition, and partly becauſe freedom was eſtabliſhed in the United Provinces, ſo that Amſterdam aroſe upon the ruins of Antwerp. The little commerce that is left is chiefly inland to Germany. The Eaſt-India Company of Oſtend was ſuppreſſed by the jealouſy of England and other powers; and the chief commerce was afterwards carried on by the Engliſh eſtabliſhed in that city. Some few fragments of the manufactures ſtill remain. Cambray is renowned for its cambrics, and and Tournay or Dornik was anciently famous for the fineſt linens. At Bruges there are ſtill ſome manufactures of broad-ſays, baize, and other woollens; conſiderable fabrics of broad-cloth, druggets, ſhalloons, and ſtockings, were conducted at St. Omer's, chiefly with wool ſmuggled from England. The principal manufactures of tapeſtry, fine linen, and laces, are at Mechlin, Bruſſels, Ghent, Antwerp, and Louvain; and theſe ſtill enrich the country, and induce the farmers to cultivate flax, even on the pooreſt ſoils. For home-conſumption, the Netherlanders produce abundance of corn and vegetables; and the coal-mines, if they were properly conducted, would be important. Turf for fuel is plentiful, as are alſo iron, porcelain, clay, and various other commodities. The climate reſembles that of the ſouth of England, and is more moiſt than warm; nevertheleſs Luxembourg produces ſome wine, reſembling Rheniſh in auſterity, but deſtitute of its ſpirit. The face of the country is generally level; the ſoil is a rich ſandy loam, interſperſed occaſionally with fields of clay, but more frequently with large intervals of ſand. The Netherlands, by the prevalence and boaſted excellence of its agriculture, have been long deemed the garden of Europe. The repeated crops of excellent clover, cole, turnips, and clean crops of flax, barley, and oats, have attracted the attention of accurate obſervers; and, indeed, the agriculture of this country has been celebrated for 600 years, ever ſince their commerce and manufactures became eminent; and it is remarked, that they ſtill poſſeſs the eſſentials of good huſbandry, in the deſtruction of weeds, and perpetual crops. Hops, a native and peculiar product, adopted in England in the reign of Henry VIII. are abundant. The Netherlanders never allow the land to lie fallow.

The chief river of the Netherlands is the Scheldt, which receives two other ſtreams, the Lys and the Scalpe. The Dyle joins the Scheldt above Neil, after receiving from the eaſt the Dermer, the Nette, or Nethe, from the north, and the Senne from the ſouth. The Netherlands, although they have no elevations that deſerve the name of mountains, have ſeveral woods and foreſts of conſiderable extent. The plants that are natives of this country may be found in the ſandy and marſhy diſtricts of the ſouth-eaſt coaſt of England, except the Gentiana cruciata. The breed of horſes and cattle in this country is eſteemed for its ſize. In various provinces are minerals of different kinds; ſlate, marble, and alabaſter.

The Dutch long took the lead of other countries, and even of England, in the extent and variety of their taxes: a pre-eminence unfortunately acquired by their long wars with Spain and France, and by the annual expenditure of property that was neceſſary to prevent the encroachments of the ſea. Their example ſupplied accordingly a number of uſeful hints to Mr. Pitt and his financial ſucceſſors; who have, however, ended by ſurpaſſing their maſters in ingenious expedients for extracting money out of the pockets of the public. Yet we might ſtill take a leſſon from our neighbours in ſome particular caſes; as in modifying the window-tax ſo as to make it payable by the rent, inſtead of the number or ſize of the windows; which latter practice will ſooner or later lead to the defacing of our dwellings, or the injury of our health by excluding the light and air. We muſt guard, however, againſt imitating either Dutch or French in the tax on patents; in other words, an impoſt on trades and profeſſions: the quantum of which is adapted with very minute attention to the nature of the buſineſs and the ſize of the town in which it is exerciſed. A patent as a merchant or agent for the ſale of foreign goods, coſting in Amſterdam 25l. a-year, may be obtained for 22l. in a town of the ſecond claſs; for 17l. in one of the third; for 13l. in one of the fourth; and for 9l. in one of the fifth claſs. The ſixth claſs compriſes forty ſmall towns, where the coſt of a patent for the occupation juſt mentioned is in them only 5l. and this is farther reduced to 3l. 10s. in the ſeventh claſs, which is the common receptacle for petty towns or large villages.

In taxing foreign goods, the Belgic legiſlature proceeds on the old mercantile ſyſtem of admitting without duty raw materials, ſuch as wool, flax, cotton, and hides; while manufactured goods are burdened with as heavy a tax as there is any chance of collecting without throwing open the door to ſmuggling. Theſe impoſts extend not only to woollens, printed cottons, carpeting, and other ſuch articles, but to beer, for the ſake of protecting their own barley-growers; and to coals, that they may encourage their own mines. The government, or at leaſt a part of the government, is alive to the impolicy of ſuch reſtrictions in a general view, but conſiders their maintenance as neceſſary to tranquillize the people, and to prevent any ſudden change in the ſtate of productive induſtry. The ratio of duty on ſuch articles as hardware, furniture, candles, blankets, hoſiery, and thoſe commodities which do not come directly in competition with the local manufactures, is 10 per cent. but on groceries the duty is extremely moderate; a point of no little conſequence to thoſe of our countrymen who ſettle with their families in the Netherlands. The Belgic manufacturers have been of late years in a moſt embarraſſed ſtate, in conſequence partly of the formidable competition of the Engliſh, and partly of the prohibition of ſending the products of their induſtry into France. The French government, obliged by the clamour of its own manufactures to prohibit the introduction of foreign goods, has eſtabliſhed a triple line of cuſtom-houſes along the Belgic frontier.

Mr. Mitchel, a late traveller, has given us a very intereſting account of the regulations which concern the important ſubject of education in the Netherlands; his accounts of the different eſtabliſhments being given not on hearſay, but from actual obſervation and official documents. He begins by praiſing an exiſting regulation, which exacts a previous examination in the caſe of every perſon claiming a licence to ſet up as ſchool-maſter. Four diſtinct degrees of qualification are preſcribed; and he who has paſſed only for the loweſt muſt not preſume to teach the branches which require a higher degree, although at perfect liberty to return after an interval, and ſtand a ſecond examination for a more favourable report. This arrangement has the effect of preventing much of the groſs impoſition practiſed in England by men who undertake teaching as a trade, and who often have no other qualification than the command of the money that is neceſſary to buy a ſhare of an eſtabliſhed ſeminary. Generally ſpeaking, education is well diffuſed throughout Holland, and the elementary ſchools are reſpectably taught. Mr. M. proceeds to give a practical example of the higher ſeminaries in the caſe of the Lycée of Ghent; one of thoſe provincial colleges or academies that have been eſtabliſhed during late years in France and the countries ſubject to her, and which contain from 100 to 200 pupils, according to the population of the town and neighbourhood. In that Lycée the ſuperintendants are a regent and thirteen teachers, or *profeſſeurs*, as it is cuſtomary in the complimentary language of our neighbours to call them, with an income of ſomewhat more than 100l. a-year each; and the objects of education are French, German, Engliſh, mathematics, drawing, claſſics, geography, and rhetoric. Annual prizes are diſtributed; ſeveral *bourſes*, or ſcholarſhips, are appropriated to thoſe of ſuperior progreſs; and the whole expenſe of the board and education in theſe ſeminaries is about 40l. a-year.

For a conſiderable time paſt, Belgium has poſſeſſed no ſeminary dignified with the name of univerſity: but an act was lately paſſed for the eſtabliſhment of one at Ghent, and for the reſtoration of the old univerſity of Louvain. The Dutch provinces contain three univerſities, Leyden, Utrecht, and Groningen; and ſix athenæ, or provincial colleges, in as many of the principal towns which happen to be ſituated at a diſtance from the univerſities. The athenæ have not the privilege of conferring degrees; ſo that the ſtudents educated there muſt go for twelve months to an univerſity, before they can obtain the credentials neceſſary for entering the church, or practiſing in the higher departments of law and medicine. The ſalaries are ſomewhat higher than in the Belgic provinces, thoſe at the univerſities being from 200l. to 250l. per annum, excluſive of fees: at the athenæ, the ſalaries are about 150l. The ſeſſion in the Dutch univerſities commences in September, and cloſes about the end of June; leaving, with a ſhort interval at Chriſtmas and at Eaſter, ſomewhat leſs than three months of vacation for the whole year. The number of ſtudents at Leyden is about 300, of whom a proportion ſtudy medicine, without the proſpect of attaining an independence by their profeſſion, the fees of phyſicians throughout the Netherlands being as much below the fair medium, as they often are above it in our part of the world. The univerſity at Utrecht is on a ſmaller ſcale than that of Leyden: but the town is preferable as a reſidence, its ſituation being on a riſing ground, the firſt which the traveller diſcovers in an extent of forty miles on coming from the weſtward. The walks on the ramparts and on the outſide of the town are very pleaſant; and nothing can ſurpaſs the gratification of even this ſlight elevation, after having been for many weeks on a dead flat. The view from the tower of the cathedral is one of the moſt extenſive in Europe; taking in the moſt populous cities of Holland to the weſt, and to the ſouth a country finely diverſified with gentle eminences. The population of Utrecht is 32,000; and Mr. M. has no heſitation in pronouncing it to be the beſt reſidence in Holland for a literary man.

The title of the preſent ruler of this country is, "William, by the grace of God, King of the Netherlands, Prince of Orange-Naſſau, and Duke of Luxembourg." The motto of his arms, *Je maintiendrai*, "I will maintain." His eldeſt ſon takes the title of "Prince of Orange." *Mitchell's Tour in Belgium*, 1816. *Gifford's Hiſt. of the Wars occaſioned by the French Revolution*, 1817.

NETH'ERMOST, *adj.* Loweſt.—Great is thy mercy toward me, and thou haſt delivered my ſoul from the *nethermoſt* hell. *Pſalm* lxxxvi. 13.—All that can be ſaid of a liar lodged in the very *nethermoſt* hell, is this, that if the vengeance of God could prepare any place worſe than hell for ſinners, hell itſelf would be too good for him. *South.*—Heraclitus tells us, that the eclipſe of the ſun was after the manner of a boat, when the concave, as to our ſight, appears uppermoſt, and the convex *nethermoſt*. *Keil againſt Burnet.*

Undaunted to meet there whatever power
Or ſpirit of the *nethermoſt* abyſs
Might in that noiſe reſide. *Milton.*

NETH'ERTHONG, a village near Wakefield in Yorkſhire.

NETH'ERTON, a village in Cheſhire, near Frodſham and the Merſey.—A village in Devonſhire, near Sidmouth. —A village in Northumberland, ſouth-eaſt of Morpeth.

NETH'ERTON, Worceſterſhire, between Eveſham and Elmſley-Caſtle, is a hamlet in the pariſh of Cropthorn. The remains of an old chapel are now viſible in a barn.

NETH'ERTON, a village in the weſt riding of Yorkſhire; three miles ſouth-weſt of Wakefield.

NETH'INIMS, [Heb. given, or offered.] The poſterity of the Gibeonites, who were condemned by Joſhua to be hewers of wood and drawers of water for the houſe of God. The Nethinims are mentioned 1 Chr. ix. 2. Neh. vii. 60. and Ezr. ii. 58. viii. 20. Ezra in this latter paſſage, informs us, that they were "given" by David to the Levites, which is the origin of their name; as the Levites were given by God to help the prieſts; and, therefore, in all places they are mentioned with holy perſons. Some have called theſe perſons inferior clergy; but they ſeem rather to have been ſervants to them. However mean their original, or low and laborious their employment may have been, the people of Iſrael were indebted to them for their zeal for the houſe of God. Many of them readily returned from Babylon to Judea, and performed their part for upholding the worſhip of God at his temple.

NETH'Y, a river of Scotland, which riſes in Invernesſhire, and runs into the Spey three miles ſouth-eaſt of Grantown.

NE'TIESS, a town of Bohemia, in the circle of Schlan: eleven miles north-eaſt of Schlan.

NE'TO, a river of Naples, which runs into the ſea ſeven miles north-north-weſt of Cortona.

NETO'PHAH, or NETOPH'ATHI, a city of Judah, between Bethlehem and Anathoh, and peopled by the poſterity of Salma, the father of Bethlehem. It is ſaid to have been noted for olives and artichokes. 1 *Chron.* ii. 51, 54. Whether it be the ſame as Nephtoah, we know not; but Maharai, one of David's mighties, and Ephai, a captain that ſubmitted to Gedaliah, were natives of this place. 2 *Sam.* xxiii. 28. *Jer.* xl. 8.

NETO'PION, *ſ.* [Greek.] A name given by the ancients to a very fragrant and coſtly ointment, conſiſting of a great number of the fineſt ſpicy ingredients. Hippocrates, in his Treatiſe of the Diſeaſes of Women, frequently preſcribes the netopion in diſeaſes of the uterus; and in other places he ſpeaks of its being poured into the ear as a remedy for deafneſs; theſe compoſitions, by their attenuating qualities, dividing the viſcous and thick humours. *Chambers.*

NET'PHE (Lower), a town of Germany, in the principality of Naſſau Siegen: four miles eaſt of Siegen.—(Upper), a town of the ſame principality: five miles eaſt of Siegen.

NETSBUCK'TOKE, or Sandwich Bay, a bay on the eaſt coaſt of Labrador. Lat. 53. 45. N. lon. 57. 30. W.

NET'SCHER (Gaſpard), an eminent painter of the Dutch School, was the ſon of a ſculptor, either at Stutgard or Heidelberg, who died, leaving a widow and young family in indigent circumſtances, and particularly diſtreſſed on account of a war which raged in that country. Gaſpard, who was born in 1639, was brought while a child by his mother to Arnheim, where he was educated at the expenſe of a phyſician named Tullekens. It was his patron's intention to bring him up to his own profeſſion; but a decided propenſity to the arts of deſign prevented this deſtination; and he was placed firſt with a painter on glaſs; then with one Koſter, a painter of fowls and game; and finally with Terburg, an artiſt of reputation at Deventer. Gaſpard was extremely aſſiduous in copying after nature, and he attained an excellence in imitating various objects which has ſcarcely ever been equalled. The gloſs of ſatins, the pile of Turkey carpets, the texture and figure of ſtuffs, and the like, were repreſented by him ſo as to become perfect deceptions. Not contented, however, with this ſpecies of excellence, he reſolved to go for improvement to Rome; but, having proceeded as far as Bourdeaux, he fell in love, and married. This incident put an end to his Italian journey, and he returned and ſettled at the Hague. He there commenced portrait-painter, in which branch he acquired ſo much reputation, that all the ambaſſadors and other diſtinguiſhed foreigners who frequented that court ſat to him before leaving it. His fame procured him an invitation to England from Charles II. but he preferred a more unconſtrained life at home. His ſtate of health was another obſtacle to a removal; for he was afflicted with the gout and gravel, which diſorders put a period to his life in 1684, or, according to another account, in 1687. Gaſpard Netſcher ranks among the beſt painters of his ſchool. In addition to the exact imitation of nature before mentioned, he poſſeſſed a light and delicate touch, a correctneſs of outline, a fine tone of colouring, with thorough knowledge of the chiaro-ſcuro; and though he retained the national taſte in his figures, there is grace in the airs of his heads, eſpecially of the females, with a natural and pleaſing expreſſion. He painted in ſmall ſize, and almoſt confined himſelf to portrait. Two of his pictures in the royal collection at Paris, a lutaniſt playing, and a muſician teaching a lady on the baſs-viol, are greatly admired.

NET'SCHER (Theodore), was ſon of the above, who taught him the art of painting from his earlieſt years, ſo that at the age of nine he was accounted a very extraordinary performer; and when he had attained his eighteenth year, he was ſolicited by count d'Arvaux to go to Paris, where he was greatly admired and encouraged. His principal occupation there, where he continued for twenty years, was painting the portraits of the principal perſons about the court, which he did with great ſucceſs, and for which he was very highly applauded and handſomely rewarded; but the taſte they were executed with is by no means of the higheſt claſs. He made the moſt of the lace cravats and ruffles, the rich velvet robes embroidered with devices, &c. then in uſe. But the principal office of portraiture was loſt in this maſs of tinſel and flutter: the minds of his ſubjects ſeem never to have engaged his thoughts, or are, by accident rather than deſign, brought forth in a few inſtances; whilſt the idle affectation of ſtate ſelf-importance reigns predominant in them: as if a nobleman could not have the air of a great man, without (to uſe a common expreſſion) at the ſame time "looking big." He died in 1732, at the age of 71

NET'SCHER, (Conſtantine), another ſon of Gaſpard, who was born at the Hague, in 1670. He alſo practiſed the art of painting under the tuition of his father, but was ſo unfortunate as to loſe that advantage at the early age of fourteen. He nevertheleſs endeavoured to compenſate himſelf for that loſs, by the careful ſtudy of his father's works; and, though he never was able to equal them, yet he arrived at no mean degree of ſkill in his profeſſion. His principal practice was in portraiture, in which he was much encouraged; but, being of an infirm habit of conſtitution, he was much interrupted in his labours, and died at the age of 52.

NET'SCHETIN, a town of Bohemia, in the circle of Pilſen: nine miles ſouth-eaſt of Teuſing.

NETSCH'KAU, a town of Saxony, in the Vogtland, ſituated on the Golſch: three miles ſouth-ſouth-eaſt Greitz, twelve ſouth-weſt Zwickau.

NET'TANGER, a town of Sweden, in Helſingland: ſix miles ſouth Hudwickſwal.

NET'TE, a river of France, which runs into the Rhine two miles above Andernach.

NET'TE, a town of Weſtphalia, in the biſhopric of Oſnabruck: four miles north-eaſt of Oſnabruck.

NET'TE, a river of Weſtphalia, which riſes in the Harz Foreſt, and runs into the Innerzee twelve miles ſouth-eaſt of Hilderſheim.

NET'TE, a river which riſes in the biſhopric of Paderborn, and runs into the Weſer three miles ſouth Corvey.

NET'TER (Thomas), a learned Engliſh carmelite monk in the fourteenth and former part of the fifteenth century, was ſurnamed *Waldenſis*, moſt probably from the place of his birth, which it is not unlikely was Saffron-Walden in Eſſex. He embraced the religious life in a monaſtery at London, and was afterwards ſent to the univerſity of Oxford. Here he purſued his ſtudies with great ſucceſs, and became public profeſſor, at firſt of philoſophy, and then of divinity. In the faculty laſt mentioned he was admitted to the degree of doctor. He zealouſly conteſted the opinions of Wickliff, both in the ſchools and in the pulpit; was elected provincial of his order; and by the command of king Henry IV. attended the council of Piſa in 1409. By Henry V. he was appointed privy counſellor, and confeſſor; and ſent to the council of Conſtance, where he diſtinguiſhed himſelf by his ſpeeches againſt the Wickliffites and Huſſites. He likewiſe poſſeſſed the favour of Henry VI. and went to France with the intention of being preſent at his coronation at Paris; but he died on his journey at Rouen, in the year 1430. He was the author of, 1. Commentaries on Geneſis, Exodus, Leviticus, the Acts of the Apoſtles, the Epiſtle of St. Paul to the Romans, and the Firſt Epiſtle of St. Peter. 2. Doctrinale Antiquitatem Fidei Eccleſiæ Catholicæ, which was publiſhed after his death in 1571, in three volumes, folio, and is ſtill held in great eſteem by Catholics. 3. In Ariſtotelis Libros de Cœlo et Mundo. 4. A multitude of Diſſertations, Diſputations, Dialogues, Sermons, Letters, &c. which are enumerated in *Freheri Theatrum Vir. Erud. Clar.*

NET'TING, *ſ.* A reticulated piece of work. The act of making a net.

Nettings, in a ſhip, a ſort of grates made of ſmall ropes ſeized together with rope-yarn or twine, and fixed on the quarters and in the tops; they are ſometimes ſtretched upon the ledges from the waſte-trees to the roof-trees, from the top of the forecaſtle to the poop, and ſometimes are laid in the waſte of a ſhip to ſerve inſtead of gratings. *Chambers.*

NET'TLE, *ſ.* [netel, Sax. *naella*, Icel, to prick, to ſting. *Serenius.*] A ſtinging herb well known. See Urtica.—The ſtrawberry grows underneath the *nettle.* *Shakeſpeare.*

Some ſo like to thorns and *nettles* live,
That none for them can, when they periſh, grieve. *Waller.*

NET'TLE, Bee; See Galeopsis.

NET'TLE, Dead; ſee Lamium. Yellow Dead; ſee Neckera. Stinking Dead; ſee Galeopsis.

NET'TLE, Hedge; ſee Galeopsis. Shrubby Hedge; ſee Prasium.

Sea-Nettle, in helminthology. See Medusa, vol. xv.

NET'TLE-TREE. See Celtis.

To NET'TLE, *v. a.* To ſting; to irritate; to provoke.—The princes were ſo *nettled* at the ſcandal of this affront, that every man took it to himſelf. *L'Eſtrange.*

NET'TLEBED, a village in Oxfordſhire, remarkable for the elevation of the land on which it is ſituated: four miles and a half from Henley, ſeven from Reading, eighteen eaſt of Oxford, and forty weſt of London, in the road to Watlington and Tame; and it lies alſo in the road from London to Wallingford, by way of Henley. In this pariſh is a ſpring never known to fail in the drieſt ſummer; which may be reckoned a bleſſing in this part of the country, where no wells are to be found.

South Stoke is a village near the above, with two ſmall ſprings, whoſe waters have the colour, but not the taſte, of milk. Here is a free-ſchool.

NET'TLER, *ſ.* One who provokes; that which ſtings or irritates.—Theſe are the *nettlers*, theſe are the blabbing books that tell, though not half your fellows' feats. *Milton's Animadv. Rem. Defence.*

NET'TLEY AB'BEY. See Southampton.

NET'TOLITZ, a town of Bohemia, in the circle of Prachatitz: ſix miles eaſt of Prachatitz, and ſeventy-five ſouth of Prague. Lat. 49. 3. N. lon. 14. 4. E.

NETTU'NE, a town of Italy, in the Campagna di Roma, on a bay of the Mediterranean, near the ruins of the ancient Antium: twelve miles ſouth-weſt of Veletri, and twenty-five ſouth-ſouth-eaſt of Rome. Lat. 41. 31. N. lon. 12. 35. E.

NE'TUM, the ancient name of a town of Sicily, now called *Noto.*

NETWOR'ZITZ, a town of Bohemia, in the circle of Beraun: eighteen miles ſouth-eaſt of Beraun.

NET'ZE, a river of Luneburg, which runs into the Ilmenau two miles ſouth-weſt of Burlingen.

NE'VA, a river of Ruſſia, which runs from Lake Lagoda, and paſſing by Peterſburg, where it divides into ſeveral branches, it afterwards empties itſelf into the gulf of Finland. See the article Ice, vol. x. p. 719, 20.

NE'VA, a river of Genoa, which joins the Aroſcia at Baſtia.

NEVALCOT'TY, a town of Thibet: eighteen miles weſt of Sirinagur.

NEU'BAUER (Erneſt-Frederic), a learned German proteſtant divine and profeſſor, was born at Magdeburg in the year 1705. He became profeſſor of antiquities, of the learned languages, and finally of divinity, at the univerſity of Gieſſen, where he prematurely died in 1748, when only forty-three years of age. He was the author of various publications, which are diſtinguiſhed by conſiderable erudition, and entitle him to have his name inſcribed on the liſt of learned Germans. They conſiſt of, 1. Illuſtrations of different Texts of Scripture. 2. Academical Diſſertations. 3. A Collection of ſmall Treatiſes by learned Heſſians. 4. Sermons. 5. The Lives of the Profeſſors of Divinity at Gieſſen; &c. *Nouv. Dict. Hiſt. Gen. Biog.*

NEU'BEGAU, a town of Auſtria: five miles ſouth-eaſt of Vienna.

NEU'BENDAM, a town of Perſia, in Segeſtan: eighty miles north of Zareng.

NEUBEN'DJAM, a town of Perſia, in Chuſiſtan: ſixty miles north-weſt of Schiras, and 125 ſouth of Iſpahan.

NEU'BERG, a town of the duchy of Stiria: twenty miles north-eaſt of Pruck.

NEU'BERG, a town of the duchy of Carniola: four miles north of Crainburg.

NEUBOU'RG, a town of France, in the department of the Eure, and chief place of a canton, in the diſtrict of Louviers. The place contains 1980, and the canton 14,007, inhabitants.

NEUBRUN', a town of the duchy of Wurzburg: four miles north of Eltman.

NEU'BRUN, a town of Germany, in the county of Henneberg: five miles ſouth-eaſt of Meinungen.

NEU'BURG, a city of Bavaria, and capital of a duchy of the ſame name. The principalities of Neuburg and Sultzbach were all that Robert count Palatine recovered of the eſtates of George duke of Bavaria, after an unfortunate war, which ended in the year 1507. They were afterwards divided, but are now united. Neuburg had a voice at the diet, in the college of princes. It enjoys a government of its own, together with a chamber of juſtice, and prefecturate-office. In it, indeed, are ſtill ſome Lutheran fiefs, but the prevailing religion is the Roman Catholic. It ſtands in a good ſituation, on a hill, by the Danube; and is well built, and fortified. It is twenty-four miles north-north-eaſt of Augſburg, and fifteen weſt of Ingolſtadt. Lat. 48. 40. N. lon. 11. 8. E.

NEU'BURG, a town of Bavaria, on the left ſide of the Inn: four miles ſouth of Paſſau.

NEU'BURG, a town of Bavaria, in the Upper Palatinate, on the Schwarza: nineteen miles ſouth-eaſt of Amberg, and twenty-four north-north-eaſt of Ratiſbon. Lat. 49. 19. N. lon. 12. 13. E.

NEU'BURG. See Closter Neuburg, vol. iv.

NEU'BURG, or Neu'enburg, a town of Bavaria, in the county of Feldkirch, on the right bank of the Rhine: five miles north-north-weſt of Feldkirch.

NEUBURG, or Neu'enburg, a town of the grand duchy of Baden, on the Rhine; formerly imperial, but much injured by war: ſixteen miles north of Bâle. Lat. 47. 49. N. lon. 7. 38. E.

NEU'BURG, Neu'enburg, or Now'ie, a town of Pruſſia, in Pomerelia, on the Viſtula: thirty-two miles ſouth of Dantzic.

NEUCHATEL'. See Neufchatel.

NEU'CLOSTER, a town of Germany, in the duchy of Schwerin: ten miles eaſt of Wiſmar.

NEU'CLOSTER, a town of the duchy of Bremen: three miles ſouth-weſt of Buxtehude.

NEU'DENFELS, a town of Germany, in the margravate of Anſpach: two miles north of Creilſheim.

NEUDO'MA, a river of Norway, which runs into the North Sea twenty miles ſouth-weſt of Wardhuys.

NEU'DORF, a town of Hungary, formerly fortified. Part of the inhabitants are farmers, and part miners: ſix miles eaſt-north-eaſt of Kapſdorf, and twenty-ſeven north-north-weſt of Caſſovia.

NEU'DORF, a town of Auſtria: eight miles ſouth of Vienna.

NEU'DORF, a town of Bohemia, in the circle of Chrudim: twelve miles north-north-eaſt of Chrudim.

NEU'DORF, a town of Sileſia, in the principality of Oels: nine miles ſouth-eaſt of Militſch.

NEU'DORF, a town of Germany, in the principality of Culmbach: three miles ſouth-ſouth-eaſt of Kirch Lamitz.—Another town, in the principality of Culmbach: five miles ſouth of Markt Erlbach.

NEU'DORF. See Schellerau.

NEUDORF'FIA, *ſ.* in botany. See Nolana.

NEUDORF'GEN, a town of Pruſſia, in Oberland: ſeven miles ſouth-eaſt of Marienwerder.

NEVE (Francis), a Dutch engraver and painter, was born at Antwerp in 1627. He ſtudied the works of Rubens and Vandyke, and afterwards travelled to Italy. He became a landſcape-painter of conſiderable merit, and ſucceeded remarkably well in introducing ſmall figures into his pictures. On his return to his native city, Van Neve etched a conſiderable number of landſcapes, into which he introduced hiſtorical figures with much judgment. They are executed in a ſlight, but intelligent, ſtyle; the effects are very agreeable; and they are all from his own compoſitions, proving at once the excellency of his taſte, and the fertility of his genius. The following are ſelected from his works, as being the moſt meritorious: A pair of mountainous landſcapes with buildings, and figures in the coſtume of the Grecians; a pair of landſcapes of the ſame character, with an angler and two other figures in one, the other has a large tree and a river in the fore-ground, and a man tending ſheep at a diſtance; a pair of paſtoral landſcapes, with figures in the dreſs of Arcadian ſhepherds; a pair of landſcapes, into one of which are introduced Diana and Endymion, and in the other Venus and Cupid; and another is Venus repoſing on the banks of a river, and Cupid ſwimming in it; a pair of hiſtorical landſcapes, in one of which is Narciſſus admiring himſelf; and the other is a paſtoral ſcene, with a ſhepherd playing the tabor, accompanied with his flock; all of folio dimenſions.

NEVE I'SLAND, a ſmall iſland of Scotland, on the north-weſt coaſt of the iſland of Ilay: four miles north-eaſt of Tonvore.

NEV'EL, a town of Ruſſia, in the government of Polotſk: ſixty-four miles north-eaſt of Polotſk. Lat. 59. 15. N. lon. 29. 54. E.

NEV'EL, a town of the Netherlands, in the diſtrict of Ghent, containing 2938 inhabitants.

NEU'ENBERG, a town of Bavaria, in the county of Feldkirch: three miles north-weſt of Feldkirch.

NEU'ENBORG, a town of Germany, in the county of Oldenburg: twenty-two miles north of Oldenburg.

NEU'ENBURG, a town of France, in the department of the Lower Rhine: two miles ſouth of Hagenbach.

NEU'ENBURG. See NEUBURG.

NEU'ENBURG, a town of Wurtemberg. In ſome old pits in the neighbourhood of this town are found great quantities of thoſe excellent iron-ſtones, called glaſs-heads or blood-ſtones; and, from their ſize and figure, *bohn-erze*, or bean-ore. It is ſixteen miles eaſt of Raſtadt, and twenty-two weſt of Stuttgart.

NEU'ENBURG, a town of the duchy of Courland: eighteen miles weſt-north-weſt of Mittaw.

NEUENDAMM', a town of the New Mark of Brandenburg: nine miles north of Cuſtrin, and thirteen ſouth of Soldin. Lat. 52. 48. N. lon. 14. 52. E.

NEU'ENDORF, a town of Weſtphalia, in the Old Mark of Brandenburg: four miles eaſt of Gardeleben.

NEU'ENDORF, a town of Pruſſia, in the province of Pomerelia: ten miles ſouth of Marienburg.

NEU'ENDORF (Böhmiſch), a town of the Upper Mark of Brandenburg, on the Havel, oppoſite Potzdam, of which it may be conſidered a part: inhabited by a colony of Bohemians.

NEU'ENKIRCHEN, a town of Germany, in the duchy of Saxe Lauenburg; three miles ſouth of Ottendorf.

NEU'ENKIRCHEN, a town of Germany, in the county of Verden: fourteen miles eaſt-ſouth-eaſt of Rotenburg.

NEU'ENKIRCHEN, a town of Germany, in the county of Rietberg: three miles north of Rietberg.

NEU'ENKIRCHEN, a town of Auſtria: twelve miles ſouth-weſt of Ebenfurth.

NEU'ENPLOSS, a town of German, in the principality of Culmbach: ſix miles north-weſt of Bayreuth.

NEU'ENRODE, a town of Germany, in the county of Henneberg: three miles ſouth of Saltzungen.

NEU'ENSTEIN, a town of Germany, in the principality of Hohenlohe, which gives a title of diſtinction to a branch of the houſe of Hohenlohe: three miles eaſt of Ohringen, and ten ſouth-eaſt of Mechmuhl.

NEV'ER, *adv.* [*ne ever*, næꝼꞃe, Sax. ne æꝼꞃe, *not ever*; Goth. *niaivi*, i. e. *ne* and *aiv.*] At no time.—*Never* any thing was ſo unbred as that odious man. *Congreve.*—Death ſtill draws nearer, *never* ſeeming near. ***Pope.***

By its own force deſtroy'd, fruition ceas'd;
And, always weary'd, I was *never* pleas'd. *Prior.*

It is uſed in a form of ſpeech handed down by the beſt writers, but lately accuſed, I think with juſtice, of ſoleciſm; as, He is miſtaken, though *never* ſo wiſe. It is now maintained, that propriety requires it to be expreſſed thus, He is miſtaken though *ever* ſo wiſe; that is, He is miſtaken *how* wiſe *ſoever* he be. The common mode can only be defended by ſupplying a very harſh and unprecedented ellipſis; he is miſtaken, though ſo wiſe as *never* was any: ſuch, however, is the common uſe of the word, among the beſt authors. ***Dr. Johnſon.***—"Be the diſtance *never* ſo remote:" Some have thought this mode of expreſſion incongruous and ungrammatical: but *never* is the ſame as *not ever;* and the ſentence is to be filled up thus: "Be the diſtance *not* [near, but] ever ſo remote." Addiſon's Spect. N° 590. This, then, is one of thoſe elliptical forms which are to be explained "by obſerving nicely the poſture of the mind in diſcourſing," (to uſe Mr. Locke's words,) and not by attending merely to the obvious ſenſe of the terms employed. For, in diſcourſing, we love to contract our ideas, though the oppoſition be not always, or but imperfectly expreſſed. *Never ſo remote,* if we regard this poſture of the mind, is, therefore, as intelligible, and as proper, as *ever ſo remote;* and, till of late, was more commonly uſed. We now ſay *ever ſo remote;* more clearly indeed, but with ſomething leſs force; for *never ſo* implies an effort, or vehemence in aſſerting, which *ever ſo* has not. However, as perſpicuity is the main object of grammar, I acknowledge it to be a good general rule to avoid not only real but *ſeeming* incongruities of ſpeech. ***Bp. Hurd.***—Be it *never* ſo true which we teach the world to believe; yet, if once their affections begin to be alienated, a ſmall thing perſuadeth them to change their opinions. ***Hooker.***—In a living creature, though *never* ſo great, the ſenſe and the affects of any one part of the body, inſtantly make a tranſcurſion throughout the whole body. ***Bacon.***—Death may be ſudden to him, though it comes by *never* ſo ſlow degrees. ***Whole Duty of Man.***—He that ſhuts his eyes againſt a ſmall light, would not be brought to ſee that which he had no mind to ſee, let it be placed in *never* ſo clear a light, and *never* ſo near him. ***Atterbury.***—In no degree.—Whoſoever has a friend to guide him, may carry his eyes in another man's head, and yet ſee *never* the worſe. ***South.***—It ſeems in ſome phraſes to have the ſenſe of an adjective. Not any; but in reality it is *not ever.*—He anſwered him to *never* a word, inſomuch that the governour marvelled. ***St. Matth.*** xxvii. 14.—There would be *never* a plain text. ***Atterbury's Sermons.***—It is much uſed in compoſition; of which ſome examples are ſubjoined.

NEV'ER-BLUSHING, *adj.* Incapable of bluſhing; impudent:

Norton hung down his *never-bluſhing* head,
And all was huſh'd, as folly's ſelf lay dead. ***Pope.***

NEV'ER-CEASING, *adj.* Continual; having no intermiſſion:

So corn in fields, and in the garden flowers,
Revive and raiſe themſelves with mod'rate ſhowers:
But, overcharg'd with *never-ceaſing* rain,
Become too moiſt. *Waller.*

NEV'ER-DYING, *adj.* Not to be deſtroyed or extinguiſhed:

But a ſmooth and ſtedfaſt mind,
  Gentle thoughts and calm deſires,
Hearts with equal love combin'd,
  Kindle *never-dying* fires. *Carew.*

NEV'ER-ENDING, *adj.* Having no end; continual; tedious.

NEV'ER-ERRING, *adj.* Infallible; incapable of error. —Leucippus, with his *never-erring* dart. ***Dryden.***

NEV'ER-FADING, *adj.* Unfading; retaining its vigour:

Not Thracian Orpheus ſhould tranſcend my lays,
Nor Linus, crown'd with *never-fading* bays. ***Dryden.***

NEV'ER-FAILING, *adj.* Always correct; not deceiving.—Nature aſſureth us, by *never-failing* experience, that our times upon the earth have neither conſtancy nor durability. ***Raleigh.***

Your *never-failing* ſword made war to ceaſe,
And now you heal us with the acts of peace. ***Waller.***

NEV'ER-MEANING, *adj.* Having no meaning; unmeaning:

Thy buſy *never-meaning* face,
Thy ſcrew'd-up front, thy ſtate-grimace. *Swift.*

NEV'ER-OPENING, *adj.* Not to be opened.—Farewell, ye *never-op'ning* gates. *Dryden.*

NEV'ER-WASTING, *adj.* Not failing; ever renewed:

Meet ſtores of gold ſo greedily purſu'd,
And be refreſh'd with *never-waſting* food. *Blackmore.*

NEV'ERBURG, a town in the late French department of the Foreſts: ſeventeen miles north-north-weſt of Treves, and twenty-two north-north-eaſt of Luxemburg.

NEU'ERDORF, a town of Germany, in the county of Henneberg: four miles north of Smalkalden.

NEV'ERDORP, a town of the duchy of Holſtein: two miles north of Lutkenborg.

NEV'ERI, a river of South-America, in the government of Caraccas, which runs into the Caribbean Sea near Barcelonetta, in lat. 10. 7. N. lon. 65. 16. W.

NEVERMO'RE, *adv.* Never, at no time to come.

NEV'ERN, a town of Bohemia, in the circle of Pilſen: ten miles ſouth of Klattau.

NEV'ERN, a river of South Wales, which runs into the ſea about two miles below Newport, in the county of Pembroke.

NEV'ERN, a village pleaſantly ſituated upon the banks of the above river. In the church-yard is a rude ſtone, about two yards high, pitched upon one end, with an inſcription, which is ſuppoſed to be the epitaph of a Roman ſoldier, and is read thus: VITELLIANI EMERITI. In this church-yard alſo is another ſtone monument, and a third in the church, each of which is inſcribed with obſcure antique characters, that have not yet been deciphered.

In the country round about, many ancient tumuli, or barrows, have been diſcovered, and ſeveral rude ſtone monuments; but the moſt remarkable of this kind is in the pariſh of Nevern. It conſiſts of a circle of rough ſtones pitched on one end, about 150 feet in circumference, in the middle of which is a large rough ſtone, about eighteen feet in length, nine in breadth, and three thick, ſupported on eight ſtone pillars, about eight feet high. A portion of this ſtone, about ten feet long and five broad, is broken off, and lies by the ſide of it, and under it the ground is neatly paved with flag-ſtones. Not far off is another large ſtone of an oval form, about thirty-ſix feet in circumference, and a foot and a half thick at one end, though ſcarcely four inches at the other, and is ſupported by four ſtones, each of which is about two feet high. Farther on, and nearer to Newport, there are five ſuch ſtone tables or altars, placed near each other, each of which is ſuppoſed to have been incloſed in a circle of ſtone pillars; theſe, however, are not ſupported with pillars, but with ſtones placed edgewiſe.

The church of Nevern has no pavement in it, and the frequent burials have raiſed the ground within it to ſeven or eight feet higher than without. In proceſs of time inſtead of a church it will be only a ſepulchre.

NEV'ERS, a city of France, and capital of the department of the Nyevre; formerly the capital of the Nivernois, ſituated on the Loire, where it is joined by the Nyevre, over which is a handſome ſtone bridge. Before the revolution, it was the ſee of a biſhop, the ſeat of an election, a marechauſſé, and ſalt-office. It contained, beſides the cathedral, eleven pariſh-churches, and ſeveral religious houſes. The principal manufactures are china, glaſs, and works of enamel. The number of inhabitants is eſtimated at about 10,000. It is twenty-nine poſts north-north-weſt of Lyons, and twenty-three ſouth-ſouth-eaſt of Paris. Lat. 46. 59. N. lon. 3. 14. E.

At the top of the hill, on the declivity of which the town is ſituated, may be ſeen wnat remains of the palace of the ancient counts of Nevers. It has of courſe ſuffered much from time, but enough ſtil. remains to bear teſtimony to its original magnificence. Nothing can be more picturеſque than the country between Nevers and Moulins. Natural beauty, and the life and activity of cultivation, unite to render it the moſt complete ſucceſſion of landſcape in France. The road is gravel, and excellent to a degree. It is bordered by magnificent trees, but which have been ſo planted, as to procure ſhade without excluding air; the road, therefore, is at once ſhady and dry. *Pinkney's Travels through France*, 1808.

NEVERTHELESS', *adv.* Notwithſtanding that.—They plead that even ſuch ceremonies of the church of Rome as contain in them nothing which is not of itſelf agreeable to the word of God, ought *neverthelefs* to be aboliſhed. *Hooker.*—Creation muſt needs infer providence; and God's making the world, irrefragably proves that he governs it too; or that a being of a dependent nature remains *neverthelefs* independent upon him in that reſpect. *South.*

NEV'ERZIN, a town of European Turkey, in Dalmatia, on the Narenza: eight miles north-north-weſt of Moſtar.

NEUF BRISAC', a town of France, in the department of the Upper Rhine, and chief place of a canton, in the diſtrict of Colmar. The place contains 1682, and the canton 7925, inhabitants.

NEU'FBOURG, a town of France, in the department of the Eure: twelve miles ſouth-weſt of Louviers, and twelve north-weſt of Evreux.

NEUFCHATEAU', a town of the duchy of Luxemburg: twelve miles north-weſt of Arlon.

NEUFCHATEL', or NEUCHATEL, for ſo it is pronounced, and therefore erroneouſly ſpelt alſo, is one of the nineteen cantons of Swiſſerland, as declared by the lxxvth article of the Treaty of Vienna, June 1, 1815. It is bounded on the north-weſt by France, on the north-eaſt by the biſhopric of Bâle and canton of Berne, on the ſouth-eaſt by the Lake of Neufchatel, and on the ſouth by the bailiwic of Granſon. This country, long ago united to the lordſhip of Vallengin, ſtretches from the lake to the limits of Franche Comté, and contains in length from north to ſouth about twelve leagues, and about eight in its greateſt breadth. The diſtrict of Neufchatel occupies the whole plain, together with the lower parts of the mountains, while Vallengin is totally encloſed within the Jura. Parallel chains of the Jura run from eaſt to weſt, and form, even in the moſt elevated parts, ſeveral valleys. The lower grounds of this chain are arable lands and vineyards; the higher conſiſt of large tracts of foreſt, which in many parts have been cleared and converted into conſiderable paſtures, intermixed with ſome fields of barley and oats. The number of inhabitants in the principality of Neufchatel and Vallengin, being in 1752 only 28,017 ſubjects and 4318 aliens, amounted in 1784 to 31,576 ſubjects and 9704 aliens, which gives an increaſe of near a fourth part within the ſpace of thirty-two years. In the whole canton are four towns, and ſixty-four villages. The ſoil is far from fertile; but the induſtry of the inhabitants renders it aſtoniſhingly productive. Any perſon having a certificate of his general good conduct may ſettle here, and enjoy every eſſential privilege of the native ſubjects. This is perhaps the only country in Europe exempt from taxes; for the payment of a few ſous annually from every houſeholder cannot be conſidered as a tax. This circumſtance leſſens our aſtoniſhment at the commercial activity which prevails in this little ſtate. The villages of Chaux de Fond and Locle, with their diſtricts, contain about 600 inhabitants, and furniſh annually 40,000 watches in gold and ſilver, beſides clocks. There are alſo numerous engravers and enamellers. Moſt of the inhabitants are proteſtants; but in two diſtricts, viz. Lauderon and Creſſier, popery prevails.

This country anciently belonged to the laſt kingdom of Burgundy, with which, in 1032, it devolved to the German empire. In 1053, Ulrich I. count of Phœnix, or Fenis, was lord of Neufchatel, but appears to have held it as a fief from Rodolphus III. His male deſcendants continued in poſſeſſion of it till the year 1373; afterwards it paſſed into ſeveral different families, and among the reſt to the houſe of Châlons. In 1694, William III. king of Great Britain, as heir to the lordſhip of the Châlons family, ſolemnly made over to Frederic elector of Brandenburg, afterwards king of Pruſſia, all his right of Neufchatel and Vallengin, which, in 1703, was notified by the latter to the ſtates thereof. But it is to be obſerved, that this principality (as it was called) of Neufchatel was conſidered as an independent ſovereignty, allied with Swiſſerland; which alliance ſecured its independence; and every prince, on ſucceeding to the ſovereignty, was obliged to ratify it. The government was a mixture of ariſtocracy and democracy. The ſovereignty, which was almoſt a name, was inalienable and indiviſible, and could not be ſold, or given to a younger branch of the reigning family, without the conſent of the people; it was hereditary, and a female was capable of inheriting it. The laſt time when the eſtates were called upon to decide between a number of claimants for the ſovereignty, was in 1707, on the death of the ducheſs of Nemours without iſſue. Moſt of the claimants came in perſon to Neufchatel, or ſent ambaſſadors to ſupport their pretenſions. Amongſt them were the king of Pruſſia, margrave of Baden-Dourlach, the prince of Naſſau, the prince of Condé, the marquis d'Algers, the count of Montbeliard, &c. &c. The reader will ſmile at all we have ſaid about the *independence* of a little ſtate like this, in which it was a fundamental maxim, that "the ſovereignty reſides not in the perſon of the prince, but in the ſtate;" and he will not wonder that the high tribunal, after a mature examination of the ſeveral allegations of the reſpective parties, paſſed a decree in favour of the ſtrongeſt, namely, Frederic I. king of Pruſſia, who immediately took poſſeſſion, and the uſual homage was performed to him; he, on his part likewiſe, confirming to them all the liberties and privileges of the ſtate, as alſo its alliances, and communities of rights with the neighbouring powers. At the peace of Utrecht in 1713, the French monarch acknowledged the king of Pruſſia as ſovereign-lord of Neufchatel and Vallengin; and farther promiſed not to moleſt him, either publicly or privately, in the poſſeſſion of theſe countries; nor to permit his ſubjects to attempt any ſuch moleſtation. In 1806, by the treaty of Tilſit, this ſtate was ſevered from Pruſſia, and given by Bonaparte to marſhal Berthier; but the downfal of Napoleon reſtored it the king of Pruſſia; the inhabitants of which ſeemed to bear the greateſt attachment to his majeſty. Mr. Bernard ſaw, in two places, the triumphal arches under which he paſſed in his late viſit to Neufchatel. The chief advantage his majeſty derived from this country was the ſupply of a great number of recruits to his army; and, the king being ſufficiently indemnified elſewhere, it was thought fit, at the general arrangement in 1815, that this principality ſhould be united to Swiſſerland, with which it had ſo long been in alliance, and to which indeed its ſituation appeared to adapt it. *Bernard's Tour through France, Swiſſerland, &c.* in 1814.

NEUFCHATEL', or NEU'ENBURG, anciently *Neocomum*, or *Novum Caſtrum*, capital of the canton above deſcribed, lies partly upon a little plain between the lake which here receives the river Scyon, and the Jura, and partly upon the declivity of that mountain. It conſiſts of four principal ſtreets, which contain ſome elegant edifices, and a caſtle for its defence, with between 4 and 5000 inhabitants. The environs are diverſified with delightful vineyards, gardens, and villas. Between Neufchatel and Yverdun, the country conſiſts of rude or elegant ſcenery, contraſted with well-cultivated hills, vineyards, and meadows. At the commencement of the laſt century commerce was almoſt wholly unknown in this town, as the ridiculous pride of its being deemed degrading generally prevailed among the (Pruſſian) inhabitants; a ſenſeleſs prejudice, which has of late been almoſt extinguiſhed. The chief article of exportation is wine, produced from the adjacent vineyards, and much eſteemed; manufactures alſo of printed linens and cottons have been eſtabliſhed with ſucceſs; and, within ſome late years, ſeveral merchants have raiſed large fortunes. Several public works and buildings, particularly a town-houſe, have been lately erected at Neufchatel; and, for the embelliſhment of their town, the burghers have been indebted to the ſingular munificence of M. David Pury, late banker of the court of Liſbon, who was a citizen of this burgh, born in 1709, and who died in 1785. His benefactions, during his life and at his deceaſe, amounted to near 200,000l. The citizens have teſtified their reſpect for his memory by placing his portrait in one of the apartments in which the government aſſembles, and a marble buſt in the new town-houſe. This town is ſaid to have been built by the emperor Conrad, about the year 1034. It entered into a ſtrict alliance and community of rights with the city of Berne in 1406, which treaty was renewed in 1550, 1570, and 1616; and in the year 1530 it declared for the reformation. Neufchatel is fifty miles ſouth-ſouth-eaſt of Bâle. Lat. 47. 2. N. lon. 6. 43. E.

NEUFCHATEL', or YVERDUN', a lake which ſeparates the canton of Neufchatel from the cantons of Berne and Friburg, and which ſtretches from north to ſouth about twenty miles in length, and in ſome places about five in breadth. It is well furniſhed with various kinds of excellent fiſh, and its ſhores near Yverdun are covered with country-houſes.

NEUFCHATEL', a town of France, and principal place of a diſtrict, in the department of the Voſges, on the Meuſe: ſixteen miles weſt of Mirecourt, and thirty weſt of Epinal. Lat. 43. 22. N. lon. 5. 48. E.

NEUFCHATEL', a town of France, in the department of the Aiſne: eleven miles eaſt-ſouth-eaſt of Laon, and ten north of Rheims.

NEUFCHATEL', a town of France, and principal place of a diſtrict, in the department of the Lower Seine: twenty-three miles north-eaſt of Rouen, and eighteen ſouth-eaſt of Dieppe. Lat. 49. 44. N. lon. 1. 30. E.

NEU'FELS, a town of Germany, in the principality of Hohenlohe: ſix miles north-eaſt of Ohringen.

NEU'FFEN. See NEIFFEN.

NEUFMANIL', a town of France, in the department of the Ardennes: three miles north-eaſt of Charleville.

NEUFMARCHE', a town of France, in the department of the Eure: nine miles north of Giſors.

NEU'FRAICH, a river of Bavaria, which riſes near Walkenhofen, and runs into the Schmutter one mile weſt of Augſburg.

NEU'FVY (St. Sepulchre), a town of France, in the department of the Indré: fourteen miles ſouth of Châteauroux.

NEU'GARTEN. See NAUGARDTEN.

NEUGED'YN, a town of Bohemia, in the circle of Pilſen: thirty miles ſouth-ſouth-weſt of Pilſen. Lat. 49. 23. N. lon. 12. 51. E.

NEUGRA'BEN, a river of Sileſia, which runs into the Oder at Brieg.

NEU'HAUS, a town of Germany, in the principality of Heſſe Darmſtadt. In this place was a palace, which Dagobert king of the Franks converted to a church, and Samuel biſhop of Worms made it collegiate in 847. The foundation was afterwards ſuppreſſed, and the revenues annexed to the biſhopric. It is eleven miles ſouth-eaſt of Worms.

NEU'HAUS, a town of Bavaria, in the biſhopric of Bamberg: three miles north of Burg Eberach.

NEU'HAUS, a town of Germany, in the principality of Culmbach: five miles weſt-ſouth-weſt of Hof.

NEU'HAUS, a citadel of Germany, belonging to the Teutonic knights: one mile ſouth of Mergentheim.

NEU'HAUS, a town of Germany, in the territory of Nuremberg: three miles north-north-eaſt of Velden.

NEU'HAUS, a town of Bavaria, in the Upper Palatinate, on the Nao: eighteen miles north of Straubing.

NEU'HAUS, or Hrad'ecz Gindrzi'chu, a town of Bohemia, in the circle of Bechin: twenty-ſeven miles ſouth-eaſt of Bechin. Lat. 49. 12. N. lon. 14. 53. E.

NEU'HAUS, or Nie'nhaus, a town of Weſtphalia, in the biſhopric of Paderborn, at the conflux of the Alme and Lippe; the uſual reſidence of the biſhop: two miles north-north-eaſt of Paderborn. Lat. 51. 42. N. lon. 8. 14. E.

NEU'HAUSEN, a town of Pruſſia, in the province of Samland: three miles north of Konigſberg.

NEU'HAUSEN, a town of the duchy of Courland: eighteen miles ſouth of Goldingen.

NEU'HAUSEN, a town of Wurtemberg: five miles eaſt of Tuttlingen.

NEU'HAUSZ, a town of the duchy of Bremen, ſituated near the mouth of the Oſte. It has a ſafe harbour; and once drove ſo great a trade, that the number of foreign ſhips which came to it annually, exceeded 100; but a ſand-bank ariſing at the conflux of the Oſte into the Elbe, renders the entrance dangerous. It is viſited therefore, at preſent, by few foreign ſhips, notwithſtanding buoys have been laid with the greateſt exactneſs for pointing out the bank. It is nineteen miles north-weſt of Stade. Lat. 53. 52. N. lon. 8. 27. E.

NEU'HAUSZ, a town of Germany, in the principality of Coburg: ten miles eaſt of Coburg.

NEU'HEUSEL, a town of Hungary, on the Neitra: thirty-two miles eaſt-ſouth-eaſt of Preſburg, and ſixty-four eaſt of Vienna. Lat. 48. 2. N. lon. 18. 3. E.

NEU'HEUSL, a town of the duchy of Carinthia: five miles weſt-ſouth-weſt of Lavamund.

NEU'HOF, a caſtle of Sileſia, in the principality of Jauer: one mile north of Schmiedeberg.

NEU'HOF, a town of Germany, in the biſhopric of Fulda: ſix miles ſouth-ſouth-weſt of Fulda.

NEU'HOF, a town of Germany, in the principality of Culmbach: two miles ſouth-ſouth-weſt of Markt Erlbach.

NEU'HOF, a town of Germany, in the territory of Nuremberg: four miles north of Nuremberg.

NEU'HOF, a town of Bohemia, in the circle of Saatz: ten miles north of Eger.

NEU'HOF, a town of Germany, in the principality of Bayreuth: twelve miles north of Anſpach.

NEU'HOF, a town of Pruſſia, in the province of Bartenland: three miles weſt of Raſtenburg.

NEU'HOFEN, a town of Auſtria: ſixteen miles eaſt of Steyr, and fourteen ſouth-weſt of Ips.

NEU'HOFF (Theodore de), a German gentlemen, born at Metz, better known by the ſtyle of Theodore king of Corſica. Being at Leghorn in 1736, he was encouraged by the Engliſh miniſtry to go over to Corſica, and head the malcontents againſt the Genoeſe government. At Tunis he negociated for arms and ammunition, and veſſels; with which he embarked for Corſica, where he was crowned king of the iſland, with a laurel crown, exerciſed all the uſual acts of ſovereignty, and gained ſuch advantages over the Genoeſe, that they were obliged to quit his new kingdom; but, the Genoeſe having applied to the French, they ſent a powerful army to oppoſe; and, the Engliſh neglecting to ſuccour him, he was obliged to abandon Corſica in 1737. The unfortunate Theodore retired to England, was for many years confined in the King's Bench priſon for debt, and ſubſiſted on the benevolence of private friends. Being releaſed by an act of inſolvency in 1756, he gave in a ſchedule the kingdom of Corſica, as his eſtate, to his creditors, and died in December of the ſame year. See the article London, vol. xiii. p. 571.

By his conſort lady Sarsfield, daughter of lord Kilmallock, and lady of honour to the queen, Theodore had a ſon, born at Madrid in 1725, who was afterwards known in this country by the name of Colonel Frederic, having obtained military rank as colonel from the duke of Wirtemberg; and who, being reduced to great diſtreſs, put an end to his life, at the weſt porch of Weſtminſter-abbey, in the year 1796. He was known in the literary world by "Mémoires pour ſervir à l'Hiſtoire de Corſe," and by a "Deſcription of Corſica, with an Account of its Union to the Crown of England." His body is depoſited in St. Anne's church yard, within a few yards of that of Theodore. Their fate is connected by a melancholy ſimilarity; equally unfortunate through life, they are at length united in death, and occupy a common grave, in a foreign country, far diſtant from the place of their nativity. *Monthly Mag.* for Feb. 1797.

NEUHORN'BACH, late a town of France, in the department of Mont-Tonnerre, containing 972 inhabitants.

NEV'IAN, a town of France, in the department of the Aude: four miles weſt of Narbonne, and ten eaſt-ſouth-eaſt of Azille.

NEU'IL sous PASSAVAN'T, a town of France, in the department of the Mayne and Loire: eight miles eaſt-ſouth-eaſt of Villiers.

NEV'ILL's BA'Y, a bay on the weſt ſhore of Hudſon's Bay. Lat. 61. 58. N. lon. 94. W.

NEV'ILL's CROSS'. See Durham, vol. vi. p. 132.

NEV'ILL's HO'LT, a village of England, in the county of Leiceſter. Here is a medicinal ſpring, chiefly recommended in hæmorrhages: three miles ſouth-eaſt of Hallaton.

NEV'ILL's I'SLAND. See Lord North's Island.

NEV'ILLE (Henry), the ſecond ſon of ſir Henry Neville, of Billingbeare, Berks. He was educated at Oxford; and, in the beginning of the civil war, travelled into Italy and other countries; whence he returned in 1645, or thereabouts, and became a member of the long parliament for Abingdon; and, in November 1651, was elected one of the council of ſtate; but, when he ſaw that Oliver Cromwell aimed at centring the government in his own ſingle perſon, he left him, was out of his favour, and acted little during his lifetime. In 1658 he was choſen to ſerve in Richard's parliament, for Reading; and, when the protector was depoſed, and the long parliament reſtored, became again one of the council of ſtate. At the reſtoration, he was taken into cuſtody, but ſoon afterwards releaſed. From this time he lived privately, without giving any offence to the reigning powers. In 1681 he publiſhed the work, for which he is now moſt diſtinguiſhed, entitled "*Plato Redivivus*; or, A Dialogue concerning Government;" the fourth edition of which was printed for Mr. Hollis in 1763. He died the 20th of September, 1694, and was buried at Warfield in Berkſhire. Among his other works, he wrote a political dramatic piece, entitled "Shuffling, Cutting, and Dealing, in a Game at Piquet; being acted from the Year 1653 to 1658, by Oliver Protector and others," 4to. 1659.

NEU'ILLY, a town of France, in the department of the Orne: thirteen miles eaſt of Mortagne.

NEU'ILLY, a town of France, in the department of the Yonne: nine miles north-north-weſt of Auxerre.

NEU'ILLY a town of France, in the department of the Seine, and chief place of a canton, in the diſtrict of St. Denis. The place contains 1500, and the canton 9542, inhabitants.

NEU'ILLY L'EVE'QUE, a town of France, in the department of the Upper Marne: ſix miles north-eaſt of Langres.

NEU'ILLY St. FRO'NT, a town of France, in the department of the Aiſne: nine miles north-north-weſt of Château Thierry, and thirteen ſouth of Laon.

NEU'ILLY les LAN'GRES, a town of France, in the department of the Upper Marne, and chief place of a canton, in the diſtrict of Langres. The place contains 1014, and the canton 6901, inhabitants.

NEU'ILLY PON'T de PIER'RE, a town of France, in the department of the Indre and Loire, and chief place of a canton, in the diſtrict of Tours. The place contains 1730, and the canton 8220, inhabitants.

NEU'ILLY le REA'L, a town of France, in the department of the Allier: nine miles ſouth-ſouth-weſt of Moulins.

NEU'ILLY EN THAL', a town of France, in the department of the Oiſe, and chief place of a canton, in the diſtrict of Senlis. The place contains 915, and the canton 9614, inhabitants.

NEV'IN, NEW'IN, or NEF'YN, a ſmall borough and market town in the county of Caernarvon, North Wales, is ſituated on the coaſt of the Iriſh Sea, and has a ſmall pier, which is found very uſeful for the herring-fiſhery and coaſting-veſſels. It was conſtituted a free borough by Edward the Black Prince; and is at preſent one of the contributory boroughs with Caernarvon, in returning one member to the Britiſh ſenate. Here Edward I. in 1284, celebrated his triumph over the liberties of Wales, which had ſo long defied the utmoſt exertions of his predeceſſors. At this time, and perhaps to conciliate the affections of his new ſubjects, in imitation of our hero Arthur, he held a round table, and celebrated it with a dance and tournaments. The concourſe was prodigious; for not only the chief nobility of England, but numbers from foreign parts, graced the feſtival with their preſence. The market-day is Saturday, and there are four fairs during the year. According to the population returns of 1811, it contains 280 houſes and 1777 inhabitants. It is ſix miles weſt of Pulhely, and 249 north-weſt of London. Lat. 52. 53. N. lon. 4. 27. W.

About a mile from Nevin, on the ſhore, is Porth-yn-Llyn, moſt probably a port of the Romans, as veſtiges of a ſtrong entrenchment, apparently the work of that people, are ſtill viſible in the vicinity. In the pariſh of Llanjeſtin, ſeveral miles to the ſouth, many Roman urns have been dug up at different times; and oppoſite to the extremity of the peninſula of Caernarvon is the ſmall iſland of Bardſey, once noted for its abbey, and ſuppoſed to have been one of the ſeats of the Colidei, or Culdees, the firſt order of religious recluſes in Britain. *Beauties of England and Wales*, vol. xvii.

NE'VIS, one of the Leeward Charibbæan iſlands in the Weſt Indies, is a beautiful little ſpot, conſiſting of a ſingle mountain, riſing like a cone in an eaſy aſcent from the ſea: the circumference of its baſe not exceeding eight Engliſh leagues. It is ſuppoſed to have derived its name from Columbus, its diſcoverer, who called it *Nieves*, or "The Snows," from its reſemblance to a mountain of the ſame name in Spain: or, perhaps, a white ſmoke was ſeen to iſſue from the ſummit, which appeared like ſnow, and that it derived its name from that circumſtance. That it owed its origin to ſome volcanic exploſion, we can have no reaſon to queſtion; for near the ſummit there is ſtill viſible a hollow, or crater, which contains a hot ſpring, ſtrongly impregnated with ſulphur; and ſulphur is frequently found in ſubſtance, in neighbouring gulleys and cavities of the earth. It is well watered, and the land is generally fertile; and even the ſummit furniſhes yams and other eſculent vegetables. The ſoil is ſtony; the beſt is a looſe black mould, on a clay; and in ſome places the upper ſtratum is a ſtiff clay, the cultivation of which requires labour that is amply compenſated by the produce. Sugar is its only ſtaple production; and in general, it yields one hogſhead of 16 cwt. per acre from all the canes that are annually cut; and, the productive land being about 4000 acres, the produce of ſugar may amount to as many hogſheads in the whole; which quantity, when the iſland belonged to the French, was fixed on for the regulation of the taxes. The Engliſh firſt ſettled here in the year 1628, by a colony from St. Chriſtopher's; and, by the wiſe management of the firſt governors, the iſland flouriſhed wonderfully, ſo that in the year 1640 there were 4000 whites. In the year 1706, it was taken by the French, but reſtored by the peace of Utrecht. In the year 1782, it was again taken by the French, but reſtored by the peace in the year 1783. Nevis is divided into five pariſhes; and contains one town, Charles-town, the ſeat of government and port of entry; beſides which, there are two other ſhipping-places, called Indian-caſtle, and New-caſtle. The principal fortification is at Charles-town, and is called Charles-fort. The commandant is appointed by the crown, but receives a ſalary from the iſland. In the abſence of the governor-general, the government is adminiſtered by the preſident of the council, which council conſiſts of ſix members beſides the preſident. The houſe of aſſembly is compoſed of fifteen repreſentatives, three for each pariſh. The adminiſtration of common law is under the direction of a chief juſtice and two aſſiſtant judges, and there is an office for the regiſtry of deeds. The number of white inhabitants is ſtated by Mr. Edwards not to exceed 600, while the negroes amount to about 10,000. The former compoſe a militia, in which there is a troop conſiſting of 50 horſe, well mounted and accoutred. Lat. 17. 14. N. lon. 62. 35. W.

NEU'KALDEN, or NEUKAHLEN, a town of the duchy of Mecklenburg, on a lake twenty-eight miles ſouth-ſouth-eaſt of Roſtock, and twenty-one eaſt of Guſtro. Lat. 53. 49. N. lon. 12. 46. E.

NEU'KIRCH, a town of Pruſſia, in the province of Ermeland: eleven miles north-eaſt of Elbing.

NEU'KIRCH, a town of Sileſia, in the principality of Oppau: ten miles eaſt of Jagerndorf, and ten north of Troppau. Lat. 50. N. lon. 17. 15. E.

NEU'KIRCHEN, a town of Swiſſerland, and capital of a bailiwic, in the canton of Schaffhauſen; purchaſed, in 1520, of the biſhop of Conſtance: five miles weſt of Schaffhauſen.

NEU'KIRCHEN, a town of Bavaria: thirteen miles ſouth-ſouth-eaſt of Nabburg, and twenty-two north-north eaſt of Ratiſbon.

NEU'KIRCHEN, a town of Auſtria: ſix miles ſouth-ſouth-eaſt of Engelhartzel.

NEU'KIRCHEN, a town of the principality of Heſſe: twenty-two miles north-north-eaſt of Marburg, and twenty-eight ſouth of Caſſel. Lat. 50. 40. N. lon. 27. 1. E.

NEU'KIRCHEN, a town of Bavaria: five miles ſouth-ſouth-eaſt of Furt, and ten eaſt of Cham.

NEU'KIRCHEN, a town of Saxony, in the circle of Erzgebirg: five miles ſouth of Chemnitz.

NEU'KIRCHEN, or MARK NEUKIRCHEN, a town of Saxony, in the Vogtland: ten miles ſouth-eaſt of Oelnitz.

NEU'KRUG, a town of Pruſſia, in the palatinate of Culm: ten miles eaſt of Culm.

NEU'LA, a town of Germany, in the principality of Culmbach, on the Selbitz: three miles ſouth-ſouth-eaſt of Lichtenberg.

NE ULTRA. See SIR THOMAS ROE'S WELCOME.

NEU'MAGEN, a town of France, in the department of the Sarre, on the ſide of the Moſelle: eleven miles eaſt-north-eaſt of Treves, and forty-two ſouth-weſt of Coblentz. Lat. 49. 54. N. lon. 6. 58. E.

NEU'MANN (John-George), a learned German Lutheran divine and profeſſor, was born in 1661 at Mertz, a village of the country of Merſebourg, in the circle of Saxony, of which his father was miniſter. He commenced his academical ſtudies at Zittau; whence he removed in 1680 to the univerſity of Wittemberg, where he was admitted an adjunct in the faculty of philoſophy in the following year. Afterwards he ſpent ſome time at Straſburg, and viſited ſeveral of the moſt celebrated of the German univerſities. Having returned to Wittemberg, he was appointed profeſſor of poetry in 1690, and librarian to the univerſity in 1692. At a ſubſequent period he was called to the theological chair, made aſſeſſor to the conſiſtory, and provoſt of the caſtle-chapel. He died in 1709, when in his forty-ninth year. He was the author of many learned, and ſome curious, Diſſertations, and other treatiſes on moral, religious, and controverſial, ſubjects, of which a liſt, conſiſting of forty-ſix articles in the Latin language, beſides his pieces in German, is given in the third volume of the Supplement to the Hiſtorical Dictionary publiſhed at Baſil. *Moreri.*

NEU'MANN (Gaſpar), an eminent chemiſt, was born at Zullichau, in the duchy of Croſſen, where his father practiſed as an apothecary, in July 1682. Gaſpar was educated for the ſame profeſſion, and commenced the practice of it at Unruſhſtadt, in Poland; but, after a ſhort reſidence there, he went to Berlin in 1705, and was employed ſeveral years in the capacity of traveller for the pharmaceutic eſtabliſhment of the king of Pruſſia. In conſequence of the ability which he manifeſted in the performance of this duty, the king ſent him to proſecute his ſtudies at the univerſity of Halle, and ſubſequently defrayed the expenſes of a journey, for the purpoſe of acquiring chemical information. He commenced this chemical tour in 1711, by viſiting the mines of Germany; and thence he went to Holland, where he profited by the inſtructions of the celebrated Boerhaave. He then viſited England, and during his ſojourn here, had the misfortune to loſe his royal patron, Frederic I. by death. His talents and character, however, ſoon afforded him relief from this temporary embarraſſment; for, on his return to the continent, he was detained at Franeker by Cyprianus, who employed him in the execution of many chemical experiments; and he was at the ſame time invited to Berlin. At that time, however, he preferred accompanying George I. king of England, to Hanover, whither he went in 1716. But he ſubſequently viſited Berlin, for the purpoſe of ſettling ſome private affairs, where he obtained the friendſhip of Stahl, through whoſe influence at court he was again ſent on a tour of chemical inveſtigation, through England, France, and Italy, where he was introduced to all the celebrated chemiſts of the day. On his return to Berlin, he was appointed apothecary to the court; and in 1723, when the king inſtituted the Royal College of Medicine and Surgery, he was nominated profeſſor of practical chemiſtry to that body, and was elected a member of it in the following year. In 1725, he was choſen a fellow of the Royal Society of London; and in 1727, was honoured with the degree of M. D. by the univerſity of Halle. In the courſe of the ſame year, he travelled through Sileſia and Moravia to Vienna; and on his return to Bohemia, he viſited the baths of Töplitz; and examined the mines, in paſſing by the way of Dreſden and Freyberg, with all the attention of a chemical philoſopher. Neumann likewiſe obtained other honours, which were due to his ſcientific character; having been elected a member of the academy Naturæ Curioſorum in 1728, and of the Inſtitute of Bologna in 1734. The king alſo conferred on him the dignity of aulic counſellor. He died at Berlin in October 1737.

The works publiſhed by Dr. Neumann in his lifetime conſiſt chiefly of diſſertations in the Latin language inſerted in the Philoſophical Tranſactions of London, the Ephemerides Acad. Naturæ Curioſorum, and the Miſcellanea Berolinenſia; and of others in the German language publiſhed ſeparately. After his death, two different copies of his Chemical Lectures were given to the public; one, in two editions, at Berlin and Dreſden, from notes taken by one of his pupils, intermixed with compilations from different authors; the other, by the bookſellers of the Orphan Hoſpital of Zullichau, from papers in Neumann's own hand-writing: of this there have been two impreſſions, the firſt in a large form, the ſecond in an abridgment, which laſt, however, conſiſts of two volumes, quarto. From this Dr. Lewis has made an excellent Engliſh tranſlation in two volumes, octavo, ſtill farther abridged, but better methodized, and enriched with notes. "Neumann's Lectures (ſays Dr. Lewis) are a valuable magazine of chemical knowledge. The author, biaſſed by no theory, and attached to no opinions, has enquired by experiment into the properties and uſes of the moſt conſiderable natural and artificial productions, and the preparation of the principal commodities which depend on chemiſtry; and ſeems to have candidly, and without reſerve, communicated all he diſcovered." Such a work muſt retain its value, notwithſtanding the great modern changes in chemical theory. *Life of Neumann prefixed to the Zullichau edit. of his Lectures. Preface to Lewis's Tranſlat. Gen. Biog.*

NEU'MARCK. See WASARHELY.

NEU'MARCK, a town of Bohemia, in the circle of Pilſen: ſix miles ſouth of Teuſing.—Another town in the circle of Pilſen: ſix miles ſouth of Taus.

NEU'MARCK, a town of the principality of Culmbach: ten miles north of Bayreuth.

NEU'MARK, a town of Saxony, in the circle of Erzgebirg: ſix miles ſouth-weſt of Zwickau.

NEU'MARK, a town of the duchy of Stiria: twenty-ſix miles ſouth-weſt of Judenburg, and fifty-ſix weſt of Gratz.

NEU'MARK, a town of the duchy of Carniola: ten miles north of Crainburg.

NEU'MARK, a town of Hinder Pomerania: ten miles ſouth-weſt of Stargard.

NEU'MARK, a town of the archbiſhopric of Salzburg: twelve miles north-north-eaſt of Salzburg, and eleven eaſt of Lauffen.

NEU'MARK, a town of the Tyroleſe: twenty-one miles north of Trent.

NEU'MARK, a town of Bohemia, in the circle of Pilſen: thirty-five miles ſouth-weſt of Pilſen. Lat. 49. 20. E. lon. 12. 52. E.

NEU'MARK, a town of Saxony, in the Vogtland: eleven miles north-north-eaſt of Plauen.

NEU'MARK, a town of the principality of Weimar: five miles north-weſt of Weimar.

NEU'MARK, a town of Bavaria: twenty-two miles ſouth-weſt of Amberg, and thirty-one north-weſt of Ratiſbon.

NEU'MARK, or NOVEMIAS'TRO, a town of Pruſſia, in the territory of Culm: forty-four miles eaſt of Culm.

NEU'MARKT, a town of Sileſia, in the principality of Breſlau: nineteen miles weſt of Breſlau. Lat. 51. 7. N. lon. 16. 38. E.

NEU'MARKT, a town of Magdeburg, cloſe to Halle.

NEU'MARKT, a town of Sileſia, in the principality of Breſlau: nineteen miles weſt of Breſlau, and twenty-two north Schweidnitz.

NEU'MARKT, a town of Bavaria, on the Roth: forty-one miles eaſt-north-eaſt of Munich, and twenty-two eaſt of Aerding.

NEU'MUNSTER, a town of the duchy of Holſtein: eighteen miles ſouth-weſt of Kiel, and twenty-eight north of Hamburg.

NEU'ENDORF, a town of Saxony, in the Vogtland: one mile ſouth-weſt of Plauen.

NE'UNG-SUR-BAR'RON, a town of France, in the department of the Loire and Cher, and chief place of a canton, in the diſtrict of Romorantin. The place contains 1150, and the canton 4544, inhabitants.

NEU'NKIRCHEN, a town of Germany, in the principality of Culmbach: four miles ſouth-eaſt of Bayreuth.

NEU'NKIRCHEN, a town of Bavaria, in the biſhopric of Bamberg: eight miles ſouth of Forcheim, and twelve north of Nuremberg.

NEVON'SKA, a town of Ruſſia, in the government of Irkutſk: ninety-two miles north-north-weſt of Ilimſk.

NEVOS'ITY, *ſ.* [from the Lat. *nævus*, a ſpot on the ſkin; *but not uſed.*] The ſtate of being freckled. *Bailey.*

NEU'PEURN, a town of Bavaria: thirty-eight miles weſt of Salzburg, and nineteen ſouth of Waſſerburg.

NEURACH'NE, *ſ.* [from the Gr. νευρον, a nerve, and αχνε, a glume or huſk, alluding to the nerves or ribs, of the calyx-valves.] In botany, a genus of the claſs digynia, order triandria, natural order gramina.—*Eſſential Character.* Calyx of two ribbed acute hiſpid coriaceous valves, hardened when in ſeed; the outer one rather the ſmalleſt. Flowers diſſimilar; the outer one neuter, of two valves, of which the outermoſt nearly reſembles the calyx; inner hermaphrodite, of two membranous pellucid valves. Scales two beneath the germen. Stigmas feathery. Seed unconnected, falling out of the membranous corolla.

Neurachne alopecuroidea, a ſingle ſpecies. Gathered by Mr. Brown on the ſouth coaſt of New Holland. A perennial

perennial graſs, with numerous upright ſtems, whoſe knots are bearded with ſilky hairs. Leaves flat and ſhort. Spike ſolitary, ovate, reſembling that of the fox-tail graſs, (Alopecurus,) ſimple, deſtitute of any involucrum. *Brown's Prod. New Holl.*

NEURA'DA, *ſ.* [ſo called, as Linnæus himſelf tells us, Phil. Bot. 183. from νευϱα, a nerve, in alluſion to the ſtructure of the plant; probably adverting to the ſtrong inter-branching ribs or nerves of the ſeed-veſſel.] In botany, a genus of the claſs decandria, order decagynia, natural order, ſucculentæ, *Linn.* (roſaceæ, *Juſſ.* but this author juſtly doubts, whether his uncle and Adanſon have not led him into an error; the genus ſurely belongs to his ficoideæ.) Generic characters—Calyx: perianthium ſuperior, minute, in five deep, at length hardened, ſegments. Corolla: petals five, equal, oval, ſeſſile, erect. Stamina: filaments ten, awl-ſhaped, ſhorter than the calyx; antheræ ſimple. Piſtillum: germen inferior, gibbous below; ſtyles ten, very ſhort, approximated; ſtigmas capitate. Pericarpium: capſule orbicular, depreſſed, convex beneath, covered all over with aſcending thorns, of ten cells. Seeds ſolitary.—*Eſſential Character.* Calyx in five deep permanent ſegments; petals five; capſule inferior, thorny, with ten cells and ten ſeeds.

Neurada procumbens, or proſtrate neurada, the only ſpecies. Native of dry ſandy ground in Egypt, Arabia, Numidia, &c. Profeſſor Desfontaines gathered it in ſimilar ſituations near Tunis. The root is ſaid to be annual. Stems ſeveral, proſtrate, woody at the baſe, round, leafy, with numerous ſhort axillary branches. They are clothed, like every part of the herbage, even the flowers and fruit, except only the corolla and organs of impregnation, with a denſe depreſſed ſnow-white cottony down. Leaves alternate, ſtalked, ovate-oblong, obtuſe; tapering at the baſe, pinnatifid and notched; leſs cottony on their upper ſurface. Flowers axillary, ſolitary, rather ſtalked. Linnæus, who raiſed this plant from ſeeds ſent him by Bernard de Juſſieu, (ſee Hort. Upſ. 117.) recommends ſowing the entire fruit, in the drieſt poſſible ſoil. Forſkall remarks that, in a ſtate of nature, the whole capſule remains, like a ring, encircling the root. So we find it in a ſpecimen from Desfontaines. Thus nine of the ſeeds prove ſuperfluous, as one capſule produces but a ſingle plant. The only figure of the Neurada is that of Lamarck; the ſynonyms of Shaw and Plukenet, cited by Linnæus, belonging to Forſkalea tenaciſſima. It is unknown in our gardens.

NEURE' (Mathurin de), an able French mathematician in the ſeventeenth century, was a native of Chinon; but we have no account of the date either of his birth or of his death. His attachment to mathematical ſtudies introduced him to the acquaintance and the friendſhip of the celebrated Gaſſendi, on whoſe recommendation he was appointed tutor to the children of M. de Champigny, intendant of juſtice at Aix. Afterwards he was entruſted with the education of the princes of Longueville. He was on all occaſions a zealous defender of the principles and fame of his earlieſt patron Gaſſendi, and on his account became involved in a controverſy with John Morin, phyſician, and profeſſor-royal of mathematics at Paris. The pieces to which this controverſy gave riſe were collected together, and publiſhed in a quarto volume at Paris, in 1650. Three of his Letters, in Latin, on mathematical and aſtronomical ſubjects, are inſerted in the ſixth volume of the folio edition of Gaſſendi's works. Neuré alſo publiſhed a Latin letter in quarto, expoſing, in ſevere and pointed terms, the ridiculous and ſuperſtitious cuſtoms obſerved by the provençals at the feſtival of Corpus Chriſti. Occaſionally our author had paid his court to the muſes, and publiſhed ſome Latin verſes which are not deſtitute of merit, though their ſtyle is ſometimes too turgid and inflated. *Gen. Biog.*

NEURIT'ICS, or NER'VINES, *ſ.* Remedies proper for diſeaſes of the nerves, and nervous parts; as the membranes, ligaments, &c. Such are betony, lavender, roſemary, ſage, laurel, marjoram, and others among the cephalics.

NEURO'DE, a town of Sileſia, in the circle of Glatz. Here are manufactures of cloth and ſerges, with a conſiderable trade in ſnuff and tobacco: ten miles north-north-weſt of Glatz. Lat. 50. 22. N. lon. 16. 19. E.

NEURO'DES, *ſ.* [from νευρον, Gr. a nerve.] A nervous fever, a lingering fever.

NEUROG'RAPHY, *ſ.* A deſcription of the nerves.

NEUROL'OGY, *ſ.* [νευρον, Gr. a nerve, and λογος, a diſcourſe.] A deſcription of the nerves.

NEUROP'TERA, *ſ.* The name of the fourth order of inſects, according to the Linnæan ſyſtem. This order is well exemplified in the LIBELLULÆ, or Dragon-flies (which ſee), in which the characteriſtic of the order is very conſpicuous. The wings are always four in number. The inſects of this order are chiefly aquatic; reſiding in the waters as caterpillars; and flying about their ſurface in the perfect ſtate. See the article ENTOMOLOGY, vol. vi. p. 833.

NEU'ROSPAST, *ſ.* [νευϱοσπαϛεω, Gr. to draw the nerves.] A puppet; a figure put in motion:

That outward form is but a *neuroſpaſt;*
The ſoul it is, that, on her ſubtile ray
That ſhe ſhoots forth, the limbs of moving beaſt
Doth ſtretch ſtrait forth. *More's Immortal. of the Soul.*

NEUROT'IC, *adj.* Good for diſorders of the nerves.

NEUROT'IC, *ſ.* A remedy for diſorders of the nerves.

NEUROT'OMIST, *ſ.* One ſkilled in diſſections of the nerves.

NEUROT'OMY, *ſ.* [νευρον, Gr. a nerve, and τεμνω, to cut.] The anatomy of the nerves.

NEU'SALTZ, a town of Sileſia, in the principality of Glogau, on the Oder: twelve miles north-weſt of Glogau. Lat. 51. 48. N. lon. 15. 45. E.

NEU'SATZ, a town of Hungary, formerly called *Peter Wardein Schanz*, ſeparated by the Danube from Peter Wardein in Sclavonia, peopled by Raſcians, and fortified. It is the ſee of a Greek biſhop, and was made a royal and free town in 1751.

NEU'SCHLOSS, a town of Bohemia, in the circle of Saatz: ſix miles eaſt of Saatz.

NEU'SCHLOSS, a town of Bohemia, in the circle of Leitmeritz: three miles ſouth of Leypa.

NEU'SCHLOSS, a town of Bohemia, in the circle of Konigingratz: nine miles weſt-ſouth-weſt of Trautenau.

NEU'SCHLOSS, a town of Sileſia, which gives name to a lordſhip on the borders of Poland: five miles eaſt of Militſch.

NEUSE, a river of North Carolina, which riſes above Hillſborough, and, after a courſe of more than five hundred miles, falls into Pamlico Sound in lat. 34. 56. N. lon. 76. 50. W. ſeventy miles below Newbern, twelve miles above which it is navigable for ſhips.

NEU'SIDL, a town of Hungary, on a lake of the ſame name: ſixteen miles north-weſt of Altenburg, and twenty-four ſouth-weſt of Preſburg.

NEU'SIDL SEE', a lake of Hungary, thirteen miles long and three wide: twenty miles ſouth-eaſt of Vienna.

NEU'SLING, a town of Germany, in the margravate of Anſpach: ſeven miles eaſt of Weiſſenburgh.

NEU'SOL, a town of Hungary. It is a royal free town, and the beſt of the mine-towns, ſituated on the river Gran. It is built much in the Saxon manner; has ſix churches and a ſchool, with about five thouſand inhabitants, chiefly Sclavonians and Germans. It is noted for its weekly market, and the copper-ore in the adjacent mountains. The ſmelting-works give the air an unhealthy taint: forty-eight miles eaſt-north-eaſt of Leopoldſtadt, and 104 eaſt of Vienna. Lat. 48. 47. N. lon. 19. 25. E.

NEU'SORG, a town of Bavaria, in the biſhopric of Bamberg: three miles eaſt-north-eaſt of Kupferberg.

NEUSS, a town in the late French department of the Roer, in the diſtrict of Creveldt: containing 4423 inhabitants.

NEU'STADT, a town of the principality of Weimar: ten miles north-eaſt of Weimar.

NEU'STADT, a town of Germany, in the lordſhip of Stuhlingen: ſixteen miles north-north-weſt of Stuhlingen, and fourteen eaſt-ſouth-eaſt of Friburg.

NEU'STADT, a town of Bavaria, belonging to the comté of Sternſtein, on the Nab: forty-five miles north of Bamberg, and forty-ſix eaſt-north-eaſt of Nuremberg.

NEU'STADT, a town of the archbiſhopric of Salzburg: twelve miles north-north-eaſt of Salzburg.

NEU'STADT, a town of Pruſſia, in the circle of Samland, in the Friſch Nerung: thirty miles ſouth of Memel.

NEU'STADT, a town of Auſtria, formerly the ſee of a biſhop, ſuppreſſed in the year 1784. Here is a manufacture of china, and a military ſchool: ten miles ſouth-ſouth-eaſt of Baden, and twenty ſouth of Vienna. Lat. 48. 18. N. lon. 16. 13. E.

NEU'STADT, a town of Bohemia, in the circle of Konigingratz: twelve miles north-eaſt of Konigingratz. Lat. 50. 15. N. lon. 15. 57. E.

NEU'STADT, a town of Moravia, in the circle of Olmutz: ten miles north of Olmutz.

NEU'STADT, a town of the principality of Heſſe: twelve miles eaſt of Marpurg, and fifty-four north-eaſt of Mentz.

NEU'STADT, a town in the late French department of Mont Tonnerre, on the Hart: fourteen miles weſt of Spire, and thirty eaſt of Deux-Ponts. Lat. 49. 20. N. lon. 8. 10. E.

NEU'STADT, a town of Sweden, in the province of Finland, near the Gulf of Bothnia, where the treaty of peace was concluded, in the year 1721, between Denmark, Sweden, and Ruſſia: twenty-four miles north of Abo.

NEU'STADT, a town of Weſtphalia, in the principality of Wolfenbuttel: twenty-four miles ſouth-eaſt of Goſlar.

NEU'STADT, a ſeaport town of the duchy of Holſtein, with a ſpacious harbour, on the coaſt of the Baltic. The caſtle has of late been uſed as a place for ſtate-priſoners. In the year 1293, count John II. confirmed this town in the enjoyments of the Lubeck rights. This town was almoſt entirely deſtroyed by fire on the 28th of September, 1817. Very large magazines of corn were conſumed. It is ſeventeen miles north-north-eaſt of Lubeck. Lat. 54. 7. N. lon. 10. 55. E.

NEU'STADT, a town of Bavaria, on the Danube: ſixteen miles eaſt of Ingoldſtadt, and forty north of Munich. Lat. 48. 44. N. lon. 11. 45. E.

NEU'STADT, a town of Weſtphalia, in the comté of Hohenſtein: four miles north of Nordhauſen, and forty eaſt of Göttingen. Lat. 51. 35. N. lon. 10. 56. E.

NEU'STADT, a town of Germany, united in the lordſhip with Gimborn, ſituated at the foot of a mountain, on which formerly ſtood a citadel. Both the town and citadel were begun to be built in the year 1301, and finiſhed in 1353. The magiſtracy of this town is changed yearly. Formerly it enjoyed a good trade, particularly in iron; but at preſent the burghers ſubſiſt for the greateſt part by agriculture and breeding of cattle. In the year 1595, in 1717, and in 1742, Neuſtadt was almoſt conſumed by fire. It is twenty-ſix miles eaſt-ſouth-eaſt of Bonn, and twenty-five eaſt of Cologne. Lat. 50. 57. N. lon. 7. 45. E.

NEU'STADT, a town of Wirtemburg: twenty-two miles north-north-eaſt of Stuttgart, and ſix north-eaſt of Heilbron. Lat. 49. 18. N. lon. 9. 20. E.

NEU'STADT. See WILHEMSTAL, NAGYBANJA, and NYSTADT.

NEU'STADT, or PRU'DNIK, a town of Sileſia, in the principality of Oppeln. Next to Oppeln, this is the beſt town in the whole principality: fourteen miles ſouth-eaſt of Neiſſe, and twenty-five ſouth-ſouth-weſt of Oppeln. Lat. 50. 12. N. lon. 17. 30. E.

NEU'STADT, or SCHELFE, a town of Germany, in the principality of Schwerin: eighteen miles ſouth of Schwerin.

NEU'STADT AM AI'SCH, a town of Germany, in the principality of Culmbach, on the Aiſch: twenty-three miles weſt-north-weſt of Nuremberg, and nineteen north of Anſpach.

NEU'STADT AM CUL'MEN, or AM RAU'HEN CULMEN, or "Neuſtadt between the Culmen," a town of Germany, in the principality of Culmbach; it takes its name from two mountains, between which it is ſituated: twelve miles ſouth-eaſt of Bayreuth, and twelve ſouth-weſt of Wonſiedel.

NEU'STADT AM DOS'SE, a town of the Middle Mark of Brandenburg, on the Doſſe, celebrated for its manufacture of plate-glaſs: thirty-ſix miles north-weſt of Berlin. Lat. 52. 52. N. lon. 12. 30. E.

NEU'STADT E'BERSWALDE, a town of the Middle Mark of Brandenburg, on the Finow canal, which forms a communication between the Havel and the Oder: thirty-ſix miles north-weſt of Frankfort on the Oder, and twenty-eight north-eaſt of Berlin. Lat. 52. 54. N. lon. 13. 50. E.

NEU'STADT AN DER HEY'DE, a town of Germany, in the principality of Coburg: ſix miles north-eaſt of Coburg. Lat. 50. 20. N. lon. 10. 14. E.

NEU'STADT PRES HO'HENSTEIN, a town of Saxony, in the margravate of Meiſſen: eleven miles north-north-eaſt of Königſtein, and twenty eaſt of Dreſden. Lat. 51. 4. N. lon. 14. 16. E.

NEU'STADT MA'HRISCH. See UNICZOW.

NEU'STADT AM OR'LA, a town of Saxony, and capital of the circle of the ſame name, on the Orla. The circle is bounded by the territories of Erzgebirg, Altenburg, Saalfeld, and Reuſs; and includes nine towns, and above 220 villages; in the town of Neuſtadt is a citadel, two churches, with a court of judicature for the circle, and a mine-office: forty-four miles ſouth-ſouth-weſt of Leipſic, and eighty weſt-ſouth-weſt of Dreſden. Lat. 50. 39. N. lon. 11. 48. E.

NEU'STADT IN DER RO'SENAU, a town of Germany, in the county of Wertheim: eighteen miles ſouth-ſouth-eaſt of Frankfort on the Maine.

NEU'STADT AM RU'BENBERG, a town of Weſtphalia, in the principality of Calenberg, ſituated on the Leina: twelve miles weſt-north-weſt of Hanover. Lat. 52. 33. N. lon. 9. 33. E.

NEU'STADT AM SA'ALE, a town of the duchy of Wurzburg, on the Saal: thirteen miles north of Schweinfurt, and thirty-two north-north-eaſt of Wurzburg.

NEU'STADT PRES DE SCHNEE'BERG, a town of Saxony, in the circle of Erzgebirg: ſeventeen miles ſouth-ſouth-weſt of Chemnitz, and ten ſouth-eaſt of Zwickau. Lat. 50. 30. N. lon. 12. 35. E.

NEU'STADT OBER WI'ESENTHAL, a town of Saxony, in the circle of Erzgebirg, on the borders of Bohemia, founded in 1526: eleven miles ſouth-ſouth-eaſt of Schwartzenburg.

NEU'STADTEIN. See RUDOLPHSWERTH.

NEU'STADTEL, a town of Sileſia, in the principality of Glogau: fifteen miles weſt of Gros Glogau, and ſixteen north-eaſt of Sagan. Lat. 51. 40. N. lon. 15. 45. E.

NEU'STADTEL, or NEUSTADTL, a town of Bohemia, in the circle of Pilſen: thirty-two miles weſt of Pilſen. Lat. 49. 39. N. lon. 12. 45. E.

NEU'STADTL, a town of Bohemia, in the circle of Boleſlaw: fourteen miles eaſt-north-eaſt of Krottau.

NEU'STADTL, or NO'WE MES'TOR, a town of Moravia, in the circle of Brunn: ſix miles eaſt of Saar.

NEU'STAEDTER TOEP'LITZ, a celebrated warm bath, in the duchy of Carniola: ſix miles from Rudolſswerth.

NEU'STATT, a town of the principality of Naſſau Dillenburg: ſix miles weſt-ſouth-weſt of Dillenburg.

NEU'STIFFT, a town of the county of Tyrol: thirteen miles ſouth-weſt of Inſpruck.

NEU'TEICH, a town of Pruſſia, in Pomerelia: ſix miles north-north-weſt of Marienburg.

NEU'TEICH, a town of Sileſia, in the principality of Oels: two miles eaſt of Militſch.

NEU'TER, *adj.* [*neuter*, Lat. *neutre*, Fr.] Indifferent; not engaged on either ſide.—The general diviſion of the Britiſh nation is into whigs and tories; there being very few, if any, who ſtand *neuter* in the diſpute, without ranging themſelves under one of theſe denominations. *Addiſon's Freeholder.*—[In grammar.] A noun that implies no ſex.—The adjectives are *neuter*, and animal muſt be underſtood to make it grammar. *Dryden.*—A verb *neuter* is that which ſignifies neither action nor paſſion; but ſome ſtate or condition of being; as *ſedeo*, I ſit. *Clarke's Latin Grammar.*

NEU'TER, *ſ.* One indifferent and unengaged.—He is an odious *neuter*, a lukewarm Laodicean. *Bp. Hall's Select Thoughts.*—The learned heathens may be looked upon as *neuters* in the matter, when all theſe prophecies were new to them, and their education had left the interpretation of them indifferent. *Addiſon on the Chriſtian Religion.*

NEU'TRAL, *adj.* [*neutral*, French.] Indifferent; not acting; not engaged on either ſide.—He no ſooner heard that king Henry was ſettled by his victory, but forthwith he ſent ambaſſadors unto him, to pray that he would ſtand *neutral*. *Bacon's Hen.* VII.

Who can be wiſe, amaz'd, temperate, and furious,
Loyal and *neutral*, in a moment? No man. *Shakeſp.*

Indifferent; neither good nor bad:

Some things good, and ſome things ill do ſeem,
And *neutral* ſome in her fantaſtick eye. *Davies.*

Neither acid nor alkaline.—Salts which are neither acid nor alkaline, are called *neutral*. *Arbuthnot.*

NEUTRAL SALTS, among chemiſts, ſuch as do not abound with an exceſs of acid or alkali. See NEUTRALIZATION. Formerly thoſe only were called neutral ſalts, which were compoſed of acids and alkalies united together to the point of ſaturation, ſo that they had no acid nor alkaline property. But now this name is commonly extended to combinations of acids with all ſubſtances, with which they can ſo unite, that they loſe entirely or moſtly their acid qualities; as, for inſtance, when they are united with earthly or metallic ſubſtances.

NEU'TRAL, *ſ.* One who does not act nor engage on either ſide.—The treacherous who have miſled others, and the *neutrals* and the falſe-hearted friends and followers, who have ſtarted aſide like a broken bow, are to be noted. *Bacon.*

NEU'TRALIST, *ſ.* An indifferent or careleſs being; one who is on neither ſide. *Bullokar.*

NEUTRAL'ITY, *ſ.* [*neutralité*, French.] A ſtate of indifference; of neither friendſhip nor hoſtility.—Men who poſſeſs a ſtate of *neutrality* in the times of publick danger, deſert the intereſt of their fellow-ſubjects. *Addiſon.*

The king, late griefs revolving in his mind,
Theſe reaſons for *neutrality* aſſign'd. *Garth's Ovid.*

A ſtate between good and evil:

There is no health: phyſicians ſay, that we
At beſt enjoy but a *neutrality*. *Donne.*

The ſtate of being of the neuter gender.—Jeſus anſwered, "I and my Father are one:" where the plurality of the verb, and the *neutrality* of the noun, with the diſtinction of their perſons, ſpeak a perfect identity of their eſſence. *Pearſon on the Creed.*

To NEU'TRALIZE, *v. a.* To render indifferent; to engage on neither ſide.—[In agriculture.] To make neutral.—Theſe [till and vitriolic ſoils] neceſſarily require the calcareous ingredient to *neutralize* their peccant acid. *Kirwan on Manures.*

NEUTRALIZA'TION, *ſ.* in chemiſtry, the act of combining an acid with an alkali in ſuch proportion that the compound may not exhibit either acid or alkaline qualities, and is in what is called a neutral ſtate. Under the ſame circumſtances the acid and the alkali are ſaid to be *mutually ſaturated*, or neutralized. In the old nomenclature, this language relative to ſalts was more appropriate than in the preſent ſtate of chemiſtry. Acids uſed then to be called *acid ſalts*, and the alkalies *alkaline ſalts*; while thoſe compounds conſiſting of an acid and an alkali, where neither the acid nor the alkali predominated, were called, for the ſake of diſtinction, *neutral ſalts*. The teſt commonly employed for aſcertaining the ſtate of neutrality is a vegetable blue, ſuch as an infuſion of violets, or paper ſtained with almoſt any vegetable blue. If the colour is not changed, the compound may be deemed neutral. If the colour be changed to red, the acid prevails; but, if a green, the alkali predominates.

NEU'TRALLY, *adv.* Indifferently; on neither part.

NEU'TRO-PAS'SIVE, *adj.* in grammar, belonging to verbs neuter, which have their preterperfect tenſes formed of a paſſive participle. *Aſh.*

NEU'VE LI'RE, a town of France, in the department of the Eure: ten miles ſouth of Beaumont le Roger, and fifteen north-north-weſt of Verneuil.

NEU'VIC, a town of France, in the department of the Dordogne: twelve miles ſouth-weſt of Perigueux.

NEU'VIC, a town of France, in the department of the Correze: ten miles ſouth of Uſſel, and twenty-two eaſt-north-eaſt of Tulle.

NEU'VILLE, a town of France, in the department of the Vienne: ſeven miles north-north-weſt of Poitiers, and ſix ſouth of Mirebeau.

NEU'VILLE, a town of France, in the department of the Upper Marne, on the Marne: ſeven miles eaſt of St. Dizier.

NEU'VILLE, a town of France, in the department of the Straits of Calais, on the Canche, oppoſite Montreuil.

NEU'VILLE, BON'NEVILLE, or NEU'ENSTADT, a town of Swiſſerland: nine miles north-eaſt of Neufchâtel.

NEU'VILLE, a town of Canada, on the St. Laurence: fourteen miles ſouth-weſt of Quebec.

NEU'VILLE (Charles Frey de), a French Jeſuit, celebrated for his admirable talents as a preacher, was deſcended from a noble family in Britany, and born at Coutances in the year 1693. He did not deliver his firſt ſermon before the year 1736; but he then made ſuch a powerful impreſſion on his hearers, by the excellence of his compoſition and the powers of his eloquence, that from that time for more than thirty years, his appearance in the pulpit, either at court or in the capital, always afforded the higheſt ſatisfaction to his auditory. After the ruin of his order in France, he retired to Compeigne, where he had permiſſion to reſide, notwithſtanding that he had not complied with the conditions which the parliament of Paris exacted from the Jeſuits who were deſirous of remaining within their juriſdiction. For this indulgence he was indebted to the effect produced by his ſuperior talents and eminent virtues on illuſtrious females at court, who obtained the conſent of Louis XV. that he ſhould live unmoleſted in the ſolitude which he had choſen. Into this retreat he was followed by the favours of the king and royal family, which conſoled him in his exile from ſociety, and mitigated the infirmities of advancing age. The principal event which contributed to diſturb his tranquillity, was the extinction of the ſociety of Jeſuits by the brief of pope Clement XIV. He died in 1774, when he was in the eighty-firſt year of his age. His Sermons were publiſhed at Paris, in 1776, in 8 vols. 12mo.

Our author had an elder brother, called PETER-CLAUDE FREY DE NEUVILLE, who was born at Grandville in 1692. He alſo became a member of the Society of Jeſus, and was twice called upon to fill the poſt of provincial. After the deſtruction of the ſociety he retired to Rennes, where he died in 1773, about the age of eighty-one. Of his Sermons, which are leſs brilliant but more ſolid than thoſe of his younger brother, two volumes were publiſhed at Rouen, in 1778, 12mo. *Nouv. Dict. Hiſt.*

NEU'VILLE AUX BOI'S, a town of France, and principal place of a diſtrict, in the department of the Loiret:

twelve miles north of Orleans, and ten ſouth-weſt of Pithiviers. Lat. 48. 4. N. lon. 2. 8. E.

NEU'VILLE St. COLOM'B, a town of France, in the department of the Rhône and Loire: ſix miles north of Lyons.

NEU'VILLE les DA'MES, a town of France, in the department of the Ain: nine miles weſt of Bourg en Breſſe.

NEU'VILLE au PON'T, a town of France, in the department of the Marne: three miles north-weſt of St. Menehould.

NEU'VILLE le ROI', a town of France, in the department of the Oiſe: nine miles north-north-eaſt of Clermont.

NEU'VILLE sur SEI'NE, a town of France in the department of the Aube: five miles ſouth of Bar ſur Seine, and twelve eaſt of Chaource.

NEUVILLE'R, a town of France, in the department of the Meurte: ſeven miles eaſt of Vezelize, and nine ſouth-weſt of Luneville.

NEUVILLE'R, a town of France, in the department of the Lower Rhine: five miles north of Saverne, and fifteen weſt of Haguenau.

NEU'VY, a town of France, in the department of the Nyevre: ſeven miles north of Coſne, and ten ſouth-weſt of St. Fargeau.

NEU'VY, a town of France, in the department of the Yonne: three miles north-eaſt of St. Florentin, and nineteen ſouth-weſt of Troyes.

NEU'VY sur BARANJO'N, a town of France, in the department of the Cher: ſixteen miles north-north-weſt of Bourges.

NEU'VY PAILLOU', a town of France, in the department of the Indre: ſeven miles ſouth-weſt of Iſſoudun, and ſeven north-eaſt of Châteauroux.

NEU'VY le ROI', a town of France, in the department of the Indre and Loire: thirteen miles north of Tours.

NEU'VY St. SEPUL'CHRE, a town of France, in the department of the Indre, and chief place of a canton, in the diſtrict of La Châtre: nine miles weſt of La Châtre. The place contains 1672, and the canton 9500, inhabitants.

NEU'WALDE, a town of Sileſia, in the principality of Neiſſe: ſeven miles north-north-eaſt of Ziegenhals.

NEU'WARP, a town of Anterior Pomerania, on a lake communicating with the Friſche Haff: ten miles eaſt of Uckermunde. Lat. 53. 48. N. lon. 14. 15. E.

NEUWED'EL, a town of Brandenburg, in the New Mark, on the Drage: thirty miles ſouth-eaſt of Stargard. Lat. 53. 14. N. lon. 15. 55. E.

NEU'WIED, or New Wied, a town of Germany, in the county of Wied Runkel, on the Rhine. This is a neat town of conſiderable commercial importance, and its proſperity has been gradually advancing with its trade and manufactures: four miles below Coblentz. Lat. 50. 29. N. lon. 7. 28. E.

NEW, *adj.* [*niuja*, Goth. neop, Sax. *newyd*, Welſh; *neu*, Germ. *neuf*, Fr.] Not old; freſh; lately produced, made, or had; novel. *New* is uſed of things, and *young* of perſons.—Shoon ful moiſt and *newe*. *Chaucer's C. T. Prol.*

What's the *neweſt* grief?
That of an hour's age doth hiſs the ſpeaker;
Each minute teems a *new* one. *Shakeſpeare's Macbeth.*

Not being before.—Do not all men complain how little we know, and how much is ſtill unknown? and can we ever know more, unleſs ſomething *new* be diſcovered? *Burnet.*—Modern; of the preſent time.—Whoever converſes much among old books, will be ſomething hard to pleaſe among *new*. *Temple's Miſcell.*—Different from the former.—Steadfaſtly purpoſing to lead a *new* life. *Common Prayer.*—Not antiquated; having the effect of novelty:

There names inſcrib'd unnumber'd ages paſt,
From time's firſt birth, with time itſelf ſhall laſt;
Theſe ever *new*, nor ſubject to decays,
Spread and grow brighter with the length of days. *Pope.*

Not habituated; not familiar.—Such aſſemblies, though had for religion's ſake, may ſerve the turn of hereticks, and ſuch as privily will inſtil their poiſon into *new* minds. *Hooker.*

Twelve mules, a ſtrong laborious race,
New to the plough, unpractis'd in the trace. *Pope.*

Renovated; repaired, ſo as to recover the firſt ſtate.—Men, after long emaciating diets, wax plump, fat, and almoſt *new*. *Bacon's Nat. Hiſt.*—Freſh after any thing:

Nor dare we truſt ſo ſoft a meſſenger,
New from her ſickneſs, to that northern air. *Dryden.*

Not of ancient extraction.—A ſuperior capacity for buſineſs, and a more extenſive knowledge, are ſteps by which a *new* man often mounts to favour, and outſhines the reſt of his contemporaries. *Addiſon.*

To NEW, *v. a.* [neopian, Saxon.] To make new; to renew. *Obſolete.*—The preſents every day ben *newed*. *Gower's Conf. Am.*—And many a maiden's ſorowe for to *newe*. *Chaucer's Tr. of Creſſ.*

NEW, *adv.* [chiefly uſed in compoſition for newly.] Lately; recently.

NEW AB'BEY, ſituated near Kilcullen-bridge in the county of Kildare, and province of Leinſter, in Ireland. It was founded by Rowland Euſtace, of a great and ancient family in this county; the tower is ſtill ſtanding, and ſome part of the abbey; the ruins of the reſt have contributed to build ſeveral dwellings near it. In the inſide Rowland Euſtace and his lady lie buried; their figures, clothed in armour, are to be ſeen there. Near this is a handſome ſeat of the Carter family, on the oppoſite ſide of the river Liffey. *Ency. Brit.*

NEW'-ADOPTED, *adj.* Lately adopted:

Will you, with thoſe infirmities ſhe owns,
Unfriended, *new-adopted* to our hate,
Dow'r'd with our curſe, and ſtranger'd with our oath,
Take her or leave her? *Shakeſpeare's K. Lear.*

NEW AL'BION. See California.

NEW ANDALU'SIA. See Andalusia, vol. i.

NEW AN'DOVER, or East Andover, a town of North America, in York-county, ſtate of Maine: ninety miles north-weſt of Portland.

NEW ANTICA'RIA, a town of New Spain: thirty-four leagues northward of Acapulco.

NEW ANTIGUE'RA, an epiſcopal city of New Spain, in the province of Guaxaca, erected into a biſhopric by Paul III. in 1547. Its noble cathedral is ſupported by marble pillars.

NEW ASH'FORD. See Ashford, vol. ii.

NEW ATH'ENS. See Tioga Point.

NEW BAN'K, one of the banks of Newfoundland: ſix miles ſouth of Cape Ballard.

NEW BIS'CAY. See Biscay, vol. iii.

NEW'-BLOWN, *adj.* Lately blown:

All in that *new-blown* age which does inſpire
Warmth in themſelves, in their beholders fire. *Cowley.*

NEW'-BORN, *adj.* Newly born; lately brought forth.—If we conſider *new-born* children, we ſhall have little reaſon to think that they bring many ideas into the world with them. *Locke.*

He ſaw heav'n bloſſom with a *new-born* light,
On which, as on a glorious ſtranger, gaz'd
The golden eyes of night. *Craſhaw.*

NEW BOS'TON, a townſhip of Hillſborough-county, New Hampſhire: twelve miles ſouth-weſt by weſt from Amuſkeag falls, ſixty weſt of Portſmouth, and equally diſtant north-weſt from Boſton.

NEW BRA'INTREE, a town of America, in the county of Worceſter, between Rutland or Oakham on the eaſt and Hardwick on the weſt: twenty-one miles north-weſt of Worceſter. It has 875 inhabitants.

NEW BRID'GE, a village in Suſſex, north-eaſt of Petworth.

NEW BRIT'AIN. See BRITAIN, vol. iii. p. 417.

NEW BRUN'SWICK. See BRUNSWICK, vol. iii. p. 456. Since that article was printed, ſome diſputes have occurred between the Britiſh and American governments on the ſubject of the boundary-line between this province and the diſtrict of Maine. On the 21ſt of September, 1814, the Britiſh lieutenant-general Sherbrook iſſued a proclamation at Halifax in Nova Scotia, ſtating that "formal poſſeſſion, in his majeſty's name, has been taken of all the eaſtern ſide of the Penobſcot-river, and all the country lying between that river and the boundary-line of New Brunſwick, including Long Iſland, and all the other iſlands near and contiguous to the ſhores thereof;" the chief of which are Fox, Hart, and Deer, iſlands; beſides a number of ſmall iſlands, rocks, and ledges. It appears, therefore, that the Penobſcot-river, inſtead of the St. Croix, now forms the boundary between the Engliſh and the Americans in this quarter.

In the year 1770, the miniſters of the Dutch church appropriated a ſum of money to the eſtabliſhment of a college at New Brunſwick; which, as it has always been devoted to the intereſts of that denomination, was lately converted into a purely theological ſeminary. It has a board of twenty-nine truſtees, a preſident, vice-preſident, and one profeſſor. The ſtudents are, for the moſt part, the children of Dutch emigrants. The library is ſmall, but well ſelected; and the whole machinery of the ſchool is under very good regulation.

NEW BUCK'ENHAM. See BUCKENHAM, vol. iii.

NEW BUIL'DING, a village in the north riding of Yorkſhire, near Burrowby, in the road from Thirſk.

NEW'-BUILT, *adj.* Lately built; recently erected:

Our houſe has ſent to-day
T' inſure our *new-built* veſſel call'd a play. *Dryden.*

NEW CALEDO'NIA. See CALEDONIA, vol. iii. p. 613.

NEW CAN'TON, a ſmall poſt-town of America, lately eſtabliſhed, in Buckingham-county, Virginia, on the ſouth ſide of James's River: ſeventy miles above Richmond.

NEW CAS'CO, a poſt-town of America, in Cumberland-county, Maine: 613 miles north-eaſt from Waſhington.

NEW CHES'TER, a townſhip of America, in Grafton-county, New Hampſhire, on the weſt ſide of Pemigewaſſet River, incorporated in 1778: thirteen miles below Plymouth.

NEW-CHO'SEN, *adj.* Newly choſen; lately choſen:

Let this be nature's frailty, or her fate,
Or Iſgrim's counſel, her *new-choſen* mate. *Dryden.*

NEW (JERUSALEM) CHURCH. Under the article LONDON, vol. xiii. p. 570, 1. we have given the leading tenets of Emanuel Swedenborg, the founder of the New Jeruſalem Church. From that article it will be collected, that, while the Jews are praying for the firſt coming of the Meſſiah, which the Chriſtians affirm to have happened 1800 years ago, and while the Chriſtians are praying for his ſecond coming, the Swedenborgians affirm this to have been accompliſhed in the year 1757. See p. 571 of that article.

The main points of faith in this church are the following: I. That God is one, in whom is a divine trinity; and that the Lord God the Saviour Jeſus Chriſt is that God. II. That a ſaving faith is to believe on Him. III. That evils ought to be ſhunned, becauſe they are of the devil and from the devil. IV. That good actions ought to be done, becauſe they are of God and from God. V. And that they ſhould be done by man as of himſelf, nevertheleſs under this belief, that they are from the Lord operating in him and by him. The two firſt particulars have relation to faith; the two next to charity; and the laſt reſpecteth the conjunction of charity and faith, and thereby of the Lord and man. *Brief Expoſition of the Doctrines of the New Church,* by Swedenborg; 1769.

As the works of Emanuel Swedenborg are very voluminous, and as very few perſons not of his perſuaſion have patience to read them, we ſhall ſelect ſome of the moſt curious paſſages which relate to the world of ſpirits and the ſtate of man after death, from his *Arcana Cœleſtia,* in 13 volumes 8vo.

"The ſpiritual world, or world of ſpirits, (he ſays,) exiſts not in ſpace: hence, I could there ſee Africans and Indians very near me, though ſituated at a great diſtance on earth; and be preſent with the inhabitants of other planets, not only in our ſyſtem, but in other worlds. In this way I have converſed with apoſtles, departed popes, emperors, and kings; with the late reformers of the church, Luther, Calvin, and Melancthon; and with others from different countries. After death a man is ſo little changed, that he does not know but he is ſtill living in the preſent world; he eats and drinks, and enjoys conjugal delight, as in this world; and ſo great is the reſemblance between the two worlds, that in the ſpiritual world there are cities with palaces and houſes, and alſo books and writings, employments and merchandiſe, gold, ſilver, and precious ſtones. But all theſe objects are in an infinitely-more perfect ſtate than they are in this world.

"The *world of ſpirits* is neither heaven nor hell, but a place or ſtate betwixt both, into which man immediately enters after death; and, after ſtaying there a certain time, longer or ſhorter according to what his paſt life had been in this world, he is either received up into heaven, or caſt down into hell. It muſt be noted here, that this intermediate ſtate has nothing in it of the probationary kind; for that is all over with the life of this world; but is a ſtate of a ſeparation, or reducing every one to his own proper prevailing principle, and as ſuch finally preparatory for an eternal happineſs or miſery.

"As the world of ſpirits is a middle *ſtate* with man, between heaven and hell, ſo it is alſo a middle *place,* having the hells underneath and the heavens above. All the hells are ſhut next to that world, except that ſome holes or clefts, like thoſe in rocks or caverns, are left open; and theſe ſo guarded, that none can paſs through them but by permiſſion, which is granted on particular occaſions. Heaven likewiſe appears as fenced all round, ſo that there is no paſſing to any of the heavenly ſocieties, but by a narrow way, which is likewiſe guarded. Theſe outlets and inlets are what in Scripture are called the *doors* and *gates* of heaven and hell.

"The world of ſpirits appears like a valley, between mountains and rocks, here and there ſinking and riſing. The doors and gates opening to the heavenly ſocieties are only ſeen by thoſe who are in their preparation for heaven; nor are they to be found by any others. To every ſociety in heaven there is an entrance from the world of ſpirits, after paſſing which there is a way, which as it riſes branches into ſeveral others: nor are the doors and gates of the hells viſible to any but thoſe that are going to enter therein, to whom they are then opened; at which time theſe appear like as it were dark and ſooty caverns, leading obliquely down to the infernal abyſs, where there are alſo more gates. Through thoſe dark and diſmal caverns exhale certain fœtid vapours, which are moſt offenſive to the good ſpirits; but which the evil ones are greedily fond of; for, as were the evils which any one took moſt delight in when in this world, ſuch is the ſtink correſponding thereto which moſt pleaſes him in the other; in which they may be aptly compared to thoſe birds or beaſts of prey, as ravens, wolves, and ſwine, which are attracted by the rank effluvia emitted from carrion and putrid carcaſſes.

"When the body of a man is no longer able to perform its natural functions correſponding to the thoughts and affections of his ſpirit, and which are derived to him from the ſpiritual world, then he is ſaid to die; which comes to paſs when the lungs and the heart ceaſe their reſpiratory and contractile motions; not that man then ſuffers extinction of life, but only is ſeparated from that corporeal part of his compoſition which ſerved him for an inſtrument of uſefulneſs in this world; but he ſtill continues a living man, and that in a proper and literal ſenſe of the expreſſion, inaſmuch as man receives his denomination, not from his body, but from his ſpirit, ſince it is the latter that thinks in him, and that thought with affection eſſentially conſtitute the man; ſo that, when any man is ſaid to die, it means no more than that he paſſes from one world into another; and hence it is, that by *death* in the Scripture, according to the internal ſenſe of the word, is ſignified reſurrection, and continuation of life.

" The ſpirit of a man remains ſome little time in the body after all ſigns of life diſappear, but not longer than till a total ceſſation of all power in the heart enſues, which varies according to the nature of the diſeaſe he dies of, for the motion of the heart continues long after in ſome, but not ſo in others; but, as ſoon as the total ceſſation of it happens, the reſuſcitation of man commences, and this by the ſole power of the Lord. By *reſuſcitation* here is meant the liberation of the ſpirit of a man from his body, and the introduction of it into the world of ſpirits, and commonly called reſurrection. That the ſpirit of a man is not ſeparated from his body before all motion and power in the heart entirely ceaſes, is becauſe the heart correſponds to the affection of love, which is the very life of man, for it is from love that every one derives his vital heat; therefore, ſo long as this conjunction laſts, ſo long the correſpondence continues; and it is from correſpondency that the ſpirit actuates and communicates life to to the body.

" That the form of the ſpirit of a man is a human form, or, in other words, that the ſpirit is the true-formed man, may be evinced from many arguments; particularly from theſe, viz. That every angel is in a perfect human form; that every man is a ſpirit as to his inner man; and that angels in heaven are from the human race. This alſo more evidently appears from man's being denominated man from his ſpirit, and not from his body, and becauſe the corporeal form is an adjunct to the ſpirit after its form, and not contrariwiſe, the former being but the clothing of the latter. Moreover, the ſpirit is the ſole moving power in man, acting upon and actuating every the moſt minute part of the body; inſomuch that, when any part no longer derives vital influence therefrom, it preſently dies. Now, the ruling powers, which govern the body as their ſubject, are the thought and the will; but theſe are from the ſpirit only, nay, conſtitute its very eſſence. The reaſon why we do not ſee any ſeparate ſpirit, nor yet that of another man whilſt in his body, in its human form, with our preſent organs of ſight, is becauſe theſe organs of viſion are material, and therefore only capable of diſcerning objects of a material nature, whereas ſpiritual things muſt be ſeen by a ſpiritual eye; but, when the corporeal ſight is extinguiſhed by the death of the body, and the ſpirit's eye is opened, then ſpirits appear to one another in their human form, not only in the ſpiritual world, but they alſo ſee the ſpirits of thoſe who yet live here in the body. It is to be noted here, that, when ſpirits are ſeen by any one in the body, they are not ſeen with the corporeal organs of viſion, but by the ſpirit of the beholder abſtractedly from the body; though the appearance is exactly the ſame in both caſes, as implied in thoſe words of the apoſtle, where, ſpeaking of his viſions, he ſays, *Whether in the body, or out of the body, I cannot tell.* 2 Cor. xii. 2.

" When the ſpirit of a man firſt enters into the world of ſpirits, which is ſoon after his reſuſcitation, (of which mention has been made before,) he as yet retains the ſame face and voice that he had in this world, as being hitherto in his exterior ſtate, that of his interior being yet unmanifeſted; and this is his firſt ſtate after death: but, ſome time after, his face becomes entirely changed, ſo as to correſpond with the particular affection or love that poſſeſſed his ſpirit when in the body; for the face of a man's ſpirit differs greatly from that of his body, the latter being derived from his parents, but the former a correſpondent to his predominant affection, of which it is the ſignature or image, and which becomes appropriated to man in the other world, upon the manifeſtation of his interior ſtate; for the ſpirit of a man, rightly conſidered, is the ſame with his predominant affection or love, and his face is the external form of it. This change reſpecting faces, in thoſe who paſs from hence into the other world, is founded on this law, that no diſſimulation or counterfeiting is there allowed, but all muſt appear to be what they really are, and conſequently expreſs their thoughts in their words, and their affections and deſires in their looks and actions, ſo that the faces of all there repreſent their minds reſpectively. Hence it is, that, though all who knew one another in this world are alike mutually acquainted in the world of ſpirits, yet it is otherwiſe in heaven and hell.

" It is to be obſerved, that the human form of every man after death is beautiful in proportion to the love he had for divine truths, and a life according to the ſame, for by this ſtandard things within receive their outward manifeſtation and form; ſo that, the deeper grounded the affection for what is good, the more conformable it is to the divine order in heaven, and conſequently the more beauty the face derives from its influx. Hence it is, that the angels of the third or inmoſt heaven, whoſe love is of the third or higheſt degree, are the moſt beautiful of all the angels; whereas they whoſe love for divine things had been in a lower degree, or more external than that of the celeſtial or higheſt angels, poſſeſs an inferior degree of beauty; and the tranſlucent luſtre in their faces, as proceeding from a ſmaller degree of divine virtue within them, is comparatively dim; for, as all perfection riſes in degrees from the inward to the inmoſt, ſo the external beauty, to which it gives life and vigour, has its degrees in the ſame proportion.

" When a man paſſes from this natural world into the ſpiritual, which is at the time of his death, he takes with him all that belonged to him as man, and poſſeſſes every ſenſe, both external and internal, that he poſſeſſed before. Thus, for inſtance, all in heaven have their ſight, their hearing, and all their ſenſes, in far greater perfection than when in this world, and alſo their minds more abundantly replete with wiſdom: for they ſee by the light of heaven, which greatly exceeds that of this world, and they hear through the medium of a ſpiritual atmoſphere, to which that of our earth is not comparable. The comparative difference between theſe two ſenſes there and here, is as that of a bright ſky to a thick fog, or as the luſtre of the meridian ſun to the duſk of the evening. Now the light of heaven, which is the divine truth, makes manifeſt the minuteſt things to the perception of angels; and, as their external correſponds to their internal or intellectual ſight, ſo by mutual influx they co-operate in forming the high perfection of angelical perſpicuity.

" There are three ſtates which man goes through after death, before he enters into heaven or hell; the firſt reſpects his exterior part; the ſecond his interior; and the third is his ſtate of final preparation. Theſe ſtates man paſſes through in the world of ſpirits; however, there are exceptions, as ſome are immediately after death taken up into heaven, or caſt into hell. Of the former claſs are they who are regenerated, and ſo prepared for heaven in this world, and that in ſo high a degree as to need only the putting off all their natural impurities, in order to be carried by the angels into heaven. On the other hand, ſuch as have been internally evil, under the maſk of externally-apparent goodneſs, and ſo have filled up the meaſure of their iniquities by hypocriſy and deceit, uſing the cloak of goodneſs as a means whereby to deceive others; theſe are immediately caſt into hell. There are alſo ſome who are committed to caverns immediately after their deceaſe, and ſo ſeparated from others in the world of ſpirits, but afterwards releaſed, and remanded thither by turns; ſuch are they who, under civil pretexts, deal fraudulently with their neighbours; but the forementioned are very few compared to the many claſſes of thoſe who are detained in the world of ſpirits, in order to their preparation for heaven or hell, according to the eſtabliſhed order of divine economy.

“ As to the firſt ſtate before mentioned, or that which reſpects the *exterior*, this man enters upon immediately after death. Now, as the life of men newly become ſpirits is ſo like to their natural life in this world, and as they are at firſt ſtrangers to their new ſtate, without knowing any thing more of heaven and hell than what they have learned from the letter of Scripture, and their preachers; therefore, after wondering for ſome time at their being clothed with a body, and poſſeſſing every ſenſe as in this world, and alſo at their ſeeing things under the like appearance as before, they find themſelves urged by a deſire of knowing what and where heaven and hell are; upon which they are inſtructed by their friends in things relating to eternal life, and are conducted to various places, and different ſocieties, and ſome into cities, gardens, and beautiful plantations, and more particularly to ſee magnificent buildings, as ſuch external objects ſuit with the preſent external ſtate of their minds. Then they are led to inſpect thoſe interior ſentiments and ideas, which they had in this life concerning the ſtate of ſouls after death, and, concerning heaven and hell, not without indignation to think of their own paſt ignorance, and alſo that of the church, in relation to theſe important ſubjects. Almoſt all in the world of ſpirits are deſirous to know whether they ſhall go to heaven or not, and the greater part judge in favour of themſelves as to this particular, eſpecially ſuch as had lived by the external rules of morality and civil obligation here; not conſidering that both good and bad do the ſame to outward appearance, as alſo do many good offices to others, and in like manner go to church, hear ſermons, and bear a part in the public worſhip; not reflecting that theſe external acts, and this outward form of worſhip, avail nothing in themſelves, conſidered ſeparately from the diſpoſition and principle of the worſhipper, and that it is the interior or inner man that ſtamps the character and value upon the outward work and form; but ſcarcely one in a thouſand knows what is meant by the interior, and, even after being taught it, place all in the words and bodily ſervice; and ſuch are the greater part of thoſe who at this day paſs from the Chriſtian world into the other.

“ After that man, now become a ſpirit, has gone through his firſt ſtate, which is that of his exterior thoughts and will, he then paſſes into his ſecond or *interior ſtate;* and this he enters upon inſenſibly, which reſembles that of a man in this world, who, finding himſelf at liberty from every reſtraint and diſſipation, recollects himſelf, and enters into the moſt ſecret receſſes of his ſoul. Now in this ſtate of introverſion, when he thinks freely from his inmoſt diſpoſition and affections, he is properly himſelf, or in his true life. All without exception enter into this ſtate in the other world, as proper to ſpirits; for the former is aſſumed and practiſed in accommodation to ſociety and tranſactions in this world; and therefore, though it remains with man for ſome time after death, yet it is not long continued in, as not being ſuitable to the nature of a ſpirit, for the following reaſons: Firſt, becauſe a ſpirit thinks and ſpeaks from the governing principle of life without diſguiſe; nay, the ſame is the caſe of man in this world, when he enters into his inmoſt ſelf, and takes an intuitive view of his inward man, in which kind of ſurvey he ſees more in a minute than he could utter in an hour. Secondly, becauſe, in his converſation and dealings in this world, he ſpeaks and acts under the reſtraint of thoſe rules which ſociety has eſtabliſhed for the maintenance of civility and decorum. Thirdly, becauſe man, when he enters into the interior receſſes of his ſpirit, exerciſes rule over his outward economy, preſcribing laws thereto, how to ſpeak and act in order to conciliate the good will and favour of others, and that by a conſtrained external behaviour. Theſe conſiderations may ſerve to ſhow, that this interior ſtate of liberty is not only the proper ſtate of the ſpirit of a man after death, but even in this life. When a ſpirit has paſſed into this ſecond or interior ſtate, it then appears outwardly what manner of man he had been in this world, as he now acts from his proper ſelf; thus, if he had been a wiſe and good man before, he now manifeſts ſtill higher degrees of rationality and wiſdom in his words and actions, as being freed from thoſe corporeal and earthly embarraſſments which had fettered and obſcured the inward operations of his mind: whereas the bad man evinces greater folly than before; for, whilſt in this world, he faſhioned his external behaviour by the rules of prudence, in order to ſave appearances; but, not being under the like reſtraints now, he gives full ſcope to his inſanity.

“ The third ſtate of man, or of his ſpirit, after death, is the *ſtate of inſtruction*, which is appointed for thoſe that go to heaven, and become angels; but not for thoſe that go to hell, as ſuch are not in a capacity of inſtruction, and therefore their ſecond ſtate is their laſt, and anſwers to the third in others, as it terminates in their total change into that prevailing love which conſtitutes their proper principle, and conſequently into a conformity to that infernal ſociety with which they have fellowſhip. When this is accompliſhed, their will and thoughts flow ſpontaneouſly from their predominant love, which, being infernal, they can only chooſe the evil and falſe, and reject all that apparent good and truth which before they had adopted, ſolely as means ſubſervient to the gratification of their ruling paſſion. On the other hand, the good ſpirits are introduced from their ſecond into their third ſtate, which is that of preparation for heaven by the means of inſtruction; for none can be qualified for heaven but through the knowledge of ſpiritual good and truth, and their oppoſites, evil and falſehood, which can only come from previous inſtruction. As to good and truth in a civil and moral ſenſe, commonly called juſtice and ſincerity, theſe may be learned from the laws of nations, and from converſation in virtuous company; but ſpiritual good and truth, as ingrafted principles in the heart, are only received by the teachings of a divine light: for, though they are literally ſet forth in the Scripture, and the doctrines of the Chriſtian churches founded thereon, yet they only gain the efficacy of a vital principle from a celeſtial influence manifeſting itſelf in a conſcientious obedience to the divine laws, as promulgated in the written word, and that in reſpect to the divine authority of them, and not from ſelfiſh and worldly motives; then a man is in the heavenly life, or in heaven, even whilſt in this world.

“ The way of conveying inſtruction in the other world differs from that on earth, inaſmuch as truths there are committed not to the memory, but to the life; for the memory of ſpirits is in their life's principle, and they receive and imbibe only what is conformable thereto, for ſpirits are ſo many human forms of their own affections. As the nature of ſpirits is ſuch, therefore they are continually inſpired with an affection for truth for the uſes of life; for the Lord has ſo ordered it, that every one ſhould love the uſes that accord with their particular gifts and qualities; which love is likewiſe heightened by the hope of their becoming angels; for in heaven all particular and ſingular uſes have relation to the general uſe or good of the Lord's kingdom, and may be conſidered as ſo many parts of one whole, ſo that the truths which they learn are both truths and the uſes of truths conjunctly: thus the angelical ſpirits are prepared for heaven. The affection or love of truth for the purpoſes of uſe is inſinuated into them many ways not known in this world, more particularly by various repreſentations of uſe under ſuch delightful forms as affect both their minds and ſenſes with unſpeakable pleaſure; ſo that, when any ſpirit is joined to the ſociety for which he was prepared, he then enjoys life moſt when he is in the exerciſe of its proper uſes. Hence it may appear, that not the ideal knowledge of truths, as things without us, but an implantation of them in the affections and life for the purpoſe of uſes, is that which qualifies for the kingdom of heaven.

“ After that the angels are duly prepared for heaven in the manner deſcribed, which comes to paſs in a ſhort time, as ſpiritual minds are of quick comprehenſion, they are then clothed in angelical garments, which, for the moſt part, are white, as of fine linen, and conducted to the way which leads up to heaven, and delivered to the guardian-angels there: after which they are received by other angels, and introduced to different ſocieties, where they partake of various delights: after this every one is led by the Lord's guidance to his particular proper ſociety, and this by various ways, ſometimes direct, ſometimes otherwiſe, not known to any of the angels, but to the Lord only. Laſtly, when they are come to their own ſociety, their inmoſt thoughts and affections open and expand themſelves; which meeting with the like returns of cordial ſympathy from their fellow-angels, they are immediately known, and received by them with a joyful welcome.”

Thus much of the world of ſpirits, and of the three ſtates of preparation for final deſtination.

“ The heavens, in the general, are diſtinguiſhed into two kingdoms; the one of which is called the *celeſtial*, the other the *ſpiritual*, kingdom. The hells likewiſe are diſtinguiſhed into two kingdoms; the one of which is oppoſite to the celeſtial, the other to the ſpiritual. That which is oppoſite to the celeſtial is in the weſt, and they who belong to it are called *genii;* and that which is oppoſite to the ſpiritual kingdom is in the north and ſouth, and they who belong to it are called *evil ſpirits.* All in the celeſtial kingdom excel in love to the Lord; and all that are in the hells oppoſite to that kingdom are under the prevailing power of ſelf-love. All that belong to the ſpiritual kingdom are diſtinguiſhed in excellence by love to their neighbour, and all that are in the hells oppoſite to this kingdom are ſlaves to the love of the world; ſo that love to the Lord and the love of ſelf are in the ſame diametrical oppoſition to each other as the love of our neighbour and the love of the world. Effectual proviſion is made by the Lord, that no power of evil, from the hells that are in oppoſition to the celeſtial kingdom, may reach the ſubjects of the ſpiritual kingdom, as the conſequence in that caſe would be the ſubverſion of the latter. Thus does the Lord keep the balance betwixt good and evil in his own hand for the preſervation of his kingdoms.

“ What has been delivered concerning heaven, the world of ſpirits, and hell, will appear obſcure to thoſe who have no reliſh for ſpiritual truths, but clear to ſuch as take delight therein, more eſpecially to all who are in the love of truth for its own ſake. What we love, we readily receive and underſtand; and, where truth is the object of our affections, it recommends itſelf to the mind by the evidence it brings with it; for truth is the light, by which all things are known and diſtinguiſhed.” Thoſe who wiſh to ſearch deeper into this abſtruſe ſubject, and yet have not the means of conſulting the baron's large work, will find conſiderable extracts tranſlated in *Sibly's Aſtrology*, 4to. 12th edit. Lond. 1817.

NEW-CLO'SING, *adj.* Lately cloſing; newly healing:

As new-born Pallas did the gods ſurpriſe,
When, ſpringing forth from Joves' *new-cloſing* wound,
She ſtruck her warlike ſpear into the ground. *Dryden.*

NEW'-COME, *adj.* Lately arrived:

Often bounding on the bruiſed graſs,
As for great joyance of his *new come* gueſt. *Spenſer.*

NEW-COM'ER, *ſ.* One newly come to any place:

Some tree, whoſe broad ſmooth leaves, together ſow'd,
And girded on our loins, may cover round
Thoſe middle parts; that this *new-comer*, Shame,
There ſit not, and reproach us as unclean. *Milton.*

NEW CORDU'BA, a town of the province of Tucuman, in South America.

NEW'-CREATED, *adj.* Juſt created; lately formed:

The *new-created* world, which fame in heav'n
Had long foretold. *Milton's Par. loſt.*

NEW CREE'K, a river of North Carolina, which runs into the ſea in lat. 34. 47. N. lon. 76. 52. W.

NEW'-DELIVERED, *adj.* Lately brought to-bed:

And I, a gaſping *new-deliver'd* mother,
Have woe to woe, ſorrow to ſorrow, join'd. *Shakeſpeare.*

NEW DUB'LIN, a townſhip in the county of Lunenburg, Nova Scotia, on Mahone-bay, firſt ſettled by Iriſh, and afterwards by Germans.

NEW ED'INBURGH, a new ſettlement in Nova Scotia.

NEW'-ELECTED, *adj.* Lately choſen.—The proctor exhibits his proxy from the dean and chapter, and preſents the *new elected* biſhop to the vicar-general. *Ayliffe.*

NEW ENG'LAND, comprehending the Northern or Eaſtern States of North America, lies around the great bay which ſets up north-weſt between Cape Cod and Cape Sable, between lat. 41. and 48. N. and between lon. 1. 30. and 10. 15. E. from Philadelphia; and is bounded north by Lower Canada; eaſt by the province of New Brunſwick and the Atlantic Ocean; ſouth by the ſame ocean and Long Iſland Sound; and weſt by the ſtate of New York. It lies in the form of a quarter of a circle; its weſt line beginning at the mouth of Byram-river, which diſcharges itſelf into Long Iſland Sound, at the ſouth-weſt corner of Connecticut, lat. 41. runs a little eaſt of north until it ſtrikes the 45th degree of latitude, and then curves to the eaſtward, almoſt to the Gulf of St. Lawrence. Its extreme length is about 626 miles; its breadth is very unequal, from 100 to 200 miles; containing about 72,000 ſquare miles. This grand diviſion of the United States comprehends the ſtates of Vermont, New Hampſhire, Maſſachuſetts (including the diſtrict of Maine), Rhode Iſland and Providence Plantations, and Connecticut; which ſee reſpectively. It was at firſt called *North Virginia*, but changed its name about the year 1614. See the article America, vol. i. p. 430, 1.

The climate of New England is ſalubrious, as we may infer from the longevity of its inhabitants; one in ſeven living to the age of ſeventy years, and about one in thirteen or fourteen to eighty years and upwards. The weather is leſs variable than in the middle and ſouthern ſtates, but more ſo than in Canada. The extremes of heat and cold are, according to Fahrenheit's thermometer, from 20° below to 100° above 0; the medium being from 48 to 50. The quantity of water which annually falls in New England is from 42 to 48 inches; and yet they ſuffer here more from drought than in England, where the annual quantity of water is eſtimated at about twenty-four inches. Hence it is inferred that the atmoſphere is remarkably dry; and thus ſome have accounted for its ſingular ſalubrity. The diſeaſes moſt prevalent in New England are alvine fluxes, St. Anthony's fire, aſthma, atrophy, catarrh, colic, inflammatory, ſlow, nervous, and mixed, fevers, pulmonary conſumption, quinſy, and rheumatiſm. The general condition of the New Englanders, which precludes the luxury of the rich and the extreme diſtreſs of the poor, affords them an exemption from a variety of diſeaſes to which a greater degree of inequality might expoſe them.

This country preſents to the traveller a great variety of ſurface, conſiſting of extenſive plains, intermixed with valleys of different breadths, from two to twenty miles; and of mountains of different elevations. Although it may be deemed, upon the whole, to be high and hilly, its mountains are comparatively ſmall, and run nearly north and ſouth, in ridges parallel to one another. The weſternmoſt range begins in the county of Fairfield, and paſſing through the counties of Lichfield and Berkſhire, unites with the Green Mountains at Williamſtown, in the north-weſt corner of the Maſſachuſetts, being ſeparated only by the narrow valley of Hooſack-river. The higheſt part of this range is Toghkonnuck Mountain in Egremont, the ſouth-weſtern corner of the ſame ſtate. Over this mountain, elevated probably more than 3000 feet above the ocean, runs the boundary between Maſſachuſetts, Connecticut, and New York. The ſecond range is that of the GREEN MOUNTAINS; which ſee, vol. ix. The third range has the ſame commencement with the ſecond at Newhaven, in a delightful eminence called the Eaſt Rock, and paſſing through the counties of Newhaven, Hartford, and Hampſhire, extends into Canada. The Blue Hills in Southington, Mount Tom, which is the principal eminence, Mount Holyoke, and Mount Toby in Sunderland, are the principal ſummits of this range ſouth of New Hampſhire. This range, which is precipitous and romantic, croſſes Connecticut-river juſt below Northampton and Hadley in Maſſachuſetts. The ſouth or eaſtern range begins at Lyme in Connecticut, and forms the eaſtern boundary of the Connecticut Valley, until it unites with the laſt-mentioned range in the county of Hampſhire; but is leſs diſtinctly marked by eminences than the others. The chief ſingle mountains are Saddle Mountain in Maſſachuſetts, computed to be about 4000 feet above the ſea, Watchuſett in the county of Worceſter, Aſchutney in the ſtate of Vermont, Monadnock in New Hampſhire, and the White Mountains in the ſame ſtate, of which the higheſt ſummit is Mount Waſhington, probably between 10,000 and 11,000 feet above the ocean, and the higheſt land in the United States. This mountain is covered during a great part of the year with ſnow; and is ſeen in fair weather at the diſtance of 90 miles from the ſea, and 160 from its baſe.

New England abounds in cataracts and caſcades; thoſe of the White Mountains being ſingularly romantic and beautiful. The principal rivers are the Schoduck, Penobſcot, Kennebeck, Amariſcoggin, Saco, Piſcataqua, Merrimack, Parkers, Charles, Taunton, Providence, Thames, Connecticut, Hooeſtonnuck or Stratford, Onion, La Moille, and Miſſiſconi. The chief lakes are Champlain and Memphremagog, lying partly in Vermont and partly in New York; Winnipiſiogee and Umbagog in New Hampſhire; Sebago, Mooſehead, Willeguenguagun, and Chilmacook or Grand Lake, in Maine. The moſt important and uſeful harbours are thoſe of Machias, Frenchman's Bay, Wiſcaſſet, Portland, and Wells, in Maine; Piſcataqua in New Hampſhire; Newbury Port, Salem, Marble-head, Boſton, Provincetown, and New Bedford, in Maſſachuſetts Proper; Newport, Briſtol, and Providence, in Rhode Iſland; and New London, New-Haven, and Black Rock, in Fairfield, in Connecticut. Burlington Bay is the moſt conſiderable harbour in Lake Champlain, on the Vermont ſhore.

The ſoil of New England is diverſified by every variety, from a lean and barren ſand to the richeſt clays and loams. The hills are covered with a brown loam intermixed with gravel, which is favourable to the production of graſs, and, in the weſtern parts of the country, of wheat, and all other kinds of grain and fruits ſuited to the climate. A rich loam, varying towards clay, is prevalent in Connecticut, and is favourable to every kind of cultivation. Sand is generally found on the plains; and the yellow-pine-plains, which are commonly a mixture of ſand and gravel, are friendly to every production that does not require a richer ſoil. The white-pine-plains are uſually covered with loam, and theſe, as well as ſome of the laſt-mentioned in the ſame condition, are uncommonly fertile. The valleys are a rich mould; and the intervals, bordering the various ſtreams, are generally ſands formed by earth depoſited by the floods in the ſpring, and are of the richeſt quality. The ſoil, however, generally ſpeaking, is better adapted for grazing than for grain, though a ſufficient quantity of the latter is raiſed for home-conſumption, if we except wheat, which is largely imported, particularly into Maſſachuſetts, from the middle and ſouthern ſtates. Indian corn, rye, oats, barley, buck-wheat, flax and hemp, generally ſucceed very well. Fruits of every kind, which ſuit a temperate climate, may be obtained in abundance. The ſummer-heat brings to perfection peaches, apricots, and nectarines. Orchards of apple-trees cover a conſiderable part of the whole country, and cider is the common drink of the inhabitants. Pears, plums, cherries, currants, gooſeberries, whortleberries, blackberries, bilberries, &c. abound. Perry is made in ſome parts of the country, but not in great quantities. Various ſpecies of the hickery and hazle-nuts, and cheſnuts, are plentifully furniſhed by the ſouthern half of New England. Gardening is much improved, and its productions are daily varying and increaſing. But the moſt important production of New England is graſs. The high and rocky ground is in many parts covered with clover, and affords excellent paſture to ſome of the fineſt cattle in the world. The quantity of butter and cheeſe made for exportation is very great. Conſiderable attention is now paid to the raiſing of ſheep; and the wool is in a ſtate of progreſſive improvement. The principal exports are mackarel, ſalmon, cod, and other fiſh; whale-oil and whale-bone, timber, maſts, boards, ſtaves, hoops, and ſhingles; horſes, mules, ſalted beef, and pork, pot-aſh, pearl-aſh, flax-ſeed, apples, cider, corn, butter, and cheeſe.

New England is the moſt populous part of the United States: it contained, in 1790, 1,009,522 perſons; in 1800, 1,233,011; and, in 1810, 1,471,927. The great body of the inhabitants conſiſts of landholders and cultivators of the ſoil. As they poſſeſs in fee-ſimple the farms which they cultivate, they are all naturally attached to their country; and the cultivation of the ſoil makes them robuſt and healthy. New England has been not unaptly denominated a nurſery of men; and hence are annually tranſplanted into other parts of the United States, thouſands of its natives. They are almoſt univerſally of Engliſh deſcent; and to this circumſtance, as well as to the general attention that has been paid to education, it is owing that the Engliſh language has been preſerved among them in ſo conſiderable a degree of purity. The New Englanders are generally tall, ſtout, and well-made. Their education, laws, and ſituation, ſerve to inſpire them with high notions of liberty, of which they are jealous, in ſome caſes perhaps, to exceſs. A chief foundation of freedom in the New-England ſtates is a law, by which inteſtate eſtates deſcend to all the children, or other heirs, in equal proportion; and hence it happens, that the people of New England enjoy an equality of condition that is unknown in any other part of the world. Beſides, they are frugal and induſtrious, and inured to habits of ſobriety and temperance. Learning is more generally diffuſed among all ranks of people in New England than in any other part of the globe; which is owing to the excellent eſtabliſhment of ſchools in every town. Literature is alſo encouraged and diffuſed by the circulation of newſpapers and periodical publications, and by the eſtabliſhment of reading-ſocieties and parochial libraries. In former times the New Englanders were ſtrict, to a degree of punctiliouſneſs, in their obſervance of the ſabbath; and hence, as well as from ſome other traits of their behaviour, they acquired the character of a ſuperſtitious and bigoted people. But ſince the war, a tolerant ſpirit, occaſioned by a more enlarged intercourſe with mankind, has much increaſed, and is becoming univerſal; ſo that, ſays Dr. Morſe, “if they do not go beyond the proper bounds, and liberalize away all true religion, of which there is very great danger, they will counteract that ſtrong propenſity in human nature which leads men to vibrate from one extreme to its oppoſite.” The ſects of Chriſtians are very numerous and various. Of theſe ſects, thoſe that are called Congregationaliſts are the moſt numerous: in New England there are about 1200 congregations of this denomination. Next to theſe in reſpect of number are Preſbyterians; and there are between 40 and 50 Proteſtant epiſcopal churches. *Morſe's American Gaz.*

NEW'-ENTRUSTED, *adj.* Lately put into truſt.—Their father's ſtate, and *new-entruſted* ſceptre. *Milton's Comus.*

NEW'-FALLEN, *adj.* Lately or juſt fallen:

Ah Blouzelind! I love thee more by half
Than does their fawns, or cows the *new-fall'n* calf. *Gay.*

NEW-FA'NE, the chief town of Windham county, in Vermont, America, ſituated on the Weſt-river, twelve miles north-weſt of Brattleborough; containing 1000 inhabitants.

NEW-FANGLE, or NEW-FANGLED, *adj.* [Some have pretended that *nova evangelia*, "new goſpels," gave riſe to this word; it being much uſed, they ſay, about the time that the goſpellers, or reformers, began to flouriſh in England. But it was in uſe long before. *Fangle* was probably a cant term, corrupted from *fingo*, to form, to faſhion; *fingle, fangle.*] Deſirous of new things.—Fleſh is ſo *newe-fangle*. *Chaucer's Manc. Tale.*—Formed with vain or fooliſh love of novelty.—Thoſe charities are not *new-fangled* devices of yeſterday, but are moſt of them as old as the reformation. *Atterbury.*

At Chriſtmas I no more deſire a roſe,
Than wiſh a ſnow in May's *new-fangled* ſhows;
But like of each thing, that in ſeaſon grows. *Shakeſpeare.*

To NEW'-FANGLE, *v. a.* To change by introducing novelties.—To controul and *new-fangle* the Scripture. *Milton's Prelat. Epiſcopacy.*

NEW'-FAN'GLEDNESS, or NEW-FANGLENESS, *ſ.* Vain and fooliſh love of novelty.—The women would be loth to come behind the faſhion in *new-fangleneſs* of the manner, if not in coſtlineſs of the matter. *Carew.*

NEW'-FASHION, or NEW-FASH'IONED, *adj.* Lately come into faſhion.—Learn all the *new-faſhion* words and oaths. *Swift.*

When pleading Matho, borne abroad for air,
With his fat paunch fills his *new-faſhion'd* chair. *Dryden.*

NEW FOR'EST, a large tract of wood-land, in the county of Hants, about forty miles in circumference, which contained many populous towns and villages, and thirty-ſix mother-churches, till it was deſtroyed and turned into a foreſt by William the Conqueror in 1079. As this large tract lay many ages open and expoſed to invaſions from foreigners, king Henry VIII. built ſome caſtles in it; and it has now ſeveral pretty towns and villages. It is ſituated in that part of Hampſhire which is bounded on the eaſt by Southampton-river, and on the ſouth by the Britiſh Channel. It poſſeſſes advantages of ſituation, with reſpect to the convenience of water-carriage and nearneſs to the dock-yards, ſuperior to every other foreſt; having in its neighbourhood ſeveral ports, and places of ſhelter for ſhipping timber, among which Lymington is at the diſtance of only two miles, Bewley about half a mile, and Redbridge three or four miles, from the Foreſt; and the navigation to Portſmouth, the moſt conſiderable dock-yard in this kingdom, is only about thirty miles from the neareſt of thoſe places. This is the only foreſt belonging to the crown of which the origin is known. Doomſday-book contains the moſt diſtinct account of its afforeſtation by William the Conqueror; the contents of every field, farm, or eſtate, afforeſted, in hides, carucates, or virgates, by which the extent of land was then computed, together with the names of the hundreds and villages, and of the former proprietors (which are for the moſt part Saxon) the rent or yearly value of each poſſeſſion, and the tax which had been paid for it to the crown during the reign of Edward the Confeſſor, before the inhabitants were expelled, and that part of the country laid waſte, are all to be found in that moſt curious and venerable record; but, the names of many of the places having been changed ſince that time, it is difficult to aſcertain with preciſion what were then the limits of the foreſt. The oldeſt perambulation we have met with is among the Pleas of the Foreſt, in the eighth year of king Edward I. preſerved in the chapter-houſe at Weſtminſter. The boundaries there deſcribed include all the country from Southampton-river on the eaſt to the Avon on the weſt, following the ſea-coaſt as far as the ſouthern boundary between thoſe rivers, and extending northwards as far as North Chardeford, or North Charford, on the weſt, and to Wade and Orebrugg, or Owerbridge, on the eaſt; and the greateſt part, if not the whole, of that extenſive diſtrict, is mentioned in Doomſday-book to be foreſt belonging to the crown. Another perambulation was however made in the 29th of the ſame king, which leaves out a great part of the country contained within the former. This perambulation, which is preſerved in the Tower of London, confines the foreſt to limits which, as far as we can trace them, appear to have been followed in the 22d year of Charles II. when the foreſt was again perambulated. By the *Charta de Foreſta*, all lands not belonging to the crown, which had been afforeſted by Henry II. Richard I. or king John, were to be diſafforeſted; but, as no proviſion was made for the reduction of the more ancient afforeſtations, it is not eaſy to account for the great diminution of this foreſt in the reign of Edward I. who was not a prince likely to ſubmit to any encroachment on his rights. The perambulation of the 22d Charles II. is the laſt we find on record: it contains the preſent legal bounds of the foreſt, and was given to the ſurveyors as their guide, in taking the plan which they have made lately by direction. From that plan, with the approbation of the lords commiſſioners of his majeſty's treaſury, an engraving was made. According to the laſt-mentioned perambulation, and the plan, the foreſt extends from Godſhill on the north-weſt to the ſea on the ſouth-eaſt, about twenty miles; and from Hardley on the eaſt to Ringwood on the weſt, about fifteen miles; and contains within thoſe limits about 92,365 acres, ſtatute meaſure. The whole of that quantity, however, is not foreſt-land, or now the property of the crown; there are ſeveral manors and other conſiderable freehold eſtates within the perambulation, belonging to individuals, to the amount of about 24,797 acres; about 625 acres are copyhold or cuſtomary lands belonging to his majeſty's manor of Lyndhurſt; about 1004 acres are leaſehold under the crown, granted for certain terms of years, and forming part of the demiſed land-revenue, under the management of the ſurveyor-general of crown-lands; about 901 acres are purpreſtures or encroachments on the foreſt; about 1193 acres more are incloſed lands held by the maſter-keepers and groom-keepers, with their reſpective lodges; and the remainder, being about 63,845 acres, are woods and waſte lands of the foreſt. To perpetuate the ſpot where William Rufus was killed, by the glance of an arrow ſhot at a ſtag, a triangular ſtone was erected in 1745. George III. viſited this ſpot in 1789. In Auguſt 1782, a curious ancient golden croſs was found here by a labouring man digging turf. It weighed above an ounce of gold; and had on one ſide an engraving of our Saviour, and on the other the ladder, ſpear, nails, and other emblems of his ſufferings.

The chief officer of this foreſt is the lord-warden; and under him are two diſtinct appointments of officers; the one to preſerve the *veniſon* of the foreſt, and the other to preſerve its *vert:* the former term, in the language of foreſt-law, comprehending every ſpecies of game; and the latter ſignifying every thing that bears a green leaf within a foreſt that may cover a deer, but eſpecially great and thick coverts. The office of ſuperintending the game is now delegated to fifteen keepers, who preſide over the ſame number of walks, into which the foreſt is divided. The woods are under the ſuperintendance of the woodward, under whom are twelve regarders. Beſides theſe officers, who are appointed by the lord-warden, there are four others called verderers, who are commonly gentlemen of property and intereſt in the neighbourhood, and are elected, like knights of the ſhire, by the freeholders of the county. Theſe officers are the only judges of the foreſt-courts. There is another officer of late conſtitution, called the purveyor, and appointed by the commiſſioner of the dock-yard at Portſmouth, whoſe buſineſs it is to aſſign timber for the uſe of the navy.

A propoſal was made many years ago to the lord-treaſurer Godolphin, for repeopling this foreſt. The celebrated Daniel de Foe drew up the ſcheme, and argued it before that noble lord and ſome others, who were principally concerned at that time in bringing over, or rather providing for when they were come over, the poor inhabitants of the Palatinate; a thing in itſelf commendable, but, as it was managed, made of no benefit to England, and miſerable to thoſe poor people. Some perſons being ordered, by the noble lord above mentioned, to conſider of meaſures how thoſe people ſhould be provided for, without injury to the public, the New Foreſt in Hampſhire was ſingled out to be the place for them. Here it was propoſed to draw a great ſquare line, containing 4000 acres of land, marking out two large highways or roads through the centre, croſſing both ways; ſo that there ſhould be 1000 acres in each diviſion, excluſive of the land contained in the ſaid croſs-roads. Then to ſingle out twenty men and their families, who ſhould be recommended as honeſt induſtrious people, expert in huſbandry, or at leaſt capable of being inſtructed in it. To each of theſe ſhould be parcelled, but in equal diſtribution, 200 acres of this land; ſo that the whole 4000 acres ſhould be diſtributed to the ſaid twenty families; for which they ſhould have no rent to pay, and be liable to no taxes, but ſuch as would provide for their own ſick or poor, repairing their own roads, &c. this exemption to continue for twenty years, and then to pay each fifty pounds to the crown. To each of theſe families it was propoſed to advance two hundred pounds in ready money, as a ſtock to ſet them to work, and to hire and pay labourers to incloſe, clear, and cure, the land; which, it was ſuppoſed, the firſt year, could not be ſo much to their advantage as the following years; allowing them timber out of the foreſt to build themſelves houſes and barns, ſheds and offices, as they ſhould have occaſion; alſo for carts, waggons, ploughs, harrows, and the like neceſſary implements. Theſe twenty families would, by the conſequence of their own ſettlements, employ and maintain ſuch a proportion of others of their own people, that the whole number of Palatines would have been provided for, had they been many more than they were, and that without being any burden upon, or injury to, the people of England; on the contrary, they would have been an advantage, and an addition of wealth and ſtrength, to the nation, and to the county in particular where they ſhould be thus ſeated. Two advantages were expected from this ſcheme; viz. 1. That the annual rent to be received for all theſe lands, after twenty years, would abundantly pay the public for the firſt diſburſements. 2. More money than would have done this was thrown away upon them here, to keep them in ſuſpenſe, and afterwards ſtarve them; ſending them a-begging all over the nation, and ſhipping them off to periſh in other countries. The ſpot where the deſign was laid out was near Lyndhurſt, in the road from Romſey to Lymington.

NEW'-FORMED, *adj.* Lately formed.—A *new-formed* faction does your power oppoſe. *Dryden.*

NEW'-FOUND, *adj.* Lately diſcovered.—*New-found* lands accrue to the prince, whoſe ſubjects make the firſt diſcovery. *Burnet.*

Your maſter's lines
Are full of *new-found* oaths, which he will break
As eaſily as I do tear this paper. *Shakeſpeare.*

NEW GAL'LOWAY. See Galloway.

NEW GAR'DEN, a poſt-town of America, in Cheſter county, Pennſylvania.

NEW GAR'DEN, a town of North Carolina: ſeven miles ſouth-weſt of Guildford.

NEW GENE'VA, a thriving poſt-town of America, on the bank of the Monongahela-river, juſt below George's Creek, about eighteen miles north of Morgantown. This town is a place of much buſineſs, partly by the glaſs-works in its vicinity, which not only ſupply the neighbourhood with window-glaſs, bottles, &c. but ſend large quantities down the river: here is alſo a paper-mill, and a manufactory for muſkets: ſmall boats are alſo built in this place.

NEW GENE'VA, a village of the county of Waterford, Ireland, nearly oppoſite to Duncannon Fort, where many good houſes were erected ſeveral years ago by government for the reception of the expatriated citizens of Geneva; but, they having relinquiſhed the deſign of ſettling in Ireland, the place remains uninhabited.

Soon after the revolution of 1782, (ſee the article Geneva, vol. viii. p. 317.) a memorial, ſigned by more than 1000 Genevans of both ſexes, who were either perſons of ſome property or verſed in trade or manufactures, expreſſing a deſire of ſettling in Ireland, was preſented to earl Temple (marquis of Buckingham), then the lord-lieutenant of Ireland. His excellency, appriſed of the advantage which would redound to Ireland from the reception of ſo many induſtrious artiſts, many of whom poſſeſſed property in the Engliſh, Iriſh, and French, funds, communicated, in September 1782, the propoſal to the privy-council of Ireland for giving an aſylum to the Genevan emigrants. This propoſal, patronized by the lord-lieutenant, and unanimouſly conſented to by the privy-council, was approved by the king. The Iriſh parliament voted 50,000l. towards defraying the expenſes of their journey, and building a town for their reception; lands were purchaſed for 8000l. and part of the town was actually completed at the expenſe of 10,000l. and a charter was granted, with very conſiderable privileges. In July 1783, ſeveral Genevans landed in Ireland; but, when the nation had expended near 30,000l. the project was ſuddenly relinquiſhed, and the ſettlement finally abandoned. The failure has been attributed to delays in the arrangement of ſo complicated a plan, occaſioned alſo by the high demands of the Genevan commiſſioners, who, in preparing the charter, required many privileges that were contradictory to the laws of the land. In conſequence of theſe delays, and the reſentment of the Genevans, many returned and took the oaths of allegiance to the new government. The project became gradually leſs popular; the few Genevans, who had prematurely landed in Ireland, were diſcontented at not finding the new town ready for their immediate reception; and, the emigrants who poſſeſſed moſt property having withdrawn their names, the reſt wanted ſufficient capital to ſettle in a foreign country, and to eſtabliſh an extenſive manufacture, without ſtill farther aſſiſtance. In conſequence of this deficiency, the Genevan commiſſioners petitioned to appropriate 10,000l. of the 50,000l. for the purpoſe of forming a capital. But, as that ſum had been voted by parliament for other purpoſes, the petition was rejected; and the Genevans, in an addreſs to the duke of Rutland, who ſucceeded lord Temple as lord-lieutenant, relinquiſhed the ſettlement, and ſoon afterwards quitted Ireland.

NEW GER'MANTOWN, a poſt-town of America, in Hunterdon county, New Jerſey: forty-eight miles north-weſt of Brunſwick.

NEW GLOU'CESTER, a ſmall poſt-town of America, in Cumberland-county, Maine: 146 miles north of Boſton; incorporated in 1774.

NEW GOT'TINGEN, a town of America, in Burke-county, Georgia, on the weſt bank of Savannah-river: about eighteen miles eaſt of Wayneſborough.

NEW GRAN'ADA, or Grenada. See Grenada (New).

NEW GRAN'THAM, a townſhip of America, in Cheſhire-county, New Hampſhire, incorporated in 1761: about fifteen miles ſouth-eaſt of Dartmouth College.

NEW'-GROWN, *adj.* Lately ſprung up.—God hath not then left this to chooſe that, neither would reject that to chooſe this, were it not for ſome *new-grown* occaſion, making that which hath been better worſe. *Hooker.*

NEW GUIN'EA. See Guinea, vol. viii. p. 90.

NEW HAMP'SHIRE, one of the United States of America, extending 168 miles in length, 90 in its greateſt, and 19 in its leaſt breadth, between lat. 42. 41. and 45. 30. N. and lon. 2. 41. and 4. 29. E. from Philadelphia; bounded north by the province of Lower Canada, eaſt by the diſtrict of Maine and the Atlantic Ocean, ſouth by Maſſachuſetts, weſt by the weſtern bank of Connecticut-river; and containing 9491 ſquare miles, or 6,074,240 acres, of which at leaſt 100,000 acres are water. Population in 1810, 214,414. This ſtate is divided into ſix counties, which are ſubdivided into 214 townſhips and locations, moſt of which are about ſix miles ſquare. The names of theſe counties, and their chief towns, are as follow:

Counties.	Chief Towns.
Rockingham -	Portſmouth, Exeter, and Concord.
Stratford - -	Dover and Durham.
Hillſborough -	Amhurſt.
Cheſhire - -	Keene and Charleſton.
Grafton - -	
Coos - - -	Lancaſter.

The principal harbour for ſhips in this ſtate, which has but about eighteen miles of ſea-coaſt at its ſouth-eaſt, corner, is the entrance of Piſcataqua-river. The more remarkable high lands do not appear nearer to the ſea than about twenty or thirty miles. The firſt ridge is denominated the Blue Hills, which paſs through Rocheſter, Barrington, and Nottingham; beyond which are ſeveral higher detached mountains. The third ridge conſiſts of higher mountains, of which the principal are Chocorua, Oſſapy, and Kyaſarge. Beyond theſe is the lofty ridge which divides the branches of Connecticut and Merrimack rivers, denominated the Height of Land. In this ridge is the celebrated Monadnock Mountain; thirty miles north of this is Sunapee; and forty-eight miles farther is Mooſehillock Mountain. This ridge is then continued northerly, dividing the waters of the river Connecticut from thoſe of Saco and Ameriſcoggin. Here the mountains riſe much higher, the moſt elevated ſummits of which are the White Mountains. The lands weſt of this ridge, bordering on Connecticut-river, are interſperſed with extenſive meadows or intervals, rich and well-watered. Five of the largeſt ſtreams in New England receive more or leſs of their waters from this ſtate: theſe are Connecticut, Ameriſcoggin, Saco, Merrimack, and Piſcataqua, rivers. The principal lakes in this ſtate are, Winnipiſcogee, Umbagog, Squam, Sunapee, Great Oſſapy, and Maſſabeſick Pond.

The ſoil in New Hampſhire is very various; the moſt valuable is that which lies contiguous to the larger rivers, becauſe it is annually overflowed, and thus enriched: lands of this kind yield wheat, and other kinds of grain, in the greateſt perfection; but they are not ſo good for paſture as the uplands of a proper quality. Apples and pears are the moſt common, and the principal, fruits cultivated in this ſtate. The chief buſineſs of the inhabitants is agriculture. The principal articles of export from this ſtate are pine-boards, oak-plank, ſtaves and heading, clap-boards, ſhingles, hoops, oars, rafters, maſts, ſpars, ſhook-hogſheads, fiſh dried and pickled, whale-oil, tar, flax-ſeed, beef, corn, oxen and cows, horſes, ſheep, New-England rum, bricks, pottery, and pearl-aſhes, &c. The imports conſiſt of Weſt-India rum, gin, molaſſes, wine, porter, ſugars, tea, coffee, cotton, cheeſe, nails, cordage, twine, ſalt, ſea-coal, ſteel, lead, and grind-ſtones. The people in this country generally manufacture their own clothing, and conſiderable quantities of tow-cloth for exportation.

By an act of aſſembly in 1792, a bank, under the ſtyle of the Bank of New Hampſhire, was eſtabliſhed at Portſmouth, to continue fifty years, under the management of a preſident and ſeven directors. The largeſt town in New Hampſhire is Portsmouth, which ſee. The conſtitution of this ſtate is ſimilar to that of Maſſachuſetts. The firſt diſcovery of any part of New Hampſhire was in 1614; and the firſt ſettlement was made in 1623. *Morſe's Geog.*

NEW HAMP'TON, a poſt-town of America, in New Hampſhire, Stratford-county, on the weſt ſide of Lake Winnipiſcogee, nine miles ſouth-eaſt of Plymouth, incorporated in 1777.—Alſo, a poſt-town in Hunterdon-county, New Jerſey: 217 miles from Waſhington.

NEW HAN'OVER, a maritime county of Wilmington diſtrict, North Carolina, extending from Cape Fear-river north-eaſt along the Atlantic Ocean. The chief town is Wilmington.—Alſo, a townſhip in Burlington-county, New Jerſey, containing about 20,000 acres of improved land, and a large quantity that is barren and uncultivated. The compact part is called New Mills, containing about fifty houſes: twenty-ſeven miles from Philadelphia.—Alſo, a townſhip in Morgan-county, Pennſylvania.—Alſo, a county of North Carolina, in the diſtrict of Wilmington, containing 5371 inhabitants, of whom 2933 are ſlaves.

NEW HAR'TFORD, a ſmall poſt-town in Litchfield-county, Connecticut: fourteen miles north-eaſt of Litchfield.

NEW'-HEALED, *adj.* Lately healed, or cloſed:

> Left by a multitude
> The *new-heal'd* wound of malice ſhould break out. *Shakeſp.*

NEW HEB'RIDES, or Hebudes, a group of iſlands in the South Pacific Ocean, to the ſouth-eaſt of Solomon's Iſlands, and in that fifth diviſion of the world now called *Auſtralaſia;* particularly ſurveyed, with regard to their ſituation and extent, by Capt. Cook, in the year 1774. The northern iſlands of this archipelago were firſt diſcovered by Quiros in 1606, and conſidered by him as part of the ſouthern continent, which at that time, and till very lately, was ſuppoſed to exiſt. They were next viſited by M. de Bougainville in 1768; who, beſides landing on the Iſle of Lepers, did no more than diſcover that the land was not connected, but compoſed of iſlands, which he called the *Great Cyclades.* Capt. Cook ſurveyed the whole, and diſcovered ſeveral new ones which were not known before, and named them the *New Hebrides.* They are ſituated between lat. 14. 29. and 20. 4. S. and between lon. 166. 41. and 170. 21. E. from Greenwich; and conſiſt of the following iſlands, ſome of which have received names from the different European navigators, and others retain the names which they bear among the natives; viz. Tierra Auſtral, del Eſpiritu Santo, St. Bartholomew, Mallicollo, Pic de l'Etoile, Aurora, Iſle of Lepers, Whitſuntide, Ambrym, Paoon, Shepherds' Iſles, Sandwich, Erromango, Immer, Tana, Erronan, Annetom, Apee, Three Hills, Montagu, Hinchinbrook, and Erromanga; which ſee reſpectively.

Quiros, who firſt diſcovered theſe iſlands, deſcribes them, as "richer and more fertile than Spain, and as populous as they are fertile; watered with fine rivers, and producing ſilver, pearls, nutmegs, mace, pepper, ginger, ebony of the firſt quality, wood for the conſtruction of veſſels, and plants which might be fabricated into ſail-cloth and cordages, one ſort of which is not unlike the hemp of Europe." The inhabitants of theſe iſlands he deſcribes as of ſeveral different races of men; black, white, mulatto, tawny, and copper-coloured; a proof, he ſuppoſes, of their intercourſe with various people. They uſe no fire-arms, are employed in no mines, nor have they any of thoſe means of deſtruction which the genius of Europe has invented. Induſtry and policy ſeem to have made but little progreſs among them: they build neither towns nor fortreſſes; acknowledge neither king nor laws; and are divided only into tribes, among which there does not always ſubſiſt a perfect harmony. Their arms are the bow and arrows, the ſpear and the dart, all made of wood. Their only covering is a garment round the waiſt, which reaches to the middle of the thigh. They are cleanly, of a lively and grateful diſpoſition, capable of friendſhip and inſtruction. Their houſes are of wood, covered with palm-leaves. They have places of worſhip and burial. They work in ſtone, and poliſh marble, of which there are many quarries. They make flutes, drums, wooden ſpoons, and, from the mother-of-pearl, form chiſſels, ſciſſars, knives, hooks, ſaws, hatchets, and ſmall round plates for necklaces. Their canoes are well-built and neatly finiſhed. Hogs, goats, cows, buffaloes, and various fowls and fiſh, for food, are found in abundance on and about theſe iſlands. Added to all theſe and many other excellencies, theſe iſlands are repreſented as having a remarkably ſalubrious air, which is evinced by the healthy robuſt appearance of the inhabitants, who live to a great age, and yet have no other bed than the earth. Such is the deſcription which Quiros gives of theſe iſlands, in and about which he ſpent ſome months, and which he repreſents to the king of Spain as "the moſt delicious country in the world; the garden of Eden, the inexhauſtible ſource of glory, riches, and power, to Spain."

Of this terreſtrial paradiſe, which the Spaniards regarded as their own, it was intended to take immediate poſſeſſion; they landed in great numbers; the iſlanders were alſo numerous, became alarmed, made them preſents, and ſignified a wiſh for them to return to their ſhips. They, however, landed from their boats, on which the chief drew a line on the ground with the end of his bow, and made ſigns that the Spaniards muſt not paſs that boundary. It is ſaid that Torres (who accompanied Quiros), to ſhow his contempt of the idea of being reſtrained by barbarians, immediately paſſed the line. A battle enſued, in which the chief was killed, and all the reſt fled into the woods. This raſh act, however, was fatal to the views of the Spaniards, who never afterwards could prevail on the iſlanders to have any friendly communication with them; and they left this country, after ſome ridiculous formalities of taking poſſeſſion in the name of Philip III. and founding a city dignified with the name of the New Jeruſalem. *Cook's Second Voyage*, vol. ii. *Burney's Account of Diſcoveries in the South Sea.*

NEW HOL'LAND, or NOTA'SIA, is an iſland in that part of the globe lately diſtinguiſhed by the name of *Auſtralaſia*, ſo large as to be entitled to the appellation of a continent. Its length from eaſt to weſt is about 43 degrees of longitude, in the medial latitude of 25, that is, about 2340 geographical miles, or 2730 Britiſh. The breadth from north to ſouth extends from 11° to 39°, being 28°, 1680 geographical, or 1960 Britiſh, miles. In the account of Cook's voyage, its ſquare ſurface is ſtated to be more than equal to the whole of Europe. This, however, is an exaggerated eſtimate; becauſe Europe is ſuppoſed to be about 3300 Britiſh miles in its utmoſt length, and its greateſt breadth 2350. This defect is, indeed, compenſated by the proximity of many large iſlands; and the whole of Auſtralaſia will probably be found greatly to exceed the European continent. This immenſe territory was firſt diſcovered in the beginning of the ſeventeenth century, and then called *Terra Auſtralis Incognita.* The firſt diſcovery is dated by De Broſſes in October 1616, when the weſtern part was explored by Hartog. In 1628, the weſtern part was diſcovered by ſome veſſels belonging to the Dutch Eaſt-India company, and called *De Witt's Land,* from the name of the commodore who commanded the ſquadron; and in the following year, a Dutch ſhip, commanded by Capt. Pelſart, was wrecked on this coaſt. In 1642 Capt. Taſman was ſent by the Dutch Eaſt-India company to ſurvey the coaſt, who viſited the ſouthern part, which he called *Anthony Van Diemen's Land,* by way of contradiſtinction to *Diemen's Land,* on the north coaſt. (See DIEMEN'S LAND.) Capt. Dampier fell in with this iſland in 1688, and viſited it again in 1699. He deſcribes the wretched condition of the inhabitants, as deſtitute of houſes and clothes; he repreſents them as black, tall, thin, ſtraight-bodied with ſmall limbs, great heads, heavy brows, and eyelids half cloſed for guarding their eyes againſt the flies, which were numerous and troubleſome. He further deſcribes them as having large bottle-noſes, full lips, and wide mouths, without the two fore-teeth of their upper jaws, and without beards; long-viſaged, and deſtitute of every graceful feature in their faces. The next perſon who viſited this iſland was Capt. Cook, in 1770, who, by his extenſive operations on its eaſt ſide, left little to be done towards completing the full circuit of it. Between Cape Hicks, in latitude 38, where his examination of this coaſt began, and that part of Van Diemen's Land whence Taſman took his departure, the diſtance was not above 55 leagues. It was highly probable, therefore, that they were connected; though Capt. Cook cautiouſly ſays, that he could not determine whether his *New South Wales* (that is, the eaſt coaſt of New Holland) joins to Van Diemen's Land, or not. But what was thus left undetermined by the operations of his firſt voyage, was, in the courſe of his ſecond, ſoon cleared up; Capt. Furneaux, in the Adventure, during his ſeparation from the Reſolution in 1773, having explored Van Diemen's Land, from its ſouthern point, along the eaſt coaſt, far beyond Taſman's ſtation, and on to the latitude 38, where Capt. Cook's examination of it in 1770 had commenced. We have now, therefore, a full knowledge of the whole circumference of this vaſt body of land, though moſt of its interior parts remain ſtill unknown. To the ſouthward of lat. 33 or 34, the land in general is low and level; far northward it is hilly, but in no part can be called mountainous; and the hills and mountains, taken together, form but a ſmall part of the ſurface, in compariſon with the valleys and plains. It is rather barren than fertile, though the riſing ground is checquered by woods and lawns, and the plains and valleys are in many places covered with herbage: the ſoil, however, is frequently ſandy; and many of the lawns, or ſavannahs, are rocky and barren, eſpecially towards the northern part, where vegetation is leſs vigorous than towards the ſouth. The inland country appeared to be better clothed than the ſea-coaſt. The banks of the bays are covered with mangroves, to the diſtance of a mile within the beach, under which the ſoil is a rank mud, always overflowed by a ſpring-tide; farther within the country, a bog was occaſionally found, upon which the graſs was very thick and luxuriant, and ſometimes a valley occurs, that was clothed with underwood; but the ſoil in general did not ſeem to admit of cultivation. In the interior of the country, immenſe ſtrata of coal have been diſcovered. The coaſt, eſpecially to the northward of 25. S. lat. abounds with fine bays and harbours, where veſſels may be ſecure from all winds. The country appeared to be well watered by ſprings and ſmall brooks, but to have no large rivers. Of timber-trees there are but two ſorts: the largeſt is the gum-tree, which grows over the whole country, the gum of which is a deep red, and reſembles the ſanguis draconis, if it be not the ſame; the other grows ſomewhat like our pines. The wood of both is extremely hard and heavy. Others are covered with a ſoft bark, which is the ſame that is uſed in the Eaſt Indies for caulking of ſhips. The country furniſhes three ſorts of palms; the nuts of one of which operated both as an emetic and cathartic with great violence.

The quadrupeds hitherto diſcovered, with very few exceptions, are of the kanguroo or opoſſum tribe; having their hinder-legs long out of all proportion, when compared with the length of the fore-legs, and a ſack under the belly of the female for the reception of the young. (See DIDELPHIS gigantea, vol. vi.) They have rats, and dogs of the jackall kind, all exactly alike, and a little animal of the bear-tribe, named *womat;* and theſe pretty nearly complete the catalogue of four-footed animals yet known on the fifth continent. There appears, indeed, ſuch an apparent affinity of the natural objects in New Holland, that Dr. White obſerves, all the quadrupeds are like opoſſums, all the fiſh like ſharks, and that every part of the land, all the trees, and all the graſſes, reſemble one another. There is, however, an animal which reſembles nothing in the creation but itſelf; a quadruped with the beak of a bird. When the head of one of theſe beaſts was brought to the late Dr. Shaw, of the Britiſh Muſeum, he ſuſpected it as an idle attempt to impoſe on his judgment, and did not haſtily believe that nature had ſet the bill of a duck on the head of a quadruped; but ſo it has ſince proved to be the caſe. It was firſt regarded as an amphibious animal, from its reſemblance, about the head, to a duck; and was deſcribed by Mr. Home, in the Phil. Tranſ. 1801, under the name Ornithorhynchus paradoxus; but it is now called PLATYPUS anatinus, which ſee.

The birds are no leſs ſingular than the beaſts, there being black ſwans and white eagles; the former everywhere in ſuch multitudes as to ſpoil a proverb that had held good for two thouſand years; and their ſong, if we may credit Mr. Baſs, "exactly reſembles the creaking of a ruſty ſign on a windy day." The Mænura ſuperba, with its ſcalloped tail-feathers, is perhaps the moſt ſingular and beautiful of that very elegant race of birds known by the name of birds of paradiſe; cockatoos, parrots, and parroquets, are innumerable, and of great variety. The mountain-eagle is a magnificent creature; but the emu is perhaps the talleſt and loftieſt bird that exiſts, many of them ſtanding full ſeven feet high.

Of the inſect-tribe, the principal are the muſquito and various kinds of ants. The *green ants* form their neſts in a very curious manner, by bending down the leaves of trees, and glueing the ends of them together ſo as to form a purſe. Though theſe leaves are as broad as a man's hand, they perform this feat by main ſtrength, thouſands of them being employed in holding down the leaves, while multitudes of others apply the glutinous matter. Captain Cook's people aſcertained that this was the caſe, by ſometimes diſturbing them at their work; in which caſe the leaf always ſprung up with an elaſticity which they could not have ſuppoſed that ſuch minute inſects were capable of overcoming. For this curioſity, however, they ſmarted pretty ſeverely; for thouſands of theſe little enemies inſtantly threw themſelves upon the aggreſſors, and revenged themſelves by their bites or ſtings for the interruption they had met with. Theſe were little leſs painful at firſt than the ſting of a bee; but the pain did not laſt above a minute. Another ſpecies of ants burrow themſelves in the root of a plant which grows on the bark of trees like the miſletoe, and which is commonly as big as a large turnip. When this is cut, it appears interſected with innumerable winding paſſages all filled with theſe animals; notwithſtanding which, the vegetation of the plant ſuffers no injury. Theſe do not give pain by their ſtings, but produce an intolerable itching by crawling along on the ſkin. They are about the ſize of the ſmall red ant in this country. Another ſort, which do not moleſt in any manner, reſemble the white ants of the Eaſt Indies. They conſtruct neſts three or four times as big as a man's head on the branches of trees; the outſide being compoſed of ſome vegetable matter along with a glutinous ſubſtance. On breaking the outer cruſts of theſe hives, innumerable cells appear ſwarming with inhabitants, in a great variety of winding directions, all communicating with each other, and with ſeveral other neſts upon the ſame tree. They have alſo another houſe built on the ground, generally at the root of a tree; formed like an irregularly-ſided cone; ſometimes more than ſix feet high, and nearly as much in diameter. The outſide of theſe is well-tempered clay about two inches thick; and within are the cells, which have no opening outward. One of theſe is their ſummer, and the other their winter, dwelling, communicating with each other by a large avenue leading to the ground, and by a ſubterraneous paſſage. The ground-ſtructures are proof againſt wet, which thoſe on the branches are not.

The number of inhabitants in this country ſeems to be very ſmall in proportion to its extent. The immenſe tract of the interior country remains unexplored; but there is reaſon to believe that it is either wholly deſolate, or more thinly inhabited than the parts viſited by Cook and his companions. The preſumption againſt its being much inhabited is ſtrengthened by the total want of cultivation. The men were of a middle ſize, and in general well-made, clean-limbed, vigorous, active, and nimble: their countenaces were not wholly without expreſſion, and their voices remarkably ſoft and effeminate. The colour of the ſkin could not be well aſcertained, on account of the dirt which uniformly covered it: with the dirt, it was as black as that of a negro, but, without it, ſuppoſed to be of a chocolate-colour. In other reſpects the accounts of our navigators materially differ from that of Dampier. They inform us that the features are not diſagreeable, that their noſes are not flat, and that their lips are not thick: their teeth are white and even, and their hair naturally long and black, though univerſally cropped ſhort, and always matted and filthy; their beards are buſhy and thick, but not ſuffered to grow long: both the hair and beard ſeemed to be kept ſhort by ſingeing them. Both ſexes go naked, without any apparent ſenſe of indecency. Their principal ornament is the bone which they thruſt through the cartilage that ſeparates the noſtrils: it is as thick as a man's finger, and, being five or ſix inches long, reaches quite acroſs the face, and is an impediment both to their breathing and ſpeaking. They had alſo necklaces made of ſhells, neatly cut and ſtrung together: bracelets of ſmall cord, twiſted two or three times round the arm, and a ſtring of plaited human hair round the waiſt. They paint their bodies both white and red, the latter forming broad patches upon the ſhoulders and breaſt, and the former being drawn in ſtripes over various parts of their bodies. Theſe people had no idea of traffic: they received what was given them, but had no idea of making a return; nor did they ſeem to have any diſpoſition to ſteal; but, if they were refuſed what they aſked for, e. g. a turtle, they were enraged, and endeavoured to take it by force. On their bodies were viſible ſcars, inflicted by blunt inſtruments, and which were underſtood to be memorials of grief for the dead. They appeared to have no fixed habitations, nor was there any trace of a town or village in the country. Their houſes, when they had any, were mere hovels, conſtructed with pliable rods, and covered with leaves of palm or broad pieces of bark; but, in general, they ſlept without any ſhelter, except the buſhes, or graſs, which is here near two feet high. Their fiſh-hooks are neatly made; and their lines, made of ſome vegetable ſubſtance, are from the thickneſs of a half-inch rope to the fineneſs of a hair. Their chief food is fiſh, and they occaſionally kill a kanguroo and ſome birds: the only vegetable that forms an article of food is the yam. They dreſs their animal food by boiling, broiling, or baking, it. As they have no nets, they catch fiſh only by ſticking with an inſtrument of wood adapted to the purpoſe, or with a hook and line. They produce fire with facility, and ſpread it in a wonderful manner. To produce it, they take two pieces of dry ſoft wood, one being a ſtick about eight or nine inches long, and the other a flat piece: the former is ſhaped into an obtuſe point at one end, and preſſing it upon the other; they turn it nimbly by holding it between both their hands, as we do a chocolate-mill, often ſhifting their hands up and down, to increaſe the preſſure. By this method they get fire in leſs than two minutes; and then ſpread it by means of the dry graſs. The weapons of this people are ſpears, or lances, of different kinds, pointed with bone or ſhells, and barbed; and they throw them with great force and dexterity, either by the hand for ſhort diſtances, or with an inſtrument contrived for that purpoſe: they have alſo ſhields or targets made of the bark of a tree. Their canoes are as rudely conſtructed as their houſes, of bark, or the trunk of a tree hollowed, probably by fire. They are moved with a pole or paddles, and ſome of them are fitted with an outrigger to prevent their overſetting: they are of different lengths, and very narrow. The only tools which they ſeemed to poſſeſs were, an adze made of ſtone, wedges of the ſame material, a wooden mallet, and ſome ſhells, and fragments of coral. For poliſhing the points of their lances, &c. they uſe the leaves of a kind of wild fig-tree. Each of their canoes carries four people.

It appears, from ſome further diſcoveries and reports pertaining to this country, that it is peopled by three or four diſtinct races of men; thoſe in the ſouth-weſt being different from thoſe in the north, and both from thoſe in the eaſt above deſcribed. They are merely divided into families, the former being ſtyled *Be-ana*, or "father," which is a title of reſpect; and each family, or tribe, has a diſtinct place of reſidence, diſtinguiſhed by adding *gal* to the name of the place: e. g. the ſouthern ſhore of Botany-bay being called *Gwea;* the tribe inhabiting it, is denominated *Gwea-gal*. Thoſe who live on the north ſhores of Port Jackſon are called *Cam-mer-rhy-gal*, Cammer-rhy being the name of that part of the harbour. This tribe, which is numerous and muſcular, exerciſe the prerogative of exacting a tooth from young men of other families, in token of government or ſubordination. This tribute of teeth is paid in a ſolemn manner, and it is performed every four years. They manifeſt but very obſcure traces of religion, though they have ſome faint ideas of a future exiſtence in the clouds, whence they originally fell. They ſeem raiſed but one degree above the brute-creation; and, like monkeys, they are great mimics. The deformity of their appearance, occaſioned by their low ſtature and thin limbs, their black buſhy beards, and the bone ſtuck in the cartilage of the noſe, by an operation performed between the ages of eight and ſixteen, is farther increaſed by their practice of rubbing fiſh-oil into their ſkins, as a protection from the air and muſquitoes, and of colouring their faces with white or red clay. The women are marked by the loſs of the two firſt joints of the little finger of the left hand, which, as well as the extraction of a tooth from the boys, is ſuppoſed to inure them to bear pain with apathy. It is ſaid, however, that theſe joints of the little finger are parted with, becauſe they are in the way when they wind their fiſhing-lines over their hands. Few inſtances of deformed perſons occur. Their huts are commonly conſtructed of the bark of trees, in the form of an oven, having the fire at the entrance, and filled with ſmoke and naſtineſs, in which they ſleep promiſcuouſly. Their mode of courtſhip is not very gallant; as it conſiſts in watching the lady's retirement, and then knocking her down with repeated blows of a club, or a wooden ſword; after which the matrimonial victim is led, ſtreaming with blood, to her future huſband's party, when a ſcene enſues too ſhocking to relate. The men of one tribe ſeek wives among the women of another. The woman, thus raviſhed, is called a wife; and polygamy is common. Parturition is eaſy, and a few hours after the mother walks about her uſual buſineſs. The infant is placed for a few days on a piece of ſoft bark; but is ſoon removed to the mother's ſhoulders with its legs acroſs her neck, ſecuring itſelf by catching hold of her hair. Superſtition is very prevalent among theſe poor ſavages; they believe in magic, witchcraft, and ghoſts; the latter being the night-mare. They have alſo ſpells againſt thunder and lightning, and pretend to foretel future events by the meteors called falling ſtars. They are ſubject to a diſeaſe reſembling a violent itch; but, for their venereal complaints they ſeem to have been indebted to Europeans. They have not only perſonal property in their weapons, and fiſhing-tackle, but ſome appear to be hereditary owners of certain ſpots, perhaps aſſigned as rewards for public ſervices, or acts of great bravery. They are repreſented, with regard to their habitual diſpoſition, as revengeful, jealous, courageous, and cunning. If they were honeſt when firſt viſited by Europeans, they have ſince acquired the art of ſtealing; and they are ſaid to be adepts in the arts of evaſion and lying. They have names for the ſun and moon, ſome few ſtars, the magellanic clouds, and the milky-way. Young people are buried; but thoſe who have paſſed the middle age, are burnt; a rude tumulus being erected as a tomb. Mr. Collins, in his account of this iſland, has given an ample vocabulary of the language; which is ſaid to be grateful to the ear, expreſſive, and ſonorous, and to have no analogy with any other known language; but the dialects of the various regions ſeem to be entirely different. The ſeaſons are like thoſe of the ſouthern part of Africa and America; and, as the country lies on the ſouthern ſide of the equator, they are the reverſe of thoſe in Europe, Chriſtmas with us being Midſummer with them.

As the *eaſtern* part of this vaſt tract was totally unknown till the laſt voyages of our countryman Capt. Cook, who, by fully exploring that part of the coaſt, gave his country an undoubted right to the occupation of it, it was accordingly taken poſſeſſion of, in his majeſty's name, about the year 1770; and now bears the appellation of *New South Wales*.

At the cloſe of the American war, it was determined to make a ſettlement on this coaſt for the reception of tranſported felons. The plan, as it may be ſuppoſed, occupied ſome time in coming to maturity; but at length, on the 6th of December, 1786, orders were iſſued by his majeſty in council for making a ſettlement, eſtabliſhing a court of judicature in the colony, and other regulations neceſſary on the occaſion. The whole received the complete ſanction of legiſlature in the beginning of the year 1787. The ſquadron, appointed for putting the deſign in execution, began to aſſemble at the Mother Bank, the place of rendezvous, in the Iſle of Wight, on the 16th of March, 1787. It conſiſted of the Sirius frigate, Capt. John Hunter; the Supply armed tender Lieut. H. L. Ball; three ſtore-ſhips, the Golden-grove, Fiſhburn, and Borrowdale, for carrying proviſions and ſtores for two years; and laſtly, ſix tranſports, the Scarborough and Lady Penrhyn from Portſmouth, the Friendſhip and Charlotte from Plymouth, and the Prince of Wales and Alexander from Woolwich. Theſe were to carry the convicts, with a detachment of marines in each proportioned to the nature of the ſervice; the largeſt where reſiſtance was moſt expected, viz. in thoſe which carried the greateſt number of male convicts. On the arrival of governor Phillip at the ſtation, he hoiſted his flag on-board the Sirius as commodore of the ſquadron; and, the embarkation being completed, he gave the ſignal to weigh anchor on the 13th of May at day-break. The number of convicts was 778, of whom 558 were men. They touched at the iſland of Teneriffe on the 3d of June, without meeting with any bad accident. Here they ſtaid a week, in order to procure ſuch refreſhments as were neceſſary for preventing the diſorders moſtly to be dreaded in ſuch a long and perilous voyage. In this they ſucceeded to their wiſh; and on the 10th of June the fleet ſet ſail, and on the 18th came in ſight of the Cape Verd iſlands, where they ſteered for St. Jago; but the want of a favourable wind and other circumſtances prevented their getting in; ſo that, as governor Phillip did not chooſe to waſte time, they did not touch land till they came to Rio Janeiro on the coaſt of Braſil. It may ſeem ſurpriſing, that a voyage to the eaſtward, which of itſelf may be accounted of ſufficient length, ſhould thus be wilfully made ſo much longer, by ſailing twice acroſs the Atlantic. The calms, however, ſo frequent on the coaſt of Africa, ſeem of themſelves to be a ſufficient inducement for navigators to preſerve a weſterly courſe; and even the iſlands at which it is ſo neceſſary to touch, are not far diſtant from the American coaſt. The returning tracks of Capt. Cook's three voyages are all within a little ſpace of the 45th degree of weſt longitude, which is even ten degrees farther weſt than Cape St. Roque; and that courſe appears to have been taken voluntarily, without any extraordinary inducement.

At Rio Janeiro they met with a very favourable reception,

tion, contrary to that which Capt. Cook experienced on a ſimilar occaſion. Proviſions were ſo cheap, that, though the allowance of meat was fixed by the governor at twenty ounces per day, the men were victualled completely at 3¾d. each, including rice, vegetables, and every other neceſſary. Wine was not at this time to be had except at an advanced price: but rum was laid in, and ſuch ſeeds and plants procured as were thought moſt likely to flouriſh in New South Wales; particularly coffee, indigo, cotton, and the cochineal-fig. An hundred ſacks of caſſada were likewiſe purchaſed as a ſubſtitute for bread, if it ſhould happen to be ſcarce. By the kindneſs of the viceroy alſo, ſome deficiencies in the military ſtores were made up from the royal arſenal, and every aſſiſtance given which the place could afford. They arrived here on the 5th of Auguſt, 1787; and ſet ſail on the 4th of September, receiving as the laſt compliment from the governor a ſalute of twenty-one guns.

From Rio de Janeiro the fleet had a fine run to Table Bay, in the ſouthern extremity of Africa, which they accompliſhed in thirty-nine days; where they took in the refreſhments meant to ſupply them during the remainder of the voyage. Here they arrived on the 13th of October; and, having ſupplied themſelves with a great number of live ſtock, they ſet ſail on the 12th of November, but were long impeded by contrary winds from the ſouth-eaſt. On the 25th they were only eighty leagues diſtant from the Cape, when Gov. Phillip left the Sirius and went on-board the Supply tender; in hopes, by leaving the convoy, to gain ſufficient time for examining the country round Botany Bay, that the moſt proper ſituation for the new colony might be choſen before the tranſports ſhould arrive. On the 3d of January, 1788, the Supply came within ſight of New South Wales; but the winds then became variable, and a current, which at times ſet very ſtrongly to the ſouthward, impeded her courſe ſo much, that it was not till the 18th of the month that ſhe arrived at Botany Bay.

Governor Phillip no ſooner landed, than he had an opportunity of converſing with the natives, who were aſſembled on-ſhore. As it was the intention of this gentleman to conciliate if poſſible their friendſhip, he uſed every method at this firſt interview to inſpire them with a favourable idea of the Europeans. For this purpoſe he preſented them with beads and other trifling ornaments, which they ſeemed pleaſed to wear, though Capt. Cook found them very indifferent about any kind of finery he could furniſh them with. They ſeemed, according to the account of that celebrated navigator, to be ſo attached to their own ornaments, that they made no account of any thing elſe. They received indeed ſuch things as were given them, but made no offer to return any thing in exchange; nor could they be made to comprehend that any thing of the kind was wanted. Many of the preſents which they had received were found afterwards thrown away in the woods.

Governor Phillip having parted with his new acquaintance in a friendly manner, next began an examination of the country about *Botany Bay*, which had been ſtrongly recommended by Capt. Cook as the moſt eligible place for a ſettlement. He found, however, that the bay itſelf was very inconvenient for ſhipping, being expoſed to the eaſterly winds; and ſo ſhallow, that ſhips even of a moderate burden could not get far enough within land to be ſheltered from the fury of the ocean. Neither did the land about any part of this bay appear an eligible ſituation for a colony; being in ſome places entirely ſwampy, in others quite deſtitute of water. Point Sutherland ſeemed to afford the ſituation moſt free from objections, but the ſhips could not approach it; and even here the ground ſeemed to be univerſally damp and ſpongy: ſo that, on the whole, finding no place within the compaſs of the bay proper for the new ſettlement, they were obliged to remove ſomewhere elſe.

The reſt of the fleet arrived in two days after the Supply; and, that no time might be loſt, Gov. Phillip ordered the ground about Point Sutherland to be cleared, and preparations to be made for landing, while he went with ſeveral officers in three boats to examine *Port Jackſon*, which was only three leagues diſtant. Here they had the ſatisfaction to find one of the fineſt harbours in the world, where 1000 ſail of the line might ride in perfect ſafety. On examining the different coves, one was preferred which had a fine run of ſpring-water, and where ſhips could anchor ſo cloſe to the ſhore, that at a very ſmall expenſe quays might be conſtructed for loading and unloading the largeſt veſſels. This was named by the governor *Sydney Cove*, in honour of lord Sydney; and the country around it deſtined for the place of ſettlement. It is about half a mile long, and a quarter of a mile broad at the entrance. On the governor's return to Botany Bay, the reports made to him concerning the adjacent country were ſo exceedingly unfavourable, that orders were immediately given for the removal of the fleet to Port Jackſon. On the morning of the 25th, therefore, the governor ſailed from Botany Bay, and was ſoon followed by the whole fleet.

The convicts and others deſtined to remain in New South Wales being landed, no time was loſt in beginning to clear ground for an encampment, ſtore-houſes, &c. The work, however, went on but ſlowly, partly owing to the natural difficulties they had to encounter, and partly to the habitual indolence of the convicts, which indeed was naturally to be expected conſidering their former way of life. Nevertheleſs, by the end of the firſt week in February, the plan of an encampment was formed, and places were marked out for different purpoſes, ſo that the colony already began to aſſume ſome appearance of order and regularity. The materials and frame-work of a ſlight temporary habitation for the governor had been brought out from England ready formed, which were landed and put together with as much expedition as circumſtances would allow. Hoſpital-tents were alſo erected; and the ſickneſs which ſoon took place ſhowed the propriety of ſo doing. In the paſſage from the Cape there had been but little ſickneſs, and few of the convicts had died; but a little time after they landed a dyſentery began to prevail, which proved fatal in ſeveral inſtances, and the ſcurvy began to rage with great violence, ſo that the hoſpital-tents were ſoon filled with patients. The diſorder proved the more virulent, as freſh proviſions could but rarely be procured; nor were eſculent vegetables often obtained in ſuch plenty as could produce any material alleviation of the complaint: the only remedy for the dyſentery was found to be a kind of red gum, produced in plenty by the trees growing upon this coaſt. The yellow gum has the ſame properties, though in an inferior degree.

In the beginning of February, a moſt violent ſtorm of thunder and lightning deſtroyed five of the ſheep which had a ſhed erected for them under a tree, which proved a prelude to other misfortunes among the cattle. The encampment, however, was carried on with great alacrity; the foundations of the ſtore-houſes were laid, and every thing began to wear a promiſing appearance. On the 7th of the month a regular form of government was eſtabliſhed in the colony, with all the ſolemnity which could poſſibly be given: the governor made a proper ſpeech to the convicts, reminding them of the ſituation in which they ſtood; and that now, if they continued their former practices, it was impoſſible they could hope for mercy if detected; neither could they expect to eſcape detection in ſo ſmall a ſociety. Offenders, therefore, he ſaid, would certainly be puniſhed with the utmoſt rigour; though ſuch as behaved themſelves in a proper manner might always depend upon encouragement. He particularly noticed the illegal intercourſe betwixt the ſexes, as a practice which encouraged profligacy in every reſpect; for which reaſon he recommended marriage: and this exhortation ſeemed not to be altogether in vain, as fourteen marriages were celebrated that very week in conſequence.

Heavy rains took place during the remainder of this month which ſhowed the neceſſity of going on with the work as ſoon as poſſible. The want of carpenters, however prevented this from being done ſo expeditiouſly as could have been wiſhed. Only ſixteen of theſe could be hired from all the ſhips; and no more than twelve of the convicts were of this trade, of whom ſeveral were ſick; ſo that the party were far too few for the work they had to perform. An hundred convicts were added as labourers; but with every effort it was found impoſſible to complete either the barracks or the huts for the officers ſo ſoon as could be wiſhed. On the 14th of February a ſmall party was ſent out to ſettle on Norfolk Iſland, who have ſince eſtabliſhed a colony there which promiſes to be of conſiderable utility. It was ſoon found, however, abſolutely neceſſary to make examples of ſome of the convicts at Port Jackſon. Towards the end of February it was thought proper to convene a criminal court, in which ſix of the convicts received ſentence of death. One, who was the head of the gang, was executed the ſame day: one was pardoned; the other four were reprieved, and afterwards exiled to a ſmall iſland within the bay, where they were kept on bread and water. They had frequently robbed both the ſtores and other convicts. The fellow who was executed, and two others, had been detected in ſtealing the very day on which they received a week's proviſion; and at the ſame time that their allowance was the ſame as that of the ſoldiers, ſpirituous liquors only excepted.

In the beginning of March the governor went out with a ſmall party to examine Broken Bay, lying about eight miles to the northward of Port Jackſon. This was found very extenſive, with many openings. One of the latter ended in ſeveral ſmall branches, and a large lagoon, which they could not at that time examine. Moſt of the land about the upper part of this branch was low and full of ſwamps, with great numbers of pelicans, and other aquatic birds. From this north-weſt branch they proceeded acroſs the bay to the ſouth-weſt branch, which is alſo very extenſive, with a ſecond opening to the weſtward, capable of affording ſhelter to almoſt any number of ſhips, with depth of water for veſſels of almoſt any burden. The land was found much higher here than at Port Jackſon, more rocky, and equally covered with timber. Large trees were ſeen growing even on the ſummits of the mountains, which appeared totally inacceſſible to the human ſpecies. Round the headland which forms the ſouthern entrance into the bay is a third branch, which Gov. Phillip thought the fineſt piece of water he had ever ſeen; which for that reaſon he honoured with the name of *Pitt-water*. This branch, as well as the former, is ſufficient to contain all the navy of Great Britain; but the latter has a bar at the entrance of only eighteen feet at low water. Within are from ſeven to fifteen fathoms. The land here is more level than on the ſouth-weſt branch, and ſome ſituations are proper for cultivation. The governor determined to have returned by land, in order to explore the country betwixt Port Jackſon and Broken Bay; but the continual rains prevented him.

On the 15th of April, the governor, attended by ſeveral officers and a ſmall party of marines, ſet out on an expedition into the interior parts of the country. Their firſt landing was at the head of a ſmall cove, named *Shell-cove*, near the entrance of the harbour on the north ſide. Proceeding in this direction, they arrived with great labour at a large lake, ſurrounded on all ſides with bog and marſhy ground to a conſiderable extent, and in which they frequently plunged up to the waiſt. Here they obſerved that bird ſo rare in other parts of the world, viz. a *black ſwan*. On being fired at, it roſe, and ſhewed that its wings were edged with white, the bill being tinged red. They ſpent three days in a very laborious manner in paſſing the marſhes and ſwamps which lie in the neighbourhood of the harbour: and here they had an opportunity of obſerving, that all the ſmall ſtreams which deſcend into Port Jackſon proceed from ſwamps, occaſioned by the ſtagnation of the water in the low grounds as it riſes from the ſprings. On leaving theſe low grounds, they found them ſucceeded by a rocky and barren country; the hills covered with various flowering ſhrubs, though frequently inacceſſible by reaſon of various natural obſtacles. At about fifteen miles diſtance from the ſea, the governor had a fine view of the internal parts of the country, which were mountainous. To the moſt northerly chain of theſe he gave the name of *Carmarthen*, and to the moſt ſoutherly that of *Lanſdown Hills*; and to one which lay between theſe he gave the name of *Richmond Hill*. It was conjectured that a large river muſt riſe from theſe mountains; but there was now a neceſſity for returning. On the 22d, however, another expedition was undertaken. Gov. Phillip with his party landed near the head of the harbour. Here they found a good country; but in a ſhort time arrived at a cloſe thicket through which they found it impoſſible to make their way, ſo that they were obliged to return. Next day, by keeping cloſe to the banks of a ſmall creek, they made a ſhift to paſs that obſtacle, and continued their courſe for three days to the weſtward. The country was now extremely fine, either entirely level or riſing in ſmall hills; the ſoil excellent, but ſtony in a few places. The trees grew at the diſtance of from twenty to forty feet from each other, in general totally deſtitute of underwood, which was confined to the barren and ſtony ſpots. On the 5th day they ſaw for the firſt time in this ſecond expedition Carmarthen and Lanſdown hills; but the country all round was ſo beautiful, that Gov. Phillip gave it the name of *Belle Vue*. They were ſtill apparently thirty miles from the mountains which they had intended to reach; but, not having been able to carry more than ſix days' proviſions along with them, they found it neceſſary to return; and, even with this ſmall ſtock, the officers as well as men were obliged to carry heavy loads. During all this time they had not proceeded farther in a direct line than thirty miles, ſo great were the obſtructions they had met with from deep ravines, &c. Their return, however, was effected with much greater eaſe, having cleared a track, and marked trees all the way as they went along to direct them in their journey back. The country explored at this time appeared ſo fine, that Gov. Phillip determined to form a ſettlement there as ſoon as a ſufficient number could be ſpared from thoſe works which were immediately neceſſary. On his return he had the mortification to find, that five ewes and a lamb had been killed very near the camp, and in the middle of the day. This miſchief was ſuppoſed to have been done by ſome dogs belonging to the natives.

All this time the ſcurvy had continued to rage with great violence, ſo that by the beginning of May near two hundred people were incapable of work. For this reaſon, and on account of the great difficulty of clearing the ground, no more than eight or ten acres of wheat and barley had been ſown, beſides what private individuals had ſown for themſelves; and it was even feared that this ſmall crop would ſuffer from the depredations of ants and field-mice. To procure as much relief as poſſible therefore in the preſent exigence, the Supply was ſent in the beginning of May to Lord Howe Iſland in hopes of procuring ſome turtle and other proviſions; but unfortunately the veſſel returned without any turtle, having met with ſqually weather, and being obliged to cut away her beſt bower anchor. The natives now began to ſhow an hoſtile diſpoſition, which they had not hitherto done. One of the convicts, who had wandered away from the reſt in queſt of vegetables, returned with a very dangerous wound in the back; giving information alſo, that another who had gone out for the ſame purpoſe had been carried off in his ſight by the natives, after being wounded in the head. A ſhirt and hat were afterwards found in ſome of the huts of the natives, but no intelligence of the man could be gained. This was followed by other misfortunes of the ſame nature. On the 30th of the month, two men who had been employed in cutting ruſhes for thatch at ſome diſtance from the camp were found dead. One of them had four ſpears in his body, one of which had pierced quite through it; but the other had no marks of violence upon him. In this caſe, however, it was proved, that thoſe who ſuffered had been the aggreſſors; as they had been ſeen with one of the canoes of the natives which they had taken from one of the fiſhing-places. All poſſible inquiry was made after the natives who had been guilty of the murder, but to no purpoſe. In the courſe of this enquiry it was found, that one of the natives had been murdered, and ſeveral wounded, previous to the attack upon the ruſh-cutters. The governor promiſed liberty to any convict who ſhould diſcover the aggreſſors; but no information was procured. About this time the two bulls and four cows belonging to government and to the governor, having been left for ſome time by the man who had the charge of them, ſtrayed into the woods and could not be recovered, though they were afterwards traced to ſome diſtance.

The 4th of June, being his majeſty's birth-day, was celebrated with as much feſtivity as circumſtances would allow; and on this occaſion it was firſt made public that the governor had given the name of *Cumberland County* to this part of the territory. The appointed boundaries were Carmarthen and Lanſdown hills on the weſt, the northern parts of Broken Bay on the north, and the ſouthern parts of Botany Bay on the ſouth; thus including theſe three principal bays, with Sydney Cove nearly in the centre.

The misfortunes which attended thoſe convicts who ſtrayed to too great a diſtance from the ſettlement, were not ſufficient to prevent ſome of them from rambling into the woods, in hopes of ſubſiſting themſelves there and regaining their liberty. One of theſe, who had been guilty of a robbery, fled into the woods on the 5th of June, but was obliged to return half-ſtarved on the 24th. He had found it impoſſible to ſubſiſt in the woods, and had met with very little relief from the natives. One of them gave him a fiſh, but made ſigns for him to go away. According to his account, they themſelves were in a very miſerable ſituation; and he pretended to have ſeen four of them apparently dying of hunger, who made ſigns to him for ſomething to eat. He pretended alſo to have fallen in with a party who would have burnt him, and that he made his eſcape from them with difficulty. He ſaid alſo, that he had ſeen the remains of a human body lying on a fire; and endeavoured to inculcate the idea of theſe ſavages eating human fleſh when other proviſions were ſcarce. This poor wretch was tried and executed for the theft he had committed before his departure, along with another criminal.

By this time the colony was ſo far advanced, that the plan of a regular town had been marked out. The firſt huts erected in this place were compoſed only of the ſoft wood of the cabbage-palm, in order to give immediate ſhelter, and which had the further inconvenience of being uſed quite green. The huts of the convicts were conſtructed only of upright poſts wattled with ſlight twigs, and plaſtered up with clay. Buildings of ſtone might eaſily have been raiſed, had there been any means of procuring lime for mortar. There were three kinds of ſtone met with about Sydney Cove; one equal in goodneſs to Portland-ſtone, an indifferent kind of ſandſtone or freeſtone, and a ſort which ſeems to contain iron; but neither chalk nor any ſpecies of limeſtone has yet been diſcovered. Lime was indeed procured from oyſter-ſhells collected in the neighbouring coves to conſtruct a ſmall houſe for the governor; but it cannot be expected that a ſufficient quantity can thus be procured for many or very extenſive buildings. Good clay for bricks has been found near Sydney Cove, and very good bricks have been made of it; the wood alſo, notwithſtanding the many reports to the contrary, is found abundantly fit for various purpoſes after being thoroughly ſeaſoned. Such ſpecimens as have been ſent to England were fine-grained and free of knots, but heavy.

On the point of land that forms the weſt ſide of the Cove, a ſmall obſervatory was erected, the longitude of which has been aſcertained to be 159° 19′ 30″ eaſt from Greenwich, and the latitude 32° 52′ 30″ ſouth.

From the firſt diſcovery of this continent, the extreme ſcarcity of freſh water had been mentioned by every navigator. None had been fortunate enough to enter the mouth of any navigable river ſuch as might be expected in a country of ſuch extent. The ſettlers about Port Jackſon found enough for the common purpoſes of life; but Capt. Tench informs us, that when he left the country, towards the end of 1788, there had been no diſcovery of a ſtream large enough to turn a mill. Since that time, however, Gov. Phillip has been more ſucceſsful; as we are informed by a letter of his to Lord Sydney, dated Feb. 13, 1790. In this letter he relates, that ſoon after the ſhips ſailed, in November 1788, he again made an excurſion to Botany Bay, where he ſtaid five days; but the reſearches he made there, tended only to confirm him in his opinion he already entertained that the country round it was by no means an eligible ſituation for a colony. After having viſited Broken Bay ſeveral times with boats, a river was found, which has ſince been traced, and all thoſe branches explored which afforded any depth of water. This river has obtained the name of *Hawkeſbury*, is from 300 to 800 feet wide, and ſeems navigable for the largeſt merchant-ſhips as far up as Richmond-hill, at which it becomes very ſhallow, and divides into two branches; on which account the governor calls Richmond-hill the head of the river. As after very heavy rains, however, the water ſometimes riſes thirty feet above its level, it would not be ſafe for ſhips to go up ſo far; but fifteen or twenty miles below it they would lie in freſh water, and be perfectly ſafe.

Richmond-hill, near which a fall prevented the boats from proceeding further up, is the moſt ſoutherly of a large range of hills which run to the northward, and probably join the mountains nearly parallel to the coaſt from fifty to ſixty miles inland. The ſoil of this hill is good, and it lies well for cultivation. There is a very extenſive proſpect from the top, the whole country around ſeeming a level covered with timber. Six miles to the ſouthward of Port Jackſon is a ſmall river; and twenty to the weſtward is one more conſiderable, which probably empties itſelf into the Hawkeſbury. As far as this river was at this time explored, the breadth was computed at from three hundred to four hundred feet. It was named the *Nepean;* and, like the Hawkeſbury, ſometimes riſes thirty feet above its level.

With regard to the civil eſtabliſhment in this colony, the governor's juriſdiction extends from 43. 49. to 10. 37. S. lat. being the northern and ſouthern extremities of the continent. It commences again in 135. E. lon. from Greenwich; and, proceeding in an eaſterly direction, includes all the iſlands within the above-mentioned latitudes in the Pacific ocean; by which partition it is ſuppoſed that every ſource of litigation will be cut off, as all theſe are indiſputably the diſcovery of the Britiſh navigators.

The powers of the governor are abſolutely unlimited, no mention being made of a council to aſſiſt him in any thing; and, as no ſtated time is appointed for aſſembling the courts, ſimilar to the aſſiſes and gaol-deliveries in England, the duration of impriſonment is altogether in his hands. He is likewiſe inveſted with the power of ſummoning general courts martial; but the inſertion in the marine mutiny-act, of a ſmaller number of officers than thirteen being able to compoſe ſuch a tribunal, has been neglected; ſo that a military court, ſhould detachments be made from head-quarters, or ſickneſs prevail, may not always be found practicable to be obtained, unleſs the number of officers in the ſettlement at preſent be increaſed. The governor is allowed to grant pardons in all caſes, treaſon and wilful murder excepted; and even in theſe he has authority to ſtay the execution of the law until the king's pleaſure ſhall be ſignified. In caſe of the governor's death, the lieutenant-governor takes his place; and, on his deceaſe, the authority is lodged in the hands of the ſenior officer.

It was not long after the convicts were landed that there appeared a neceſſity for aſſembling a criminal court; and it was accordingly convened by warrant from the governor. The members were the judge-advocate, who preſided, three naval and three military officers. The number of members is limited by act of parliament to ſeven; who are expreſsly ordered to be officers either of his majeſty's ſea or land forces. The court being met, completely arrayed and armed as at a military tribunal, the judge advocate proceeds to adminiſter the uſual oaths taken by jurymen in England to each member; one of whom afterwards ſwears him in a like manner. This ceremony being over, the crime is laid to the priſoner's charge, and the queſtion "guilty or not guilty" put to him. No law-officer being appointed on the part of the crown, the party at whoſe ſuit he is tried is left to proſecute the priſoner entirely by himſelf. All the witneſſes are examined on oath; and the deciſion muſt be given according to the laws of England, or "as nearly as may be, allowing for the circumſtances and ſituation of the ſettlement," by a majority of votes, beginning with the youngeſt member, and ending with the preſident of the court. No verdict, however, can be given in caſes of a capital nature, unleſs at leaſt five of the ſeven members concur therein. The evidence on both ſides being finiſhed, and the priſoner's defence heard, the court is cleared, and, on the judgment being ſettled, is thrown open again, and ſentence pronounced. During the time of ſitting, the place in which it is aſſembled is directed to be ſurrounded by a guard under arms, and admiſſion granted to every one who chooſes to enter it. Of late, however, ſays Capt. Trench, our coloniſts are ſuppoſed to be in ſuch a train of ſubordination, as to make the preſence of ſo large a military force unneceſſary; and two centinels in addition to the provoſt-marſhal are conſidered as ſufficient.

The firſt trials which came before this court were thoſe of three convicts, one of whom was convicted of having ſtruck a marine with a cooper's adze, and behaving otherwiſe in a moſt ſcandalous and riotous manner. For this he was condemned to receive 150 laſhes, being a ſmaller puniſhment than a ſoldier would have ſuffered in a ſimilar caſe. A ſecond, for having committed a petty theft, was ſent to a ſmall barren iſland, and kept there on bread and water only for a week. The third was ſentenced to receive fifty laſhes; but, being recommended by the court to the governor, had his ſentence remitted. The ſame lenity, however, could not be obſerved in all caſes. One fellow, who had been condemned to be hanged, was pardoned while the rope was about his neck, on condition that he would become the common executioner ever after.

Beſides the criminal court, there is an inferior one, compoſed of the judge-advocate and one or more juſtices of the peace, for the trial of ſmall miſdemeanors. This court is likewiſe empowered to decide all law-ſuits; and its verdict is final, except where the ſum exceeds 300l. in which caſe an appeal can be made to England from its decree. In caſe of neceſſity, an admiralty-court, of which the lieutenant-governor is judge, may alſo be ſummoned for the trial of offences committed on the high ſeas.

This colony has improved as faſt as could be expected, conſidering the many difficulties with which every infant ſettlement has to ſtruggle for ſome time. At the cloſe of the year 1797, the colony had of live-ſtock, 26 horſes, 58 mares, 132 bulls and oxen, 195 cows, 4247 hogs, 743 rams, 1714 ſheep, 781 he and 1495 ſhe goats. Of land in a ſtate of cultivation, there were 3361½ acres in wheat, 1527 for maize, and 26½ in barley, beſides a conſiderable quantity of garden-ground, which produced potatoes, callevances, and vines. The increaſe of public buildings belonging to the government was alſo very conſiderable. At Toongabbe a barn was erected ninety feet long, in which eighteen men might thraſh corn, without interrupting each other. At Sydney an entire new ſuite of apartments was built of brick, for the accommodation of the two aſſiſtant-ſurgeons, and a gaol eighty feet long was erected at the ſame place. Two wind-mills, and a granary ſeventy-two by twenty-one feet, were among the buildings of public utility; as well as an elegant church one hundred feet by forty-four, with a veſtry twenty feet long, erected upon pillars, beſides a great variety of other edifices and uſeful improvements.

From the 27th of January 1788, to the 7th of June 1800, not fewer than 120 ſhips and veſſels of various deſcriptions, and from different quarters of the globe, had viſited this country; a convincing proof that they either found it a place of refreſhment after the fatigues of a long voyage, or an advantageous market for their commercial ſpeculations. Thirty-ſeven of them went from England with convicts, to the number of 5000, of whom only 157 were females.

In the year 1801 the increaſing proſperity of the colony was ſtill conſpicuous; for the live ſtock of different individuals conſiſted of 6269 ſheep, 362 cattle, 211 horſes, 1259 goats, and 4766 hogs; and what belonged to government conſiſted of 488 ſheep, 931 cattle, and 32 hogs. Individuals had 4857 acres of land ſown with wheat, and 3564 acres for maize; and government had 467 acres for the one ſpecies of grain, and 300 for the other. In the month of June 1801, there were 5547 perſons of all deſcriptions in the ſettlement, which, with 961 at Norfolk iſland, made a total of 6508 perſons ſubject to the governor's authority.

A correct and particular ſtate of the colony in the year 1810, with hints for new regulations, are contained in the Report of a Select Committee of the Houſe of Commons on Tranſportation, which was ordered to be printed July 10, 1812.

"The principal ſettlement on the eaſtern coaſt of New South Wales, was formed in 1788. It is ſituated in latitude 33 S. longitude 170 E. The moſt conſiderable diſtrict is that of Sydney, containing, by the return dated the 1ſt of March, 1810, 6158 inhabitants. Paramatta contains 1807; Hawkeſbury, 2389; and Newcaſtle, 100. Of the total number 10,454, 5513 are men, 2220 women, and 2721 children. Of theſe, from ¼ to ⅕ are convicts; the troops are about 1100 in number; and the remainder are free perſons. In addition to theſe, are the ſettlements of Port Dalrymple and Hobart's Town, in Van Diemen's Land, about five degrees to the ſouth of Sydney; containing 1321 inhabitants; and at the date of the laſt returns, 177 perſons were living in Norfolk-Iſland, but orders have been ſince ſent out for its total abandonment. The ſettlement in New South Wales is bounded on the north-weſt and ſouth by a ridge of hills, known by the name of the *Blue Mountains*, beyond which, no one has yet been able to penetrate the country; ſome have with difficulty been as far as one hundred miles in the interior; but, beyond ſixty miles, it appears to be no-where practicable for agricultural purpoſes; and, in many places, the diameter of the habitable country is much leſs: in length it extends from Port Stephens to Port Jervis, compriſing from north to ſouth about four degrees; beyond theſe, it is ſtated, that the colony will not be capable of extenſion; and of the land within theſe boundaries, about one-half is ſaid to be abſolutely barren. The ground actually in cultivation, amounts to rather more than 21,000 acres, and 74,000 acres are held in paſture. The ſtock appears to be conſiderable: by the return in 1810, the amount was—horſes, 521; mares, 593; bulls, 193; cows, 6351; oxen, 4732; ſheep, 33,818; goats, 1732; hogs, 8992. Of theſe, a ſmall proportion is kept by government; of which, part is killed for the ſupply of the public ſtore, and the remainder is made uſe of to ſtock the farms of new ſettlers. It appears from the evidence, that the colony has for ſome years, except when the crops have failed, from inundations or other accidental cauſes, been able wholly to ſupply itſelf with corn;

but that it is ſtill neceſſary to continue, to a certain extent, the importation of ſalted proviſions. The ſoil and climate are deſcribed to be extremely fine, healthy, and productive; diſeaſes, with the exception of ſuch as ariſe from intemperance or accident, are little known; and freſh fruits and vegetables are produced from the beginning to the end of the year. The river Hawkeſbury is however occaſionally ſubject to violent and ſudden floods, which have in ſome inſtances totally deſtroyed the produce of the farms in its vicinity, upon which the colony principally depends for its ſubſiſtence. Great difficulties have in conſequence at times occurred; and, though precautions are now taken to remove the crops as ſoon as poſſible from the low grounds in the neighbourhood of the river, no perfect ſecurity is yet obtained againſt the recurrence of theſe diſaſters. The out-ſettlements of Port Dalrymple and Hobart's Town, in Van Diemen's Land, are repreſented as enjoying a purer climate and more generally productive ſoil than New South Wales, and to be otherwiſe proſperous and thriving. Yet your committee muſt concur in the opinion already expreſſed by his majeſty's government, that more benefit to the colony will be derived from the cultivation and improvement of the ſettlements that are already formed, than from the formation of new and diſtant eſtabliſhments, whatever may be the encouragement that a fertile ſoil or an advantageous ſituation may appear to hold out.

"The currency of the colony conſiſts principally of government-paper and copper money; but, from its ſcarcity, many of the tranſactions which in other countries would be accompliſhed by money are here carried on by barter; thus the labourer is not paid in money, but in kind: he demands from his employer ſuch articles as he is moſt in need of, and they are delivered to him at the prices which they bear in the market. At times, indeed, wheat and cattle have in the courts of juſtice been conſidered as legal tender in payment of debts. To remedy theſe inconveniences, a ſupply of ſilver coin, to the amount of 10,000l. has lately been ſent to the colony; but, whilſt the neceſſity of large importations continues, with the reſtraints upon exportation, it is not likely that this coin will long remain there in circulation. The exportations from the colony have hitherto principally conſiſted of oil, ſeal-ſkins, coals, and wool; the fiſheries appear to have been much neglected; and the iron-ore, of which there is abundance, and of very fine quality, has not yet been worked. The trade in ſkins and coals is the moſt thriving, but is much ſtraitened by the reſtrictions in favour of the Eaſt-India Company. The ſtock of ſheep is not yet ſufficiently large to make wool an article of large exportation. The culture of hemp has been leſs attended to than might have been expected; a profitable trade in ſandal-wood has at times been, though illegally, carried on with the South-Sea iſlands and China; woollen manufactories, potteries, and breweries, have been eſtabliſhed, but not with any great ſucceſs. The commercial regulations of the colony have in many inſtances been ſo impolitic as much to diſcourage mercantile ſpeculation; for many years a maximum price was impoſed by the governor upon all imported merchandiſe; and at this price, often too low to afford a fair profit to the trader, the whole cargo was diſtributed amongſt the civil and military officers of the ſettlement, who alone had liberty to purchaſe; and articles of the firſt neceſſity were afterwards retailed by them, at an enormous profit, to the poorer ſettlers. Part of theſe abuſes were corrected in the year 1800; but, in the traffic of ſpirituous liquors, they continued to a very late period; and it is therefore with the greateſt ſatisfaction that your committee have learnt that meaſures have been enforced, as well by the government here as in the colony, to put an end to theſe practices. One commercial regulation appears however to be ſtill in full force, which, in the opinion of your committee, ought immediately to be reſcinded; it is that by which no ſhip is allowed to diſpoſe of any merchandiſe in Van Diemen's Land, unleſs it ſhall have previouſly touched at Port Jackſon. By this reſtriction all mercantile enterpriſe is at once put an end to in the dependent ſettlements; and ſupplies, abſolutely eſſential to the ſupport of its inhabitants, may in their greateſt neceſſity be delayed to them. The impolicy and injuſtice of this regulation are ſo apparent, that your committee truſt it will not long remain in exiſtence.

"The want of an extended corn-market, where the prices are regulated by a fair and liberal competition, is much felt in the colony. Of 10,452 inhabitants, 4277 are wholly, or in great part, victualled from the public ſtore; and three-fifths of the corn brought to market are purchaſed by the governor, at a price, over which, from the largeneſs of his demand, he has always a power of controul, and which many governors have taken upon themſelves abſolutely to limit, ſo as ſcarcely to afford to the farmers a fair profit for their produce; and, in the diſtant parts of the ſettlement, they have been known to feed their pigs with the corn for which they could not obtain a ſufficient price. From the occaſional overflowing of the Hawkeſbury, and conſequent ſcarcities, a larger cultivation of corn than is neceſſary for the mere annual ſubſiſtence of the colony, is extremely deſirable: and your committee are of opinion, that an enlarged market, great encouragement to agriculture, and a free ſupply of ſpirits, may be afforded to the colony, without loſing the revenue which would be produced by the duties on importation, if diſtillation within the colony were permitted under proper duties and regulations; and they confidently ſuggeſt, that this is a meaſure which ought to be ſubſtituted for that propoſed by governor Macquarrie: it would extend agricultural ſpeculation; it would be a reſource in times of ſcarcity; and, with proper attention, would afford a better ſpirit than has been hitherto imported; for the importations have, for the moſt part, been of Bengal and American rum. But your committee muſt at the ſame time regret, that an impediment has ariſen to the immediate alteration of the preſent ſyſtem, from a contract entered into by governor Macquarrie, under which certain merchants have agreed to build an hoſpital for the ſettlement, on being allowed, during the enſuing three years, excluſively to purchaſe ſpirits at the government-price, no other ſpirits being permitted, within that time, to be imported into the colony by private individuals.

"The courts of judicature are inſtituted by commiſſion. The civil court is called the Court of Civil Juriſdiction, and conſiſts of the judge-advocate, and two reſpectable inhabitants of the colony, to be from time to time appointed by the governor; and they have full power to hear and determine, in a ſummary way, "all manner of perſonal pleas whatſoever:" they have alſo full power to grant probates of wills, and adminiſtration of the perſonal eſtates of inteſtates dying within the ſettlements; and, if either party find him, her, or them, ſelves, aggrieved by any judgment or decree given or pronounced by the ſaid court, he, ſhe, or they, ſhall and may appeal to the governor; or, in caſe of his abſence or death, to the lieutenant-governor; and, if any party ſhall find him, her, or them, ſelves, aggrieved by the judgment or determination of the ſaid governor, in any caſe where the debt or thing in demand ſhall exceed the value of 300l. ſuch party ſo aggrieved may appeal to the king in council. An allowance, to be fixed at the diſcretion of the court, is to be made by all complainants, at whoſe ſuit any perſon ſhall be impriſoned, to ſuch defendants, provided ſuch defendant make oath that he has no eſtate or effects ſufficient to maintain himſelf. It is in evidence that this allowance has been fixed at 6d. per day, which is not more in value than 4d. in England. It appears alſo, that no convict can, during the time of his ſervitude, ſue or be ſued in theſe courts, or ſuffer impriſonment for any debt incurred by him. By the ſame commiſſion, a Court of Criminal Juriſdiction is eſtabliſhed, upon the authority of the act 27 Geo. III. c. 2. It is a court of record, with all ſuch powers as are incident to courts of record in England: it conſiſts of the judge-advocate and ſix officers of the ſea and land ſervice, to be convened from time to time by precept under the hand and ſeal of the governor, with power (having taken the oaths directed in the commiſſion) to hear and determine all crimes committed within the ſettlement, and to cauſe puniſhment to be inflicted according to the laws of England, as nearly as may be, conſidering and allowing for the circumſtances and ſituation of the place and ſettlement aforeſaid, and the inhabitants thereof. The verdict to be by the opinion of the major part of the court: if the offence be capital, the court may pronounce judgment of death, or of any puniſhment, not amounting to death, which to the court ſhall ſeem meet. But, unleſs five of the perſons ſitting in the court ſhall concur in the verdict, execution of any judgment of death ſhall not be had or done until the proceedings ſhall have been tranſmitted to this country, and the pleaſure of the king had thereon; and in no capital caſe is the ſentence to be executed without the conſent of the governor, who has power to ſuſpend ſuch execution until he have the direction of his majeſty. Your committee have to obſerve, that all the evidence examined on the ſubject, unequivocally condemns the manner in which the criminal courts are thus eſtabliſhed. Governor Bligh, having ſtated that they conſiſted principally of military officers, proceeds; "It did not give ſatisfaction to the inhabitants; they were particularly deſirous that they might not be ſo much in the power of the military, but might have ſome kind of juſtice that might bring them nearer to their brethren in Great Britain." He alſo ſtates that there were ſettlers ſufficient in character and numbers to furniſh juries; and thinks their deciſions would have been fairer than thoſe that took place without them. Similar to his, are the opinions of Gov. Hunter, Mr. Palmer, and Mr. Campbell; and, upon their evidence, your committee are of opinion, that the manner of adminiſtering criminal juſtice may be altered with great advantage to the colony. It is not to be expected that its inhabitants ſhould view, otherwiſe than with jealouſy and diſcontent, a ſyſtem which reſembles rather a court-martial than the mode of trial the advantages of which they have been accuſtomed to ſee and to enjoy in their own country. However neceſſary it may have been, at the firſt foundation of the ſettlement, thus to conſtitute the courts, as well from the default of other members as from the refractory habits of the perſons then compoſing the colony; that neceſſity has now ceaſed to exiſt; a numerous claſs of reſpectable perſons is now formed within the ſettlement, amply ſufficient to warrant the eſtabliſhment of that trial by jury, for which they are anxiouſly wiſhing. But upon this ſubject your committee particularly refer to a memorial of Mr. Bent, judge-advocate, whoſe views have met with the approbation of governor Macquarrie; in which the inconveniences of the preſent ſyſtem are moſt ably and clearly detailed, and ſuch regulations are ſuggeſted, as appear to your committee to be moſt worthy the attention and conſideration of the government. It is ſtated in the evidence, that the natives of the country find the ſame protection in theſe courts of juſtice with the ſubjects of the king. Yet your committee have obſerved with ſurpriſe, in a report of the priſoners tried before the court of criminal juriſdiction in March 1810, that a perſon charged with ſhooting at and wounding a native, was tried ſimply for an aſſault; whilſt another, who had committed a ſimilar offence againſt an European, was tried on the ſame day for his life.

"It appears proper to your committee here to remark, that great inconveniences are felt in the colonies to Van Diemen's Land, from the want of a court of juſtice. The juriſdiction of the magiſtrates is all that the inhabitants have to look to for their protection againſt offenders; and, for the ſettlement of civil differences, they have no power within the colony of appealing to the law; all cauſes and great offences are removed for trial to Port Jackſon, at an inconvenience and expenſe too manifeſt to need any remark; a judge-advocate is already appointed, and the additional expenſe to be incurred by the complete formation of a court, adapted to the male population of that colony, would not be great.

"The commiſſion and inſtructions under which the governor acts, are given at length in the appendix. He is made Governor and Captain General, with the moſt enlarged powers, uncontrouled by any council, with authority to pardon all offences (treaſon and murder excepted), to impoſe duties, to grant lands, and to iſſue colonial regulations. It is in evidence from governor Bligh, that to the breach of ſome of theſe regulations, iſſued at the ſole will of the governor, a puniſhment of five hundred laſhes is annexed, and to others a fine of 100l. The manner in which theſe extenſive powers have been uſed, has not always been ſuch as to give ſatisfaction to the colony; nor can it be expected where ſo much authority and reſponſibility are thrown into the hands of one man, that his will however juſt, and his adminiſtration however wiſe, will not at times create oppoſition and diſcontent amongſt men unuſed, in their own country, to ſee ſo great a monopoly of power. Under this impreſſion, your committee think it right to recommend, that a council be given to the governor, for the purpoſe of ſharing with him in the reſponſibility of the meaſures which they may think neceſſary for the ſecurity or proſperity of the colony.

"The governor has the power of making grants of land; and your committee have heard with ſurpriſe, that this power has, in one inſtance at leaſt, been uſed in a manner, to ſay the leaſt of it, liable to much obſervation. It has been ſtated in evidence, that a grant of land, to the amount of 1000 acres, was made by a governor to the perſon appointed to ſucceed him, who, immediately on aſſuming the government, made a ſimilar grant to his predeceſſor. Upon this your committee muſt ſuggeſt, that no governor ought on his own account to enter into farming-ſpeculations; his ſalary ought to be ſufficient to ſupport him; he ought never to look to other and indirect means of enriching himſelf.

"For many years the governor was reſtrained from granting longer leaſes, within the town of Sydney, than for the period of fourteen years. This impolitic regulation, which cauſed much diſcontent, and materially checked all enterpriſe in building, has lately been reſcinded. Many ſettlers have been ſent out from this country by government, to whom grants of lands, ſometimes to a large amount, have been made; and in many inſtances their want of capital, of character, and agricultural knowledge, have expoſed them to difficulties on their arrival, and excited complaints againſt them for miſconduct. Your committee are glad to learn that greater precautions are now taken in the ſelection of theſe perſons than appears formerly to have been the caſe. None are allowed to go out as free ſettlers, unleſs they can prove themſelves to be poſſeſſed of ſufficient property to eſtabliſh themſelves there without the aſſiſtance of government, and who can produce the moſt ſatisfactory teſtimonials and recommendations from perſons of known reſpectability; the perſon allowed to go is then recommended to the governor, to whoſe diſcretion it is left to make what grant of land he may think expedient. Your committee wiſh, however, to ſuggeſt that it ought to be made a principle, in ſelecting theſe perſons, to give the preference to thoſe who have been previouſly accuſtomed to agricultural purſuits.

"Though the religious feeling in the colony appears to have been weak, latterly the erection of places of worſhip, and the eſtabliſhment of clergymen, have not been neglected. Churches have been built at Sydney and Paramatta, and in Hawkeſbury the ſervice was performed in houſes appropriated to that purpoſe; and to each of theſe diſtricts clergymen have been appointed, with a ſufficient proviſion from government. In governor Hunter's time, the attendance of the convicts was enforced at church. This compulſion appears to have been neglected during the government of admiral Bligh; though during the hours of divine ſervice all loitering was forbidden in the town of Sydney. No reſtraint is impoſed on thoſe profeſſing a different religion, and Roman-catholic clergymen have been allowed to perform the rites of their church; regiſters of baptiſms, marriages, and burials, are regularly kept, and many ſchools have been eſtabliſhed. The Orphan Female School, ſupported by port-duties and fines, has flouriſhed almoſt from the firſt ſettlement of the colony; and a Male Orphan School, on a ſimilar plan, has lately been eſtabliſhed; ſeveral private ſchools are alſo open, and the education of youth appears by no means to be neglected, though the want of proper maſters has been much felt at different periods.

“ Your committee will now proceed to detail the manner in which the tranſportation of the convicts is conducted, and what are their government and treatment within the colony.

“ When the hulks are full up to their eſtabliſhment, and the convicted offenders in the different counties are beginning to accumulate, a veſſel is taken up for the purpoſe of conveying a part of them to New South Wales. A ſelection is in the firſt inſtance made of all the male convicts under the age of fifty, who are ſentenced to tranſportation for life and for fourteen years; and the number is filled up with ſuch from amongſt thoſe ſentenced to tranſportation for ſeven years, as are the moſt unruly in the hulks, or are convicted of the moſt atrocious crimes: with reſpect to female convicts, it has been cuſtomary to ſend, without any exception, all whoſe ſtate of health will admit of it, and whoſe age does not exceed forty-five years.

“ The evidence of Mr. M'Leay diſtinctly and ſatisfactorily explains the manner in which they are tranſported. An order is received from the Treaſury at the Tranſport-office, to take up veſſels for New South Wales. They are advertiſed for, and the loweſt tender accepted. Clothing and proviſions for the ſupport of the convicts during the voyage, and nine months afterwards, are ſent from the Victualling-office, and medicines are furniſhed from Apothecaries' Hall. The owner of the veſſel provides a ſurgeon, who undergoes an examination at Surgeon's Hall and the Tranſport-office. He is inſtructed to keep a diary, not only of the illneſs on-board, but of the number of convicts admitted on deck; of the ſcraping the decks, cleaning the births, and general treatment of the tranſports. The ſick are to be viſited twice a-day, the healthy once. He is ordered to take the greateſt precaution againſt infection, and to fumigate the clothes of thoſe taken to the hoſpital. He has not only power to uſe medicines, but alſo the ſtores, if any ſick be in want of greater nouriſhment. He is further inſtructed to tranſmit to the ſecretary of ſtate any obſervations which may occur to him productive of improvement in the mode of treatment, and he is paid a gratuity of 10s. 6d. for every convict landed in New South Wales. The inſtructions to the maſter are equally ſatisfactory. He is to be particularly cautious to receive no diſeaſed perſon on-board during the voyage; a proportion of the priſoners is daily to be admitted upon deck, and the births of all cleaned and aired; and theſe things are to be noted in the log-book, which is afterwards ſubmitted to the governor of New South Wales; and, if the conduct of the maſter appears to have been ſatisfactory, he receives a gratuity of 50l. If the contrary ſhould turn out to be the caſe, a power of mulcting him is given by the contract, and he becomes liable to a proſecution. The ration of proviſion is fixed, and appears to be amply ſufficient for the ſupport of the men; about 200 men or women are generally embarked on-board one ſhip, with a guard of thirty men and an officer.

“ Such are the preſent regulations for the voyage; and, however bad the treatment of the convicts on-board the veſſels may formerly have been, the preſent ſyſtem appears to your committee to be unobjectionable. The witneſſes ſpeak of it in terms of high commendation, particularly two of thoſe who have been ſent out as convicts. Governor Macquarrie, in his laſt diſpatches, mentions the good treatment of the priſoners on-board the two tranſports laſt ſent out; and a ſtill ſtronger poof of the improvement in the mode of conveyance is, that from the year 1795 to 1801, of 3833 convicts embarked, 385 died on-board the tranſports, being nearly one in ten; but ſince 1801, of 2398 embarked, fifty-two only have died on the paſſage, being one in forty-ſix. The only further obſervation your committee have to make on this part of the ſubject is, one of regret that no arrangement whatever is made for the performance of divine ſervice during this ſix-months' voyage; that this, which is the heavieſt part of their puniſhment, is alſo the leaſt likely to produce reformation. With the diſpatches from government a liſt of the convicts is generally ſent; but this liſt has for the moſt part been very deficient in particulariſing the offences of which they have been convicted; and hence, in diſtributing them upon their arrival, the governor has no clue to guide him in giving to them more or leſs advantageous ſituations, according to the nature of their crimes and characters. This is a neglect eaſy, and at the ſame time moſt neceſſary, to be corrected.

“ Upon the arrival of a tranſport, general orders are iſſued for returns of the number of men wanted, with the land held in cultivation by each ſettler. The trade, age, character, and capacity, of the convicts are, as far as poſſible, inveſtigated; the artificers are in general reſerved for the ſervice of government, and as many of the others as may be wanted. Perſons who have been in a higher ſituation of life have *tickets of leave* given to them, by which they have liberty to provide for themſelves, and are exempt from all compulſory labour; ſimilar tickets are given to men unuſed to active employment, as goldſmiths and others; the remainder are diſtributed amongſt the ſettlers as ſervants and labourers. The convicts in the ſervice of government are divided into gangs. Every gang has an overſeer, and every two or three gangs a ſuperintendent; theſe are frequently choſen from amongſt thoſe convicts who beſt conduct themſelves. They work from ſix in the morning till three in the afternoon, and the remainder of the day is allowed them, to be ſpent either in amuſement or profitable labour for themſelves. They are clothed, fed, and for the moſt part lodged, by government; and though, in the early periods of the colony, inconvenience and diſtreſs may have ariſen from the irregularity of ſupply from this country, latterly the food and clothing have been good, and, generally ſpeaking, in ſufficient abundance. Should the convicts miſconduct themſelves at their work, the ſuperintendents have no power of inflicting puniſhment, but are for that purpoſe obliged to take them before a magiſtrate. The ſitting magiſtrate of the week at Sydney may order a puniſhment of twenty-five laſhes; a regular bench, which conſiſts, at leaſt, of three, may order as many as three hundred; and, in the diſtant parts of the colony, a ſingle magiſtrate has the ſame power with the bench at Sydney; but a heavy puniſhment is not executed without the previous approbation of the governor. Another mode of correction, and that which your committee would recommend to be preferred in as many caſes as poſſible, is to ſentence the culprit to work for a certain number of days in the gaol-gang: he is here obliged to labour at ſome public work, in irons, from ſix in the morning to ſix at night, and no hours are allowed to him for profit or amuſement. The convicts diſtributed amongſt the ſettlers, are clothed, ſupported, and lodged, by them; they work either by the taſk or for the ſame number of hours as the government-convicts; and, when their ſet labour is finiſhed, are allowed to work on their own account. The maſter has no power over them of corporal puniſhment, and this can only be inflicted by the interference of a magiſtrate; even if the maſter be a magiſtrate himſelf, he can order no puniſhment to his own ſervant, but muſt have recourſe to another magiſtrate. If the ſervant feels himſelf ill uſed by his maſter, he has power of complaining to a magiſtrate, who will, if the complaint be well founded, deprive the maſter of his ſervant. It is ſo much the intereſt of the ſettlers to keep their ſervants in good health, and to attend to their conduct, that your committee have heard no evidence but in commendation of their treatment, and of its effects upon their morals and comfort. Indeed it is moſt manifeſt, that, where two or three convicts are domiciled in a family, removed from their former companions, and forced into habits of induſtry and regularity, the chance of reformation muſt be infinitely greater than when they are worked in gangs, living with each other amidſt all the inducements to vice which ſuch a town as Sydney muſt afford to them; and ſuch, by all the evidence, appears to be the effect of this ſyſtem of diſtributing them amongſt the ſettlers. Nor is it to be loſt ſight of, that in the ſervice of ſettlers they are likely to acquire ſome knowledge of farming; and that if, from convicts, they became well-behaved and induſtrious ſervants, a farther poſſibility is opened to them of becoming proſperous and reſpectable ſettlers. On theſe grounds your committee recommend as much as poſſible their diſtribution as ſervants and labourers to individuals; and they have obſerved with much ſatisfaction, that ſuch appears to be the ſyſtem purſued at preſent by governor Macquarrie; nor will ſuch an arrangement materially increaſe the expenſe to government, or impede the progreſs of its works. It is to be found in the evidence of Mr. Commiſſary Palmer, that the expenſe of each convict in the ſervice of government was about 40l. a-year, and that a free labourer at Sydney could be hired for 70l. but that he would do nearly twice as much work. Mr. Campbell ſtates the annual expenſe of a convict at 30l. but in the other point he agrees with Mr. Palmer. Some of the benefits of this ſyſtem muſt be loſt where too many convicts are given to one maſter, and in ſome inſtances forty have been put under the controul of a ſingle ſettler; but, from the extent of ſome of the farms, ſuch a diſtribution appears to be unavoidable. In the diſtribution of female convicts great abuſes have formerly prevailed; they were indiſcriminately given to ſuch of the inhabitants as demanded them, and were in general received rather as proſtitutes than as ſervants; and, ſo far from being induced to reform themſelves, the diſgraceful manner in which they were diſpoſed of operated as an encouragement to general depravity of manners. Upon the arrival of governor Bligh, two-thirds of the children annually born within the colony were illegitimate. Marriages have latterly become more frequent, conſequently proſtitution is ſtated to have been leſs prevalent; and governor Macquarrie is directing his endeavours, under orders from the government here, to keep the female convicts ſeparate till they can properly be diſtributed among the inhabitants in ſuch manner as they may beſt derive the advantages of induſtry and good character. He further ſtates in his diſpatch, dated April 30, 1810, that the ſituation of the colony requires that as many *male* convicts as poſſible ſhould be ſent thither, the proſperity of the country depending on their numbers; whilſt, on the contrary, female convicts are as great a drawback as the others are beneficial. To this obſervation your committee feel they cannot accede: they are aware that the women ſent out are of the moſt abandoned deſcription, and that in many inſtances they are likely to whet and to encourage the vices of the men, whilſt but a ſmall proportion will make any ſtep towards reformation; but yet, with all their vices, ſuch women as theſe were the mothers of a great part of the inhabitants now exiſting in the colony, and from this ſtock only can a reaſonable hope be held out of rapid increaſe to the population; upon which increaſe, here, as in all infant colonies, its growing proſperity in great meaſure depends. Let it be remembered too, how much miſery and vice are likely to prevail in a ſociety in which the women bear no proportion to the men; in the colony at preſent, the number of men compared to that of women, is as two to one; to this, in great meaſure, the prevalence of proſtitution is reaſonably to be attributed; but increaſe that proportion, and the temptation to abandoned vices will alſo be increaſed, and the hopes of eſtabliſhing feelings of decency and morality amongſt the lower claſſes will be ſtill farther removed. The ſupply of women to the colony muſt, however, be materially diminiſhed by the propoſed ſyſtem of employing convicts in penitentiary-houſes; and your committee think this an additional reaſon for affording increaſed facilities to the wives of male convicts, who may wiſh to accompany or follow their huſbands to New South Wales. This permiſſion is now ſeldom granted, and that only to the wives of men tranſported for life or for fourteen years. It is however the moſt eligible way of providing the colony with women, and one which may with very great advantage be much extended.

"At the expiration of the time to which the convicts have been ſentenced, their freedom is at once obtained, and they are at liberty either to return to this country, or to ſettle in New South Wales. Should the latter be their choice, a grant is made to the unmarried of forty acres of land, and to the married of ſomething more for the wife and each child: tools and ſtock (which they are not allowed to alienate) are alſo given to them, and for eighteen months they are victualled from the government-ſtores. In this manner, they have an opportunity of eſtabliſhing themſelves in independence, and by proper conduct to regain a reſpectable place in ſociety; and ſuch inſtances, your committee are glad to learn, are not unfrequent. They alſo ſee with ſatisfaction, that governor Macquarrie adopts it as a principle, that long-tried good conduct ſhould lead a man back to that rank in ſociety which he had forfeited, and do away, in as far as the caſe will admit, all retroſpect of former bad conduct: this appears to him to be the greateſt inducement that can be held out towards the reformation of the manners of the inhabitants. In theſe principles your committee cordially concur, and are the more anxious to expreſs their opinion, as, under a former governor, tranſports, whatever their conduct might be, were in no inſtance permitted to hold places of truſt and confidence, or even to come to the government-houſe; thoſe advantages being, in his opinion, not to be expected until after generations.

"The ſame advantages as are allowed to convicts having ſerved their time, are given to thoſe who have been pardoned or emancipated by the governor; and your committee do not wiſh to diſmiſs the ſubject, without making ſome obſervations upon the power poſſeſſed by him of granting to convicts either the entire or partial remiſſion of their ſentence, or tickets of leave, by which they are altogether relieved from its ſeverity. They do not ſee any neceſſity for the governor's poſſeſſing a power to grant theſe abſolute or conditional pardons; it is a power liable to great abuſe, and which appears to have been at times very much abuſed. It is in evidence, that in ſome years one hundred and fifty pardons have been granted; that pardons have been granted to convicts immediately upon their arrival, without reference to their characters or merits;* and it appears rather to have at

* Thus the governor a few years ago thought fit to pardon, and to permit to return to England before his term was expired, a man of the name of Bullock, who had been capitally convicted of fraudulently concealing his effects as a bankrupt, but had got his ſentence commuted into tranſportation for a certain term. It has, however, been determined by the judges, (Nov. 2, 1818.) that the governor's pardon does not act like a pardon under the great ſeal, "and conſequently that ſuch perſon is not thereby reſtored to his civil rights and capacities."

times been made an inſtrument to gain popularity, than the means of rewarding exemplary conduct by a well-deſerved extenſion of his majeſty's mercy. Your committee therefore ſuggeſt, *that no pardon whatever, real or conditional, be granted but through the ſecretary of ſtate.* This may create a delay perhaps of a year, in obtaining the pardon of any convict; but that inconvenience will not be great; for, by granting to him a ticket of leave, the convict will in the mean time be entirely relieved from the preſſure of his ſentence. Upon the ſubject of *tickets of leave*, your committee feel that the power of granting them ought to remain in full force with the governor; but it is a power which they would wiſh to ſee ſparingly and cautiouſly made uſe of; and with this view, they recommend that an annual return be made to the ſecretary of ſtate's office, of the number of tickets of leave iſſued in the year, with a ſtatement of the grounds upon which each was granted.

" No difficulty appears to exiſt, amongſt the major part of the *men* who do not wiſh to remain in the colony, of finding means to return to this country. All but the aged and infirm eaſily find employment on-board the ſhips viſiting New South Wales, and are allowed to work their paſſage home; but ſuch facility is not afforded to the women: they have no poſſible method of leaving the colony but by proſtituting themſelves on-board the ſhips whoſe maſters may chooſe to receive them. They who are ſent to New South Wales, that their former habits may be relinquiſhed, cannot obtain a return to this country but by relapſing into that mode of life which with many has been the firſt cauſe of all their crimes and miſfortunes. To thoſe who ſhrink from theſe means, or are unable even thus to obtain a paſſage for themſelves, tranſportation for ſeven years is converted into a baniſhment for life; and the juſt and humane proviſions of the law, by which different periods of tranſportation are apportioned to different degrees of crime, are rendered entirely null. To ſee this defect in the puniſhment remedied, is the anxious wiſh of your committee; and they truſt that means may be deviſed to facilitate the return of ſuch women as have paſſed their time of ſervitude, and are unwilling to remain in the colony, either by affording them a ſufficient ſum of money, or by ſome ſtipulation in their favour with the maſters of veſſels touching at the ſettlement.

" It will be ſeen by the accounts laid before your committee, that the expenſes of the colony are conſiderable. The bills drawn in the year 1810 amounted to 72,600l. being a great increaſe upon any preceding year; and the expenditure of the year 1811 promiſed to be ſtill greater: in addition to theſe, a great annual expenditure is incurred in the tranſmiſſion of ſtores and merchandiſe, and in the freight of tranſports. Your committee truſt that, when the buildings abſolutely neceſſary for the public ſervice ſhall be completed, as the commerce of the colony ſhall proſper, the duties become more productive, and, from agricultural improvement, the ſupply of ſtores to its preſent amount ſhall be diſcontinued, this expenſe will be materially diminiſhed; and it is their opinion, that it might even now be conſiderably reduced by the removal of part of the military force in the colony, which appears to them to be unneceſſarily large. The whole population does not amount to 11,000, and of theſe 1100 are ſoldiers.

" Such is the view taken by your committee of the colony of New South Wales; and it is, in their opinion, in a train entirely to anſwer the ends propoſed by its eſtabliſhment. It appears latterly to have attracted a greater ſhare of the attention of government than it did for many years after its foundation; and, when the ſeveral beneficial orders lately ſent out from this country, and the liberal views of the preſent governor, ſhall have had time to operate, the beſt effects are to be expected. *The permiſſion of diſtillation within the colony*, and *the reform of the courts of juſtice*, are two meaſures which your committee, above all others, recommend as moſt neceſſary to ſtimulate agricultural induſtry, and to give the inhabitants that confidence and legal ſecurity which can alone render them contented with the government under which they are placed."

To thoſe who know how very limited a tract of country had been hitherto occupied by the coloniſts of New South Wales, extending along the eaſtern coaſt to the north and ſouth of Port Jackſon only eighty miles, and weſtward about forty miles, to the foot of that chain of mountains in the interior which forms its weſtern boundary, it muſt be a ſubject of aſtoniſhment and regret that amongſt ſo large a population no one appeared within the firſt twenty-five years of the eſtabliſhment of this ſettlement poſſeſſed of ſufficient energy of mind to induce him to explore a paſſage over the Blue Mountains; but when it is conſidered that for the greater part of that time even this circumſcribed portion of country afforded ſufficient produce for the wants of the people, whilſt on the other hand the whole ſurface of the country beyond thoſe limits was a thick and in many places nearly an impenetrable foreſt, the ſurpriſe at the want of effort to ſurmount ſuch difficulties muſt abate very conſiderably.

The records of the colony only afford two inſtances of any bold attempt having been made to diſcover the country to the weſtward of the Blue Mountains. The firſt was by Mr. Baſs, and the other by Mr. Caley; and both ended in diſappointment; a circumſtance which will not be much wondered at by thoſe who have lately croſſed thoſe mountains. To Gregory Blaxland and William Wentworth, eſqrs. and lieutenant Lawſon, of the Royal Veteran Company, the merit is due of having, with extraordinary patience and much fatigue, effected the firſt paſſage over the moſt rugged and difficult part of the Blue Mountains.

Governor Macquarrie, being ſtrongly impreſſed with the importance of the object, had, early after his arrival in this colony, formed the reſolution of encouraging the attempt to find a paſſage to the weſtern country, and willingly availed himſelf of the facilities which the diſcoveries of theſe three gentlemen afforded him. Accordingly, in November 1813, he entruſted the accompliſhment of this object to Mr. George William Evans, deputy ſurveyor of lands, the reſult of whoſe journeys was laid before the public through the medium of the Sydney Gazette in February 1814.

From this account we collect, that, on the 19th of November, 1813, Mr. Evans left Emu Iſland in the Nepean, and returned on the 8th of January, 1814, having performed a journey of 154 miles nearly weſt. At the end of forty-eight miles, he had cleared the ranges of mountains, which he ſays are granite, with looſe flints and quartz pebbles ſtrewed on the ſurface; and here, for the firſt time, he fell in with a ſmall ſtream running to the weſtward. The farther he advanced, the more beautiful the country became; both hill and dale were clothed with fine graſs, the whole appearing at a little diſtance as if laid out into fields divided by hedge-rows; through every valley meandered trickling ſtreams of fine water, all falling down towards the *Fiſh River*, ſo called by him from the vaſt abundance of fine fiſh reſembling trout, which his party caught with eaſe whenever they had occaſion for them. Many of the hills were capped with foreſt-trees, chiefly of the Eucalyptus; and clumps of theſe, mixed with Mimoſas and the Caſuarina, were interſperſed along the feet of the hills and in the valleys, ſo as to wear the appearance of a ſucceſſion of gentlemen's parks. The river, which at firſt conſiſted of a chain of pools, connected by ſmall ſtreamlets, had aſſumed, in the neighbourhood of *Macquarrie's Plains*, the character of a conſiderable ſtream, and had become unfordable; which made it neceſſary to conſtruct a bridge of large trees to tranſport the people, the horſes, and baggage. Evans ſays, the country was now more beautiful than he had ever ſeen. A fine river running in a deep channel over a gravelly bottom, and its banks ſkirted with trees, excepting at the ſloping points of hills round which it winded, and which were covered with a fine green ſod down to the margin, intermixed with the white daiſy; all this, added to the temperate climate, put him in mind of England. Farther on, and before they reached *Bathurſt's Plains*, the river was increaſed conſiderably in ſize by the junction of another ſtream, which he called *Campbell's River;* and to the united ſtreams, he gave the name of *Macquarrie's River*, the general direction of which appeared to be to the northward of weſt. Fiſh continued to abound of the ſame kind as thoſe firſt caught, but of a ſize from eleven to fifteen pounds each. Governor Macquarrie ſays, theſe fiſh reſemble perch, are not unlike that uſually called rock-cod, and have been caught from ſeventeen to twenty-five pounds weight each. Large herds of emus were ſeen croſſing the plains, and kanguroos in great abundance; but not a native human being appeared until on his return, when, near Bathurſt's Plains, two women and four children were come upon by ſurpriſe, and were ſo terrified, that they fell down with fright. It was obſerved, that both the women had loſt the right eye. Evans makes Bathurſt's Plains near 150 miles from Emu Iſland; but governor Macquarrie, who ſubſequently viſited this place, ſtates the meaſured diſtance from Sydney town to be only 140 miles. It is repreſented as an eligible ſituation for eſtabliſhing a ſettlement, as the land is excellent; plenty of ſtone and timber for building, but no lime-ſtone; abundance of water, though the river, at the time of the governor's viſit, juſt at the cloſe of an unuſually dry ſeaſon, was reduced to a chain of pools, the intermediate channels being dried up.

The favourable account given by Mr. Evans of the country he had explored, induced the governor, in the following year, to undertake a journey himſelf acroſs the Blue Mountains; but firſt he cauſed a road to be conſtructed for the paſſage and conveyance of cattle and proviſions to the interior; and men of good character, from amongſt a number of convicts who had volunteered their ſervices, were ſelected to perform this arduous work, on condition of being fed and clothed during the continuance of their labour, and being granted emancipations as their final reward on the completion of the work. The direction and ſuperintendence of this great work was entruſted to William Cox, eſq. the chief magiſtrate at Windſor; and, to the aſtoniſhment of every one who knows what was to be encountered, and ſees what has been done, he effected its completion in ſix months from the time of its commencement, happily without the loſs of a man, or any ſerious accident.

Mr. Cox having reported the road as completed on the 21ſt of January, the governor, accompanied by Mrs. Macquarrie and that gentleman, commenced his tour on the 25th of April, 1815, over the Blue Mountains; and was joined by ſir John Jamieſon at the Nepean, who accompanied him during the entire tour. The following gentlemen compoſed the governor's ſuite: Mr. Campbell, ſecretary; Capt. Antill, major of brigade; Lieut. Watts, aide-de-camp; Mr. Redfern, aſſiſtant-ſurgeon; Mr. Oxley, ſurveyor-general; Mr. Mechan, deputy-ſurveyor-general; Mr. Lewin, painter and naturaliſt; and Mr. Evans, mentioned above, who had been ſent forward for the purpoſe of making further diſcoveries, and rejoined the party on the day of arrival at Bathurſt Plains.

The commencement of the aſcent from Emu Plains to the firſt depôt, and thence to a reſting-place, now called Spring Wood, diſtant twelve miles from Emu Ford, was through a very handſome open foreſt of lofty trees, and much more practicable and eaſy than was expected. The facility of the aſcent for this diſtance excited ſurpriſe, and is certainly not well calculated to give the traveller a juſt idea of the difficulties he has afterwards to encounter. At a further diſtance of four miles, a ſudden change is perceived in the appearance of the timber and the quality of the ſoil; the former becoming ſtunted, and the latter barren and rocky. At this place the fatigues of the journey may be ſaid to commence. Here the country became altogether mountainous, and extremely rugged. Near to the 18th mile-mark (it is to be obſerved that the meaſure commences from Emu Ford), a pile of ſtones attracted attention. It is cloſe to the line of road, on the top of a rugged and abrupt aſcent, and is ſuppoſed to have been placed there by Mr. Caley, as the extreme limit of his tour. Hence the governor gave that part of the mountain the name of *Caley's Repulſe.* To have penetrated even ſo far was at that time an effort of no ſmall difficulty. From henceforward to the 26th mile is a ſucceſſion of ſteep and rugged hills, ſome of which are almoſt ſo abrupt as to deny a paſſage altogether; but at this place a conſiderably-extenſive plain is arrived at, which conſtitutes the ſummit of the weſtern mountains; and from thence a moſt extenſive and beautiful proſpect preſents itſelf on all ſides to the eye. The town of Windſor, the river Hawkeſbury, Proſpect-hill, and other objects within that part of the colony now inhabited, of equal intereſt, are diſtinctly ſeen from hence. The majeſtic grandeur of the ſituation, combined with the various objects to be ſeen from this place, induced the governor to give it the appellation of the *King's Table Land.* On the ſouth-weſt ſide of the King's Table Land, the mountain terminates in abrupt precipices of immenſe depth, at the bottom of which is ſeen a glen, as romantically beautiful as can be imagined, bounded on the further ſide by mountains of great magnitude, terminating equally abruptly as the others, and the whole thickly covered with timber. The length of this pictureſque and remarkable tract of country is about twenty-four miles, to which the governor gave the name of the *Prince Regent's Glen.* Proceeding hence to the 33d mile, on the top of a hill, an opening preſents itſelf on the ſouth-weſt ſide of the Prince Regent's Glen, from whence a view is obtained particularly beautiful and grand; mountains riſing beyond mountains, with ſtupendous maſſes of rock in the fore-ground, here ſtrike the eye with admiration and aſtoniſhment. The circular form in which the whole is ſo wonderfully diſpoſed, induced the governor to give the name of *Pitt's Amphitheatre* to this offset or branch from the Prince Regent's Glen. The road continues from hence for the ſpace of ſeventeen miles on the ridge of the mountain which forms one ſide of the Prince Regent's Glen; and there it ſuddenly terminates in nearly a perpendicular precipice of 676 feet high, as aſcertained by meaſurement. The road conſtructed by Mr. Cox down this rugged and tremendous deſcent, through all its windings, is no leſs than three-fourths of a mile in length, and has been executed with ſuch ſkill and ſtability as reflects much credit on him. The labour here undergone, and the difficulties ſurmounted, can only be appreciated by thoſe who view this ſcene. In order to perpetuate the memory of Mr. Cox's ſervices, the governor deemed it a tribute juſtly due to him, to give his name to this grand and extraordinary paſs; and he accordingly called it *Cox's Paſs.* Having deſcended into the valley at the bottom of this paſs, the retroſpective view of the overhanging mountain is magnificently grand. Although the preſent paſs is the only practicable point yet diſcovered for deſcending by, yet the mountain is much higher than thoſe on either ſide of it, from whence it is diſtinguiſhed at a conſiderable diſtance, when approaching it from the interior; and in this point of view it has the appearance of a very high diſtinct hill, although it is in fact only the abrupt termination of a ridge. The governor gave the name of *Mount York* to this termination of the ridge, in honour of H. R. H. the duke of York.

On deſcending Cox's Paſs, the governor was much gratified by the appearance of good paſture-land, and ſoil fit for cultivation, which was the firſt he had met with ſince the commencement of his tour. The valley at the baſe of Mount York he called the *Vale of Clwyd*, in conſequence of the ſtrong reſemblance it bore to the vale of that name in North Wales. The graſs in this vale is of a good quality, and very abundant; and a rivulet of fine water runs along it from the eaſtward, which unites itſelf at the weſtern extremity of the vale with another rivulet containing ſtill more water. The junction of theſe two ſtreams forms a very handſome river, now called by the governor *Cox's River*, which takes its courſe, as has been ſince aſcertained, through the Prince Regent's Glen, and empties into the river Nepean; and it is conjectured, from the nature of the country through which it paſſes, that it muſt be one of the principal cauſes of the floods which have been occaſionally felt on the low banks of the river Hawkeſbury, into which the Nepean diſcharges itſelf. The Vale of Clwyd, from the baſe of Mount York, extends ſix miles in a weſterly direction, and has its termination at Cox's River. Weſtward of this river the country again becomes hilly; but is generally open foreſt-land, and very good paſturage.

Three miles to the weſtward of the Vale of Clwyd, Meſſrs Blaxland, Wentworth, and Lawſon, had formerly terminated their excurſion; and, when the various difficulties are conſidered which they had to contend with, eſpecially until they had effected the deſcent from Mount York, to which place they were obliged to paſs through a thick bruſh-wood, where they were under the neceſſity of cutting a paſſage for their baggage-horſes, the ſeverity of which labour had ſeriouſly affected their healths, their patient endurance of ſuch fatigue cannot fail to excite much ſurpriſe and admiration. In commemoration of their merits, three beautiful high hills joining each other at the end of their tour at this place, have received their names in the following order, viz. *Mount Blaxland, Wentworth's Sugar-loaf*, and *Lawſon's Sugar-loaf*. A range of very lofty hills and narrow valleys alternately form the tract of country from Cox's River, for a diſtance of ſixteen miles, until the Fiſh River is arrived at; and the ſtage between theſe rivers is conſequently very ſevere and oppreſſive on the cattle. To this range the governor gave the name of *Clarence Hilly Range*.

Proceeding from the Fiſh River, and at a ſhort diſtance from it, a very ſingular and beautiful mountain attracts the attention, its ſummit being crowned with a large and very extraordinary-looking rock, nearly circular in form, which gives to the whole very much the appearance of a hill-fort, ſuch as are frequent in India. To this lofty hill Mr. Evans, who was the firſt European diſcoverer, gave the name of *Mount Evans*. Paſſing on from hence, the country continues hilly, but affords good paſturage, gradually improving to Sidmouth Valley, which is diſtinct from the paſs of the Fiſh River eight miles. The land here is level, and the firſt met with unencumbered with timber. It is not of very conſiderable extent, but abounds with a great variety of herbs and plants, ſuch as would probably highly intereſt and gratify the ſcientific botaniſt. This beautiful little valley runs north-weſt and ſouth-eaſt between hills of eaſy aſcent thinly covered with timber. Leaving Sidmouth Valley, the country becomes again hilly, and in other reſpects reſembles very much the country to the eaſtward of the valley for ſome miles. Having reached Campbell River, diſtant thirteen miles from Sidmouth Valley, the governor was highly gratified by the appearance of the country, which there began to exhibit an open and extenſive view of gently-riſing grounds and fertile plains. Judging from the height of the banks, and its general width, the Campbell River muſt be on ſome occaſions of very conſiderable magnitude; but the extraordinary drought which has apparently prevailed on the weſtern ſide of the mountains, equally as throughout this colony for the laſt three years, has reduced this river ſo much, that it may be more properly called a chain of pools than a running ſtream at the preſent time. In the reaches or pools of the Campbell River, the very curious animal called the paradox, or water-mole, is ſeen in great numbers. [This, we ſuppoſe to be the Platypus, noticed in a former part of the article.] The ſoil on both banks is uncommonly rich, and the graſs is conſequently luxuriant. Two miles to the ſouthward of the line of road which croſſes the Campbell River there is a very fine rich tract of low lands, which has been named *Mitchell Plains*. Flax was found here growing in conſiderable quantities. The Fiſh River, which forms a junction with the Campbell River a few miles to the northward of the road and bridge over the latter, has alſo two very fertile plains on its banks, the one called *O'Connell Plains*, and the other *Macquarrie Plains*; both of conſiderable extent, and very capable of yielding all the neceſſaries of life.

At the diſtance of ſeven miles from the bridge over the Campbell River, Bathurſt Plains open to the view, preſenting a rich tract of champaign-country of eleven miles in length, bounded on both ſides by gently riſing and very beautiful hills, thinly wooded. The Macquarrie River, which is conſtituted by the junction of the Fiſh and Campbell Rivers, takes a winding courſe through the plains, which can be eaſily traced from the high lands adjoining, by the particular verdure of the trees on its banks, which are likewiſe the only trees throughout the extent of the plains. The level and clean ſurface of theſe plains gives them at firſt view very much the appearance of lands in a ſtate of cultivation.

The governor and ſuite arrived at theſe plains on Thurſday the 4th of May, and encamped on the ſouthern or left bank of the Macquarrie River; the ſituation being ſelected in conſequence of its commanding a beautiful and extenſive proſpect for many miles in every direction around it. At this place the governor remained for a week, which time he occupied in making excurſions in different directions through the adjoining country, on both ſides of the river. On Sunday, the 7th of May, the governor fixed on a ſite ſuitable for the erection of a town at ſome future period; to which he gave the name of *Bathurſt*, in honour of the preſent ſecretary of ſtate for the colonies. The ſituation of Bathurſt is elevated ſufficiently beyond the reach of any floods which may occur, and is at the ſame time ſo near to the river on its ſouth bank as to derive all the advantages of its clear and beautiful ſtream. The mechanics and ſettlers of whatever deſcription who may be hereafter permitted to form permanent reſidences to themſelves at this place will have the highly important advantages of a rich and fertile ſoil, with a beautiful river flowing through it, for all the uſes of man. The hopes which were once ſo ſanguinely entertained of this river becoming navigable to the Weſtern Sea, have ended in diſappointment.

During the week that the governor remained at Bathurſt, he made daily excurſions in various directions; one of theſe extended twenty-two miles in a ſouth-weſt direction; and on that occaſion, as well as on all the others, he found the country compoſed chiefly of valleys and plains, ſeparated occaſionally by ranges of low hills; the ſoil throughout being generally fertile, and well circumſtanced for the purpoſe of agriculture or grazing.

“ The governor here feels much pleaſure in being enabled to communicate to the public, that the favourable reports which he had received of the country to the weſt of the Blue Mountains, have not been by any means exaggerated. The difficulties which preſent themſelves in the journey from hence are certainly great and inevitable; but thoſe perſons who may be inclined to become permanent ſettlers there will probably content themſelves with viſiting this part of the colony but rarely, and of courſe will have them ſeldom to encounter. Plenty of water, and a ſufficiency of graſs, are to be found in the mountains for the ſupport of ſuch cattle as may be ſent over them; and the tracts of fertile ſoil and rich paſturage which the new country affords, are fully extenſive enough for any increaſe of population and ſtock which can poſſibly take place for many years. Within a diſtance of ten miles from the ſite of Bathurſt, there is not leſs than 50,000 acres of land clear of timber; and fully one half of that may be conſidered excellent ſoil, well calculated for cultivation. It is a matter of regret, that, in proportion as the ſoil improves, the timber degenerates; and it is to be remarked, that every-where to the weſtward of the mountains it is much inferior both in ſize and quality to that within the preſent colony; there is, however, a ſufficiency of timber of tolerable quality within the diſtrict around Bathurſt for the purpoſes of houſe-building and huſbandry. The governor has here to lament, that neither coals nor lime-ſtone have been yet diſcovered in the weſtern country; articles in themſelves of ſo much importance, that the want of them muſt be ſeverely felt whenever that country ſhall be ſettled."

The ſite deſigned for the town of Bathurſt, by obſervation taken at the flag-ſtaff which was erected on the day of Bathurſt receiving that name, is ſituated in lat. 33. 24. 30. S. and in lon. 149. 37. 45. E. of Greenwich, being alſo twenty-ſeven miles and a half north of Government-houſe in Sydney, and ninety-four and a half weſt of it, bearing weſt 20. 30. N. eighty-three geographic miles, or ninety-five ſtatute-miles and a half; the meaſured road diſtance from Sydney to Bathurſt being 140 Engliſh miles. The road conſtructed by Mr. Cox, and the party under him, commences at Emu Ford, on the left bank of the river Nepean, and is thence carried 101½ miles to the flag-ſtaff at Bathurſt. This road has been carefully meaſured, and each mile regularly marked on the trees growing on the left ſide of the road proceeding towards Bathurſt.

On Thurſday the 11th of May, the governor and ſuite ſet out from Bathurſt on their return, and arrived at Sydney on Friday the 19th. On the 10th of June, the governor publiſhed an official account of his journey, with a map or plan; and, on the 8th of July, his excellency publiſhed a farther or ſupplementary account, in conſequence of the ſafe return of Mr. Evans, who had been diſpatched, (as we have noticed,) while the governor's party remained at Bathurſt, to proceed from thence, and purſue his diſcoveries as much farther weſtward as his means of carrying proviſions, the nature of the country through which he ſhould paſs, and the unforeſeen occurrences to which, as a traveller, in an unexplored country, he might be expoſed, would permit.

On the 13th of May, Mr. Evans commenced this his ſecond tour of diſcovery; and on the 2d of June, finding his proviſions would not enable him to proceed farther, he began to retrace his courſe back to Bathurſt, where he arrived on the 12th, having been abſent thirty-one days. In the courſe of this tour Mr. Evans was ſo fortunate as to travel over a vaſt number of rich and fertile valleys, with ſucceſſions of hills well covered with good and uſeful timber, chiefly the ſtringy bark and the pine, and the whole country abounding with ponds, and gulleys of fine water; he alſo fell in with a large river, which he conceives would become navigable for boats at the diſtance of a few days' travelling along its banks. From its courſe, he conjectures that it muſt join its waters with thoſe of the Macquarrie River; and little doubt can be entertained, that their joint ſtreams muſt form a navigable river of very conſiderable ſize. At a diſtance of about ſixty miles from Bathurſt, Mr. Evans diſcovered a number of hills, the points of which ended in perpendicular heads, from thirty to forty feet high, of pure lime-ſtone of a miſty grey colour. At this place, and alſo throughout the general courſe of the journey, kanguroos, emues, ducks, &c. were ſeen in great numbers; and the new river, to which Mr. Evans gave the name of the *Lachlan*, abounds with fiſh, although, from the coolneſs of the ſeaſon, he was not able to catch any of them. In the courſe of this tour Mr. Evans alſo diſcovered a very unuſual and extraordinary production, the proper or ſcientific name of which cannot at preſent be aſſigned. It poſſeſſes much of the ſweetneſs and flavour of manna, but is totally different in its appearance, being very white, and having a roundiſh irregular ſurface, not unlike the rough outſide of confectioners' comfits, and of the ſize of the largeſt hail-ſtones. Mr. Evans does not conſider it to be the production of any inſect, tree, or vegetable, of the country; and from hence the moſt probable conjecture appears to be, that it is a production of the ſame nature with that which is found in Arabia, and there called “wild honey," or “the Almighty's ſugar-plums," and there ſuppoſed to be a dew. Where this ſubſtance was found moſt plentiful, Mr. Evans ſaw the kanguroo in immenſe flocks, and wild fowl equally abundant. The natives appeared more numerous than at Bathurſt; but ſo very wild, and apparently ſo much alarmed at the ſight of white men, that he could not induce them to come near, or to hold any intercourſe whatever with him.

At the termination of the tour, Mr. Evans ſaw a good level country, of a moſt intereſting appearance, and a very rich ſoil; and he conceives that there is no barrier to prevent the travelling farther weſtward to almoſt any extent that could be derived. He ſtates that the diſtance travelled by him on this occaſion was 142 meaſured miles out; which, with digreſſions to the ſouthward, made the total diſtance 155 miles from Bathurſt: he adds at the ſame time, that, having taken a more direct line back to Bathurſt than that by which he left it, he made the diſtance then only 115 miles; and he obſerves, that a good road may be made all that length without any conſiderable difficulty, there not being more than three hills which may not be avoided.

From the entire tenor of Mr. Evans's narrative of this tour, it appears that the country over which he paſſed has even exceeded the country leading to and ſurrounding Bathurſt, in richneſs, fertility, and all the other valuable objects for the ſuſtenance of a numerous population.

“Before cloſing the preſent account, the governor deſires to obſerve, that, having accidentally omitted ſome particulars in his own tour, which he had meant to remark on, he avails himſelf of the preſent occaſion to notice them.

“When the governor arrived at Bathurſt, on the 4th of May, he found there three native men and ſix children ſtanding with the working-party; they appeared much alarmed, particularly at the horſes; but this ſoon ceaſed, and they became quite familiar, eating whatever food was offered them, and appearing very proud of ſome little articles of dreſs which were given them. Frequently during the governor's ſtay at Bathurſt, ſmall parties of men and boys came in, and they always got meat and ſome articles of ſlop-clothing, and tomahawks; which latter ſeemed to be highly prized by them. Theſe natives are in appearance very like thoſe of Sydney, though rather better looking and ſtronger made; ſome of them were blind of one eye, though not always on the ſame ſide. Their language being altogether diſſimilar to that of the natives of this part of the country, it was impoſſible to learn whether their being thus blinded was the reſult of any eſtabliſhed cuſtom amongſt them, or merely accidental; the probability is, however, that it is intentional, whatever might be the cauſe. A native who attended the governor from this ſide of the mountains was much alarmed at the appearance of the ſtranger-natives; but afterwards, perceiving that they did not attempt to injure him, he endeavoured to hold a converſation with them; their, languages, however, appeared totally different, neither party ſeeming to underſtand a ſingle word ſpoken by the other. Thoſe men were covered with ſkins of different animals, neatly ſewed together, and wore the fur-ſide inwards; on the outer or ſkin ſide, they had curious devices wrought. The governor obſerved on one of theſe dreſſes or cloaks, as regularly-formed a St. George's croſs as could be made, though he could not connect that circumſtance with any other which might lead to the aſſigning it to a religious ceremony. The manner of forming theſe figures, muſt be by the throwing up a ſlight part of the ſkin with a ſharp inſtrument, round the outlines of the figure. They appeared, judging from the neatneſs of the ſewing and work on theſe cloaks, to have made ſome little advance to civilization and comfort beyond what the natives of this part of the country have done. In other reſpects they ſeem to be perfectly harmleſs and inoffenſive, and by no means warlike or ſavage, few of them having any weapons whatever with them, but merely a ſtone axe, which they uſe for cutting ſteps for themſelves to climb up trees by, in purſuit of the little animals which they live upon. Theſe natives never brought any of their families with them on their viſits to Bathurſt; and the governor had only accidentally, in the courſe of one of his excurſions from thence, an opportunity of ſeeing one of them. She was blind of the left eye, wanted all her teeth, and was altogether one of the moſt wretched-looking old creatures that could be poſſibly imagined, compoſed of merely ſkin and bone.

"The governor, on his return over the King's Table Land, had much gratification in beholding a cataract of immenſe height, which falls over a precipice little ſhort of a thouſand feet down into the Prince Regent's Glen, forming one of the moſt ſtupendous and grand ſights that perhaps the world can afford. This cataract having been diſcovered by four gentlemen of the governor's party, his excellency has been pleaſed to give it the name of one of them, by calling it the *Campbell Cataract*."

The diſcovery of a large river in the interior, is a circumſtance which muſt materially affect the future advancement of the colony of New South Wales. A means of communication like this had long been anxiouſly ſearched for, without ſucceſs; and many began to entertain an apprehenſion that the progreſs of colonization in New Holland would be confined to its coaſts. Our accounts from this intereſting country reach up to the beginning of the preſent year, 1818. The colony continued to be in a flouriſhing condition; and conſiderable exports of fine wool have been already made, and will probably be much increaſed in the courſe of a few ſeaſons. The Sydney Gazette of the 11th of October, 1817, gives an intereſting account of further diſcoveries made in the interior of New Holland, by the ſurveyor-general, Mr. Oxley. Another expedition was about to depart, under the direction of the ſame gentleman, for the purpoſe of tracing the courſe of the Macquarrie-river; which, from its ſize and appearance, promiſes to become of the firſt importance to the colony. The increaſe in the colony of cultivation and live-ſtock, from the end of 1813 to the end of 1815, has been in acres cultivated 3756, paſture 46,645, horſes and mules 437, and ſheep 3706. From 1800 to 1815, or in fifteen years, the increaſe of ſtock was ſurpriſing; being from 163 horſes, their higheſt number for the firſt twelve years, to 2328; from 1044 horned-cattle, to 25,279; and from 6124 ſheep, to 62,476, without taking into the account the immenſe quantities of cattle annually killed for the ſupply of his majeſty's ſtores and the general conſumption. The climate of the colony being found particularly favourable to the ſilk-worm, means are adopting for rearing it to ſome extent.

NEW HOL'LAND, a poſt-town of America, in Lancaſter-county, Pennſylvania, in the midſt of a fertile country; containing a German church and about one hundred houſes: fifty-four miles weſt-north-weſt of Philadelphia.

NEW JER'SEY, one of the United States of America, ſituated between lat. 39. and 41. 24. N. and between the meridian of Philadelphia and lon. 1. E. and bounded eaſt by Hudſon-river and the ſea; ſouth by the ſea; weſt by Delaware Bay and river, which divides it from the ſtates of Delaware and Pennſylvania; north by a line drawn from the mouth of Mahakkamak-river, in lat. 41. 24. to a point on Hudſon-river in lat. 41. This province is 160 miles long and 52 broad, and contains about 8320 ſquare miles, or 5,324,800 acres. It is ſaid to have been firſt diſcovered by Capt. Hudſon, who, in 1609, entered into the ſervice of the Dutch, by whom it was firſt ſettled, about the year 1615. Its original inhabitants were a tribe of Indians, who called themſelves *Linnellinopes;* which the French tranſlated into *Les Loups*, but the Engliſh called them *Delawares*. This confederacy compriſed numerous ſubordinate clans, who waged war for the greateſt part of a century with the Iroquois, or five nations, but were at laſt ſubdued, and reduced to the moſt humiliating terms, about the year 1682, when William Penn landed in Pennſylvania.

This province formed a part of a large tract of country called New Belgium, or New Netherlands; and, being ceded to the Engliſh, it was granted, in 1664, by Charles II. to his brother James duke of York, who made it over to lord Berkeley and ſir George Carteret. After ſeveral diviſions and transfers, which were ſources of quarrels and confuſion, the proprietors, in the year 1702, ſurrendered their charter to the crown, and the country was united to the government of New York. In 1706 Jerſey was made a ſeparate government.

New Jerſey is now divided into thirteen counties, which are ſubdivided into ninety-four precincts, or townſhips; and contained, by the laſt cenſus, which was made in the year 1810, a population of 245,562 inhabitants. The names of the counties, and their chief towns, are as follow:

	Counties.	Principal Towns.
Theſe ſeven counties lie from ſouth to north on Delaware-river. Cape May and Glouceſter extend acroſs to the ſea.	Cape May	None.
	Cumberland	Bridgetown.
	Salem -	Salem.
	Glouceſter	Woodbury and Glouceſter.
	Burlington	Burlington and Bordentown.
	Hunterdon	*Trenton.*
	Suſſex	Newtown.
Theſe four counties lie from north to ſouth on the eaſtern ſide of the ſtate.	Bergen	Hackinſack.
	Eſſex	Newark and Elizabeth-town.
	Middleſex	Amboy and part of Brunſwick.
	Monmouth	Freehold.
Inland counties	Somerſet	Boundbrook and part of Brunſwick.
	Morris	Morriſtown.

The militia of this ſtate, in 1793, amounted to 19,077, between the ages of eighteen and forty-five years; and the whole number of men capable of bearing arms amounted to between 30 and 40,000. The government of this ſtate is veſted in a governor, choſen annually by the council and aſſembly jointly, a legiſlative council compoſed of one member from each county, choſen annually by the people, and a general aſſembly compoſed of three members choſen as above. The governor ſits in and preſides over the legiſlative council; his privy or executive council conſiſts of any three members of the legiſlative council; and the governor and any ſeven members of the council are a court of appeal in the laſt reſort as to points of law in civil caſes, and poſſeſs a power of pardoning criminals in all caſes whatever. The council may originate any bills, except preparing or altering any money-bill, which is the ſole prerogative of the aſſembly. Every bill is read three times in each houſe. None of the judges of the ſupreme court, or other courts, ſheriffs, or any perſon poſſeſſing any poſt of profit under the governor, juſtices of peace excepted, is entitled to a ſeat in the aſſembly. The courts of juſtice in this ſtate are juſtices' courts, courts of quarter-ſeſſions of the peace, courts of common-pleas, ſupreme courts, orphans' courts, courts of chancery, and high court of errors and appeals. The Engliſh laws, as far as they are not repugnant to revolution-principles, are adopted by the conſtitution; but in the diſtribution of property, where there is no will, each ſon has two ſhares, and each daughter has one ſhare. In this ſtate there are about fifty Preſbyterian congregations, ſubject to the care of three preſbyteries; viz. thoſe of New York, New Brunſwick, and Philadelphia. Beſides theſe there are upwards of forty congregations of Friends, thirty of the Baptiſts, twenty-five of the Epiſcopalians, twenty-eight of Dutch Reformers, twenty of the Methodiſts, and a ſettlement of Moravians. All are allowed by the conſtitution to worſhip God according to the dictates of their own conſciences;

ences; and are not compelled to attend or ſupport any worſhip contrary to their own faith and judgment. All Proteſtant inhabitants, of peaceable behaviour, are eligible to the civil offices of the ſtate. The capital town of this province is Trenton.

The rivers in this ſtate, though not large, are numerous. A traveller in paſſing the common road from New York to Philadelphia, croſſes three conſiderable rivers, viz. the Hackinſack and Paſſaick, between Bergen and Newark, and the Rariton by Brunſwick. Paſſaick is a very crooked river. It is navigable about ten miles, and is 230 yards wide at the ferry. The cataract, or Great Falls, in this river, is one of the greateſt natural curioſities in the ſtate. The river is about forty yards wide, and moves in a ſlow gentle current, until, coming within a ſhort diſtance of a deep cleft in a rock, which croſſes the channel, it deſcends and falls above ſeventy feet perpendicularly, in one entire ſheet. One end of the cleft, which was evidently made by ſome violent convulſion in nature, is cloſed; at the other, the water ruſhes out with incredible ſwiftneſs, forming an acute angle with its former direction, and is received into a large baſon, whence it takes a winding courſe through the rocks, and ſpreads into a broad ſmooth ſtream. The cleft is from four to twelve feet broad. The falling of the water occaſions a cloud of vapour to ariſe, which, by floating amidſt the ſun-beams, preſents rainbows to the view, which adds beauty to the tremendous ſcene. The new manufacturing town of Patterſon is erected upon the Great Falls in this river. Rariton-river is formed by two conſiderable ſtreams, called the north and ſouth branches; one of which has its ſource in Morris, the other in Hunterdon, county. It paſſes by Brunſwick and Amboy, and, mingling with the waters of the Arthur Kull Sound, helps to form the fine harbour of Amboy. Bridges have lately been erected over the Paſſaick, Hackinſack, and Rariton, rivers, on the poſt-road between New York and Philadelphia. Theſe bridges greatly facilitate the intercourſe between theſe two great cities.

The greateſt part of the ſoil of New Jerſey is ſandy; ſome of it barren and unfit for cultivation; but that near the ſea-coaſt is ſaid to be many feet deep, in ſome places fifty, without rocks or ſtones, when you come to ſalt-marſh, and has much the appearance of being artificial; the good land in the ſouthern counties lies principally on the banks of rivers and creeks; the ſoil on theſe banks being generally a ſtiff clay, which, in its natural ſtate, produces various ſpecies of oak, hickory, poplar, cheſnut, aſh, &c. The barren parts produce little elſe but ſhrub-oaks, and yellow pines. Theſe ſandy lands yield an immenſe quantity of bog-iron ore, which is wrought very advantageouſly in the iron-works in theſe counties. The ſalt-meadows along the lower part of the Delaware river and bay, afford plentiful paſture for cattle in ſummer, and hay in winter; but the ſwarms of muſkitoes in the months of June, July, and Auguſt, are very troubleſome both to man and beaſt. The inhabitants along the ſea-coaſt ſubſiſt principally by feeding cattle on the ſalt-meadows, and by various kinds of fiſh, abundantly ſupplied by the ſea, rivers, and creeks. They raiſe Indian corn, rye, potatoes, &c. but not for exportation. Their ſwamps afford lumber, which is conveyed with eaſe to a good market. The ſugar-maple-tree is common in Suſſex-county, upon the Delaware. In the hilly and mountainous parts of the ſtate, which are not too rocky for cultivation, the ſoil is of a ſtronger kind, covered, in a ſtate of nature, with ſtately oaks, hickories, cheſnuts, &c. and when cultivated, producing wheat, rye, Indian corn, buckwheat, oats, barley, flax, and fruits of all kinds common to the climate. The land in this hilly country is good for grazing, and farmers feed great numbers of cattle for the markets of New York and Philadelphia; and many of them keep large dairies, as there are large tracts of fine meadows between the hills. The orchards in many parts of the ſtate are ſaid to be equal to any in the United States, and the cider is reckoned the beſt in the world. Thoſe parts of New Jerſey that are contiguous to New York and Philadelphia, ſupply their markets with many kinds of vegetables, as apples, pears, peaches, plums, ſtrawberries, cherries, and other fruits; cider in large quantities, butter, cheeſe, beef, pork, mutton, and other meats.

The trade of New Jerſey is carried on almoſt ſolely with New York and Philadelphia; though it has ſome good ports of its own. The articles exported are chiefly wheat, flour, horſes, live cattle, hams which are much commended, lumber, flax-ſeed, leather, iron in great quantities, and formerly copper-ore. The imports conſiſt chiefly of Weſt-India goods. The manufactures of this ſtate have been inconſiderable, though they are now improving; and they conſiſt principally of the articles of iron, nails, and leather. Tanneries are numerous and valuable; paper-mills and nail-manufactories are wrought with profit in ſeveral parts of the ſtate. Wheat is alſo manufactured into flour, and Indian-corn into meal; and theſe are profitable articles. But iron is the moſt ample ſource of wealth to the ſtate. Iron-works are erected in Glouceſter, Burlington, Suſſex, Morris, and other counties. In the whole ſtate, it is ſuppoſed, there are yearly made about 1200 tons of bar-iron, 1200 ditto of pigs, and 80 ditto of nail-rods, excluſive of hollow ware, and various other caſtings, to a great amount. This ſtate affords vaſt quantities of iron and copper ore. The iron-ore is of two kinds: one capable of being manufactured into malleable iron, and found in mountains and low barrens; and the other called bog-ore, found in rich bottoms, and yielding iron of a hard brittle quality, which is commonly manufactured into hollow ware, and uſed ſometimes inſtead of ſtone in building. Many copper-mines have been diſcovered in different parts of the ſtate. Mines have alſo been diſcovered of lead and plaſter of Paris; and the ſtate is ſaid alſo to contain coal. In the town of Newark and its vicinity, there are immenſe quarries of valuable ſtone, much uſed in building.

There is a college at Princeton, called *Naſſau Hall*, which has been under the care of a ſucceſſion of preſidents eminent for piety and learning; and has furniſhed a number of civilians, divines, and phyſicians, of the firſt rank in America. It has conſiderable funds, is under excellent regulations, and has generally from eighty to a hundred ſtudents, principally from the ſouthern ſtates. There are academies at Freehold, Trenton, Hackinſack, Orangedale, Elizabeth-town, Burlington, and Newark; and grammar-ſchools at Springfield, Morriſtown, Bordentown, and Amboy.

The inhabitants of this ſtate are a collection of Dutch, Germans, Engliſh, Scotch, Iriſh, and New Englanders, or their deſcendants; and of courſe differ much in their manners and characters; and this difference is in ſome meaſure increaſed by different forms of religion, and alſo by intercourſe with the inhabitants of other ſtates. The people in Weſt-Jerſey trade to Philadelphia, and incline to the faſhions and manners of that city; whilſt thoſe of Eaſt-Jerſey trade to New York, and acquire a reſemblance to the inhabitants of this capital. But, whatever differences may ſubſiſt among them in conſequence of theſe circumſtances and of their different occupations and profeſſions, the people of New Jerſey are generally induſtrious, frugal, and hoſpitable. Mr. Morſe adds, that "this ſtate was the ſeat of war for ſeveral years, during the bloody conteſt between Great Britain and America. Her loſſes both of men and property, in proportion to the population and wealth of the ſtate, was greater than of any other of the ſtates. When Gen. Waſhington was retreating through the Jerſeys, almoſt forſaken by all others, her militia were at all times obedient to his orders; and, for a conſiderable length of time, compoſed the ſtrength of his army. There is hardly a town in the ſtate that lay in the progreſs of the Britiſh army, that was not rendered ſignal, by ſome enterpriſe or exploit." *Morſe's American Gaz.*

NEW JER'SEY TE'A. See Ceanothus.

NEW IN'LET, a channel of the Atlantic, between Cape Fear Iſland and the coaſt of North-Carolina. Lat. 33. 56. N. lon. 78. 5. W.

NEW IN'LET, a channel between two ſmall iſlands on the coaſt of New Jerſey. Lat. 39. 50. N. lon. 74. 15. W.

NEW INVERNESS'. See Inverness (New).

NEW IP'SWICH. See Ipswich, vol. xi. p. 282.

NEW I'RELAND. See Ireland, vol. xi. p. 369.

NEW I'SLAND, an iſland near the ſouthern extremity of South America: twenty-one miles north-eaſt of Evout's Iſlands.

NEW KEN'T, a county of Virginia, bounded on the ſouth ſide of Pamunky and York rivers; about thirty-three miles long, and twelve broad; containing 2741 free inhabitants, and 3622 ſlaves.

NEW-KIN'DLED, *adj.* Newly lighted up.—Among the Pleiads, a *new-kindled* ſtar. *Dryden.*

NEW'-LAID, *adj.* Lately laid, or excluded:

Curds and cream,
And *new-laid* eggs, which Baucis' buſy care
Turn'd by a gentle fire, and roaſted rare. *Dryden.*

NEW LEB'ANON, a poſt-town of Camden-county, North Carolina: 279 miles from Waſhington. See alſo Lebanon, vol. xii.

NEW LON'DON, a maritime county of the American States, in Connecticut, comprehending the ſouth-eaſt corner of it, bordering eaſt on Rhode Iſland, and ſouth on Long-Iſland Sound, about thirty miles from eaſt to weſt and twenty-four from north to ſouth. It is divided into eleven townſhips, of which New London and Norwich are the chief; and contained, in the year 1800, 34,888 inhabitants, of whom 209 were ſlaves.—Alſo, a city, a port of entry, and poſt-town, of the above county, and one of the moſt conſiderable commercial towns in the ſtate; ſituated on the weſt ſide of the river Thames, about ſeven miles from its entrance into the Sound, and defended by Fort Trumbull and Fort Griſwold. Here are about 300 dwelling-houſes, and 4600 inhabitants. The harbour is large, ſafe, and commodious; and has, on the weſt ſide, a light-houſe. The exports for a year, ending Sept. 1794, amounted in value to 557,453 dollars. In this year 1000 mules were ſhipped for the Weſt Indies. The townſhip of New London was laid out in lots in 1648; it was called by the Indians "Namang" or "Toungog," and, from being the ſeat of the Pequot-tribe, "Pequot." It was the ſeat of Saſſacus, the grand monarch of Long Iſland, and part of Connecticut and Naraganſet. It is fourteen miles ſouth of Norwich. Lat. 41. 25. N. lon. 72. 15. W.

NEW LON'DON, a poſt-town of Campbell-county, Virginia, ſeated on riſing ground, and containing about 130 houſes, a court-houſe, and gaol. It has a magazine of arms, and a flouriſhing academy. It is 153 miles weſt-by-ſouth of Richmond.—Alſo, a ſmall townſhip of Hillſborough-county, New Hampſhire, incorporated in 1779, and containing 617 inhabitants; lying at the head of Blackwater-river, and about three miles from the north-eaſt ſide of Sunapee Lake.

NEW'-MADE, *adj.* Lately faſhioned or formed.—Witneſs this *new-made* world, another heav'n. *Milton.*

Drummers with vellum-thunder ſhake the pile
To greet the *new-made* bride. *Gay's Trivia.*

A bird *new-made*, about the banks ſhe plies,
Not far from ſhore, and ſhort excurſions tries. *Dryden.*

NEW MADRID'. See Madrid, vol. xiv. p. 80.

NEW MAR'LBOROUGH. See Marlborough, vol. xiv. p. 381.

NEW'-MARRIED, *adj.* Lately married; as, a *new-married* couple.

NEW MEX'ICO. See Mexico (New), vol. xv. p. 313.

NEW MIL'FORD, a poſt-town of America, in Litchfield-county, Connecticut, on the eaſt ſide of Houſatonick-river, twenty miles ſouth-weſt of Litchfield; containing about 500 houſes, a church for Epiſcopalians, one for Congregationaliſts, one for Preſbyterians, one for Baptiſts, and one for Quakers; alſo, ſeven forges, which manufacture 300 tons of iron, beſides hollow ware. See alſo Milford, vol. xv.

To NEW-MOD'EL, *v. a.* To make up anew; to make an old thing look like a new one.

NEW-MOD'ELLED, *adj.* Made up anew; dreſſed up in a new form.

NEW-MOD'ELLING, *ſ.* The act of dreſſing up in a new form.

NEW MOO'N, *ſ.* The ſtate of the moon immediately, and for a few days, after her conjunction with the ſun. See Moon and Neomenia.

NEW-MO'ULDED, *adj.* Newly made, or faſhioned.—The Engliſh is not ſo properly a tranſlation as a new compoſition, there being ſeveral new chapters in it, and ſeveral *new-moulded.* *Burnet.*

NEW NOR'TH WALES, an extenſive territory of North America; having Prince William's Land on the north, part of Baffin's Bay on the eaſt, and ſeparated from New South Wales, on the ſouth, by Seal-river.

NEW OR'LEANS, an iſland and territory in the eaſtern diviſion of Louiſiana, in North America. See Louisiana, vol. xiii.

NEW OR'LEANS, the capital of Louiſiana in North America, ſituated on the eaſt bank of the Miſſiſſippi, ninety-five miles from the mouth of the river. Lat. 30. 2. N. lon. 89. 53. W. The town is regularly laid out, the ſtreets running at right angles; but they are very narrow, and unpaved. This town ſuffered much by fire in 1788, being reduced from 1100 to 200 houſes in three hours; but it has ſince been rebuilt, principally of brick, and not as before of timber, with flated roofs. Thoſe that are conſtructed of brick conſiſt of two ſtories, without cellars; and the old wooden houſes are of one ſtory, raiſed from the ground for the accommodation of cellars. Some few houſes have piazzas. The public buildings are, a handſome catholic church, a government houſe, a calabozo, or priſon, which alſo ſerves as a court-houſe, a convent, barracks for the ſoldiers, king's hoſpital, a lunatic hoſpital, and a ſmall market-houſe.

The Miſſiſſippi, being ſubject to an annual overflowing of its banks, like the Nile, is kept within its proper bed by means of a mound of earth thrown up along the ſhore: this mound is called the *levée*, and varies in its height, according to the ſurface of the adjoining country, from two to three, and even four, feet. It commences at Detour des Anglois, a diſtance of eighteen miles below New Orleans, and is carried along the banks of the river as far as the German ſettlements, which are more than thirty miles above New Orleans, making in the whole about fifty miles. This bank is of a conſiderable width in ſome places, ſo as to form a handſome broad walk; and is kept up by the owners of the adjoining plantations, who are anſwerable for any damage ſuſtained by the breaking down of the bank, if through their neglect. As all this country is very low and flat, and conſequently liable to be overflowed, theſe *levées* are oftentimes continued round the whole of the plantation; ſo that, at the time of the inundation of the river, the ſurface of the ſurrounding water is conſiderably above the plantation, which ſeems to lie in a bed within it. The *levée*, which forms the boundary here, is a handſome raiſed gravel walk, planted with orange-trees, and ſerves as a place of faſhionable reſort on a ſummer's evening for the inhabitants of the city. To the north-eaſt of the town are large marſhes, which contribute to render it unwholeſome in ſummer and autumn, particularly to ſtrangers; whereas the conſtant inhabitants are never afflicted by the epidemic diſeaſes which prevail among foreigners, but are ſaid to be as long-lived as the inhabitants of the northern parts of the United States. Lake Pontchartrain communicates with the town by means of the creek St. John, which proceeds from the lakes through a courſe of ſix miles, and within two miles of the town. A canal was formed in 1792 from the creek to the town; and at the mouth of the creek, where it enters the lake, is a ſmall fort of ſix guns. In the year 1802 the principal aggregate exports of American and Spaniſh produce have been eſtimated at

30,000 bales of cotton, value	-	2,000,000 Dollars
8,000 hogſheads of ſugar,	-	480,000
90,000 hogſheads of flour,	-	400,000
Total		2,880,000

In the ſame year were exported, of former crops, about 300,000 lbs. of indigo, value 300,000 dollars. Conſiderable quantities of deer-ſkins and ſome furs are alſo exported; alſo tobacco, ſalt beef and pork, hams, lard, &c. The ſkins and furs are obtained from the Indians, who are continually bringing them down to this place, where they barter them for rifle-guns, powder, blankets, &c. The articles of importation are chiefly Weſt-India produce, and ſuch European manufactures as are moſt in demand amongſt the inhabitants, or intended for the traders amongſt the Indians. This latter is a very profitable employment. Moſt of the articles of export above mentioned are the produce of the plantations within two or three hundred miles of New Orleans; but the article of flour, which is one of the moſt conſiderable, together with a ſmall quantity of hemp, tobacco, &c. is the produce of the American ſettlements on the Ohio, a diſtance of more than two thouſand miles above New Orleans! Theſe articles are put on-board a kind of boat, or rather raft, which is no-where to be found but on theſe rivers: they are a flat-bottomed veſſel, about twelve feet wide, and forty feet long, and carry from ten to fifty tons: they are made of the coarſeſt materials, becauſe they are always broken up and ſold when they arrive at New Orleans, it being impoſſible for them to return againſt the ſtream. Early in the ſpring theſe boats are loaded, and, floating night and day, they are carried by the force of the ſtream (which runs at the rate of five miles an hour through a highly-romantic country) down to the Miſſiſſippi, where they arrive about the time the inundations commence. In this river, the navigation of which is dangerous on account of the rapidity of the current, and the numerous logs that lie concealed juſt below the ſurface of the water, the boatmen are obliged to proceed with caution, and it is a month or near five weeks before the voyage is completed; a voyage where you are ſecluded from all ſociety of man, except in a ſavage ſtate, but where the eye is relieved by a continual change of the moſt delightful and pictureſque ſcenery, and ſome of the grandeſt and moſt ſublime views of nature.

The inhabitants of New Orleans were eſtimated in 1802 to be 10 or 11,000. Its ſituation, not far from the ſea, on a noble river, in a very fertile country, under a ſalubrious climate, and near Mexico, but ſtill nearer to the French, Spaniſh, and Britiſh, Weſt-India iſlands; with the moral certainty of its becoming a general receptacle for the produce of the extenſive and valuable country on the Miſſiſſippi, Ohio, and its other branches; afford advantages which ſeem to enſure the growing proſperity of this city, more eſpecially as it is now in the poſſeſſion of the United States. *Morſe's American Gaz. Monthly Mag.* 1803.

NEW PA'LTZ, a townſhip of America, in Ulſter county, New York, bounded E. by Hudſon river, S. by Marlborough and Shawangunk; containing 3255 inhabitants, including 308 ſlaves. The compact part contains about 250 houſes, and a Dutch church; ten miles from Shawangunk.

NEW PORT GLAS'GOW. See PORT GLASGOW.

NEW RIV'ER, a moſt important artificial canal, or ſtream of water, paſſing through parts of the counties of Hertford and Middleſex, which was contrived and principally executed by an individual, Sir Hugh Middleton, in order to ſupply the Britiſh metropolis and its environs with freſh water: for that of the Thames, though extremely beneficial to London, was ſo liable to alteration, and ſubject to foulneſs, that a copious ſupply of pure water was extremely deſirable. Beſides, the Thames-water muſt be forced to aſcend by machines, even for the lower parts of the city; whereas a ſtream on the northern ſide of London may be made to flow, in a natural deſcent, to almoſt any quarter of the widely-extended metropolis. From theſe conſiderations, in the reign of James I. Hugh Middleton, citizen and goldſmith, projected the plan of bringing water out of Hertfordſhire, in a channel to London. Meeting with no co-operation, he, at length, in the year 1608, commenced the undertaking at his own expenſe; and, after exhauſting all his reſources, and being refuſed aid from the corporation of London, he was enabled, by the aſſiſtance of the king, to bring it to completion. On September 29, 1613, the water was let into the New River Head, at Iſlington; (with the ceremonies deſcribed under the article LONDON, vol. xiii. p. 85.) but the projector was ruined by the expenſes, and it was long before the ſcheme was rendered uſeful and beneficial to the public. The New River is formed by the collected waters of ſeveral ſprings, which riſe at Chadwell, near Ware, Hertfordſhire, about twenty miles north-weſt from London. Theſe ſprings are collected into a large open baſin of conſiderable depth, near which a ſtone is placed, with inſcriptions, implying that the ſtream was opened in 1608, and that from the Chadwell ſpring the river flows forty miles. The original ſupply of water having been found inadequate to the conſumption, the mill-ſtream of the river Lea, which runs near it, was reſorted to; and, after various diſputes and litigations between its proprietors and thoſe of the New River, the mill has at length become the property of the latter company, who have now an unreſtricted uſe of the water; ſo that the river Lea may be conſidered as one of the ſources. On a ſluice leading from it are flood-gates, with a building, in which a man is placed, whoſe conſtant employ is to raiſe or lower them, according to the fulneſs of the river below; and, that he may not err in the quantity ſupplied, a gauge is fixed acroſs the ſluice, conſiſting of a ſtone of great bulk, under which all the water paſſes; ſo that the current is regulated with the greateſt exactneſs. To preſerve a proper level, the New River takes ſuch a winding courſe, that the length of the channel is nearly thirty-nine miles. Paſſing Ware, Amwell, Hoddeſdon, and Cheſhunt, it enters Middleſex near Waltham-Croſs; bending towards Enfield-Chaſe, it returns to the town of Enfield; and at Buſh-hill was formerly carried acroſs a valley, in a wooden aqueduct, or open trough, 660 feet in length, ſupported by arches; but the improvement in canal-making has ſuggeſted a better mode to effect the purpoſe by means of a mound of earth, over which the river paſſes in a new channel, which was completed in the year 1785. Hence the river proceeds with devious bends to Hornſey, between which village and Highbury it was formerly conveyed in another wooden aqueduct, now ſuperſeded, like the former, by a bank of clay. Still winding, it reaches Stoke-Newington, and paſſes on to the eaſt ſide of Iſlington, where it has a ſubterraneous channel for two hundred yards beneath the ſtreet. Juſt before this part is a building, whence ſeveral mains, or pipes, are ſent to ſupply the eaſtern ſide of London. After paſſing under the road, the New River emerges and coaſts the ſouthern ſide of Iſlington, till it reaches its termination at the grand reſervoir, called the New River Head. The width of the river near Iſlington is fourteen feet and a half, the average depth four feet and a half, but the depth decreaſes on aſcending towards its ſource. The number of bridges which croſs the river in its whole courſe is about two hundred: in various places are ſluices to let off the waſte water; which, with other works, excited admiration in the earlier ſtage of this branch of mechanics, but are now overlooked in the wonders of canal-navigation. Truly admirable are the contrivances for diſtributing the water through the various parts of London. From a circular baſin, now thrice its original ſize, which firſt receives it, the water is conveyed by ſluices into ſeveral large brick ciſterns; whence it paſſes through large wooden pipes to the ſeveral diſtricts, and is conveyed into the houſes by leaden pipes. At the New River Head is a building, containing two ſteam-engines and a water-engine for forcing the water to a higher reſervoir near Pentonville, and to another near Tottenham-court road, for diſtribution to the weſtern parts of the town. Near the former reſervoir, in a field, a conſpicuous object appears, the uſe of which is little known. It is an iron-pipe, twelve feet high, and four feet eight inches in circumference, with a wooden tub placed on its top. This acts in the double capacity of an air and waſte water-pipe, and is uſeful in preventing the burſting of the pipes, which was formerly very frequent from the force of water, or from compreſſed air. A new reſervoir, communicating with that of Pentonville, has been recently conſtructed by the ſide of Tottenham-court-road, for the ſupply of Mary-le-bone and its vicinity: the mains from it are iron pipes of four feet eight inches circumference. For farther particulars, ſee the article Canal Navigation, vol. iii. p. 675.

The New-River Company have an office at the bottom of Dorſet-ſtreet, Saliſbury-court, Fleet-ſtreet: (ſee London, vol. xiii. p. 522.) The management of their affairs is veſted, by charter, in twenty-nine holders of adventurers' ſhares, who form a board. The officers are, a governor, deputy-governor, a treaſurer, and a clerk. Few public companies ſurpaſs this in property and extent of concerns. The conſtant repairs and improvements employ a vaſt number of men and horſes; and the whole ſyſtem of the diſtribution of the water is ſo complicated, as to require the utmoſt ſkill and attention on the part of the ſurveyor and other officers.

The New River is a conſiderable ornament to many ſeats and pleaſure-grounds in its courſe; though it has too much canal-like regularity to be truly pictureſque. It is likewiſe of great utility in affording a ſupply of water for cattle, and for various other purpoſes. *Hunter's Hiſtory of London and its Environs. Wilkes's Britiſh Directory*, vol. iii.

NEW RIV'ER, a river of North-Carolina, which riſes in the Iron-mountains, and, running to the Laurel-mountains, is then called the *Kanhawa*.

NEW RIV'ER, a river of North-Carolina, which runs into the Atlantic in lat. 34. 30. N. lon. 77. 40. W.

NEW RIV'ER, a river of South-Carolina, which runs into the Atlantic in lat. 32. 11. N. lon. 80. 56. W.

NEW RIV'ER INLET, a channel between two ſmall iſlands, on the coaſt of North-Carolina, leading to New River. Lat. 34. 27. N. lon. 77. 38. W.

NEW ROCHEL'LE, a poſt-town of America, in Weſt-Cheſter-county, New York, in Long-Iſland Sound: twenty miles north-eaſt of New York.

NEW ROSS'. See Ross.

NEW SA'LEM. See Salem.

NEW SOUTH WA'LES, a name given to the eaſtern part of New Holland, which ſee.

NEW SPA'IN. See Mexico.

NEW STOCK'BRIDGE. See Stockbridge.

NEW SWE'DELAND, the name of a territory between Virginia and New York, when in poſſeſſion of the Swedes, and which was afterwards poſſeſſed or claimed by the Dutch: the chief town was called Gottenburgh.

NEW TUNBRIDGE WELL'S. See Islington, vol. xi. p. 438.

NEW VIN'EYARD, a town in Kennebeck county, Maine, weſt of Kennebeck river, between Anſon and Strong; forty miles north-weſt of Auguſta.

NEW U'TRECHT, a ſmall maritime town of New York, in King's county, Long Iſland, oppoſite to the Narrows; ſeven miles ſouth of New York, and containing 778 inhabitants.

NEW WER'KT, a ſmall iſland in the German Sea, at the mouth of the Elbe, near the coaſt of Bremen: ſeven miles weſt of Cuxhaven.

NEW WIN'DSOR, a townſhip of Orange-county, New York, pleaſantly ſituated on the weſt branch of Hudſon-river; three miles ſouth of Newburgh, and containing 2001 inhabitants: it is famous for a ſcythe-manufacture: ſixty-four miles north of New York.

NEW WORK I'SLAND, a ſmall iſland near the north-eaſt coaſt of Newfoundland. Lat. 49. 55. N. lon. 54. 30. W.

NEW-YEAR's DA'Y; with us, at preſent, the firſt of January, and the day on which we commemorate the circumciſion of our Saviour, as being the eighth from the 25th of December, his ſuppoſed day of nativity. Among the ancient Romans, in the time of Romulus, the year began at the vernal equinox, March being the firſt month. Numa Pompilius added the months of January and February, and ordered the year to begin at the winter ſolſtice. The 25th of March was generally conſidered as the civil and legal new-year's day with us, till the alteration of the ſtyle in 1752, when it was permanently fixed to the 1ſt of January. In Scotland, the year was, by a proclamation which bears date ſo early as the 27th of November, 1599, ordered thenceforth to commence in that kingdom on the 1ſt of January, inſtead of the 25th of March.

Among the Egyptians, the 29th of Auguſt was new-year's day. The Jews began their civil year at the new moon next after the autumnal equinox. The French republicans decreed that the year ſhould begin on the 22d of September; and that day, in the year 1792, was declared to be the firſt day of the firſt year of the republic and of liberty. This mode of reckoning began to fall into diſuſe after Bonaparte, firſt-conſul, had aſſumed the title of emperor, in the 12th year of the republic; and we hardly need to add, that it is now totally aboliſhed.

The firſt day of January having been obſerved by the Heathens as a day of extreme *rejoicing*, and for offering up ſacrifices to their idol Janus, the primitive Chriſtians held it as a *faſt*, to avoid even the ſemblance of joining in their abominable cuſtoms. The firſt mention of this day as a *feſtival* among Chriſtians, was during the pontificate of Felix the Third, A. D. 487, who denominated it the *Octave of Chriſtmas*. Under its preſent title of "Circumciſion," the feſtival is only to be traced from about the year 1090; and it was not generally ſo obſerved until included in our Liturgy in the year 1550.

The popiſh legends inform us, that the firſt of January was held in ſuch eſteem by the Heathens, that they would not "even ſully the *joy* of it with martyring the Chriſtians; ſo that, whereas there were in Conſtantine's time the feaſt of 5000 ſaints for every other day in the year, *there were none for this*."

Upon this day of feſtivity, the Romans, though indulging in exceſſes, yet never failed to *begin* their reſpective employments: the men of letters their books, poems, &c. the mechanics, ſome of their works of labour. And ſo particular were they in their obſervance of this day, that the moſt inveterate enemies refrained from paſſing the ſlighteſt reflection upon the character or conduct of each other.

The 30th of January is, by the Jews, called *new-year's-day for the trees*, becauſe all thoſe trees that were planted upon or after that day were reckoned from the growth of the enſuing year, and their fruit was tithed accordingly; and becauſe tithes of different years were not to be put together, but to be paid every year ſeparately. *Time's Teleſcope*, 1816. *Brady's Clavis Calendaria.*

NEW-YEAR's GIF'T, *ſ.* Preſent made on the firſt day of the year.—If I be ſerved ſuch a trick, I'll have my brains taken out and buttered, and give them to a dog for a *new-year's gift*. *Shakeſpeare's M. Wives of Windſor.*

Nonius Marcellus refers to the origin of this cuſtom among the Romans to Tatius king of the Sabines, who reigned at Rome conjointly with Romulus, and who, having conſidered as good omen a preſent of ſome branches cut in a wood conſecrated to Strenia, the goddeſs of ſtrength, which he received on the firſt day of the new year, authoriſed this cuſtom afterwards, and gave to theſe preſents the name of *ſtrenæ*. However this may be, the Romans on that day celebrated a feſtival in honour of Janus, and paid their reſpects at the ſame time to Juno; but they did not paſs it in idleneſs, leſt they ſhould become indolent during the reſt of the year. They ſent preſents to one another of figs, dates, honey, &c. to ſhow their friends that they wiſhed for a happy and agreeable life. *Clients*, that is to ſay, thoſe who were under the protection of the great, carried preſents of this kind to their patrons, adding to them a piece of ſilver. Under Auguſtus, the ſenate, the knights, and the people, preſented ſuch gifts to him, and in his abſence depoſited them in the capitol. Of the ſucceeding princes, ſome adopted this cuſtom and others aboliſhed it; but it always continued among the people. The early Chriſtians condemned it, becauſe it appeared to be a relic of Paganiſm and a ſpecies of ſuperſtition; but, when it began to have no other object than that of being a mark of veneration and eſteem, the church ceaſed to diſapprove of it.

The celebration of new-year's day, obſerves Mr. Hutchinſon (Hiſt. of Northumberland), is preſerved in this county as a rural feſtival. Gifts are made to children, ſervants, and dependants, called new-year's gifts. Stillingfleet ſays, that among the Saxons and the northern nations the feaſt of the new year was obſerved with more than ordinary jollity; and, from Hoſpinian, ſays, it was an ancient cuſtom of the Heathens, and afterwards practiſed by the Chriſtians. Servants were exempt from their labour, and partook of the feaſt and rural ſports with their maſters: they were preſented with tokens of approbation and favour. On certain feſtivals the Romans gave pieces of money to travellers and ſtrangers who were preſent at the ſacrifice. "On our day of feſtivity, mirth is excited by a ruſtic maſquerading and playing tricks in diſguiſe: the hide of the ox ſlain for the winter-cheer, is often put on; and the perſon thus attired, attempts to ſhow the character of the devil, by every horrible device in his power. All the winter-ſports ſeem to expreſs a ſtrong opinion of the ancients, that genii of very contrary natures prevailed on earth; that the one was conſtantly concomitant to light, as the other was to darkneſs; and this image of the devil, which is frequently permitted to expel the inhabitants and take poſſeſſion of the houſe, is typical of the power of the evil genius, in the ſeaſon when the ſun is longeſt abſent from our hemiſphere. This correſponds with the lamentation uſed by thoſe who held the Eleuſinian myſteries, and mourned for Adonis. It is very difficult to make any probable determination to what people we owe theſe cuſtoms."

The ancient cuſtom of going about with the *waſſail*, a bowl of ſpiced ale, is yet retained in many places. The compoſition was ale, nutmeg, ſugar, toaſt, and roaſted crabs or apples; and was called *lamb's wool.*

In France, particularly in the ſouth, early in the morning of new-year's day, a round of viſits is commenced to relations and friends, to wiſh them a happy new year, and to preſent them with *bonbons* (ſweetmeats). The relations are firſt viſited, beginning with thoſe neareſt in affinity, then thoſe that are further removed, and laſtly come the friends and acquaintance. It is a conteſt of politeneſs on this occaſion which ſhall ſtart firſt, and anticipate the call of a relation or friend. The ſhops of the confectioners are dreſſed up on the day before with looking-glaſſes, intermixed with feſtoons of ſilk or muſlin, and branches of ribands or flowers. The counters are covered over with a nice table-cloth, and ſet out with cakes, ſweetmeats, dried fruits, and bonbons, made up into pyramids, caſtles, columns, or any form which the taſte of the decorator may ſuggeſt; and, in the evening, they are illuminated for the reception of company, who come to buy their bonbons for the next day. Endleſs are the devices for things in which they are to be incloſed; there are little boxes or baſkets, made of ſatin, ornamented with gold, ſilver, or foil; balloons, books, fruit, ſuch as apples, pears, oranges, &c. or vegetables, ſuch as cauliflower, a root of celery, an onion; any thing, in ſhort, which can be made with a hollow within to hold the bonbons; but the moſt prevailing device is what is called a *cornet*, that is, a little cone ornamented in different ways with a bag to draw over the large end and cloſe it up. In theſe things, the prices of which vary from one franc (ten pence) to fifty, the bonbons are preſented by thoſe who chooſe to be at the expenſe of them; and by thoſe who do not, they are only wrapped in a piece of paper; but bonbons in ſome way or other muſt be preſented. In theſe viſits to friends, and in goſſipping at the confectioners' ſhops, which are the great lounge for the occaſion, the morning of new-year's day is paſſed; a dinner is given by ſome member of the family to all the reſt; and the evening concludes, like Chriſtmas-day, with cards, dancing, or any other amuſement that may be preferred. *Miſs Plumtree's Reſidence in France*, vol. ii. *Time's Teleſcope*, 1815.

NEW YEAR HAR'BOUR, a good harbour on the north coaſt of the iſland of Staten Iſland. Lat. 54. 50. S. lon. 64. 25. W.

NEW YEAR's I'SLANDS, a group of ſmall iſlands in the South Pacific Ocean, on the north coaſt of Staten Land; on the moſt eaſterly, Capt. Cook landed, on the 31ſt of December, 1774, and killed a great number of ſeals and birds. Theſe iſlands, ſays Cook, are in general ſo unlike Staten Land, eſpecially the one on which we landed, that it deſerves a particular deſcription. "It ſhows a ſurface of equal height, and elevated about thirty or forty feet above the ſea, from which it is defended by a rocky coaſt. The inner part of the iſle is covered with a ſort of ſward-graſs, very green, and of a great length. It grows on little hillocks of two or three feet in diameter, and as many or more in height, in large tufts, which ſeemed to be compoſed of the roots of the plant matted together. Among theſe hillocks are a vaſt number of paths, made by ſea-bears and penguins, by which they retire into the centre of the iſle. It is nevertheleſs exceedingly bad travelling; for theſe paths are ſo dirty, that one is ſometimes up to one's knees in mire. Beſides this plant, there are a few other graſſes; a kind of heath, and ſome celery. The whole ſurface is moiſt and wet; and on the coaſt are ſeveral ſmall ſtreams of water. The animals found on this little ſpot are ſea-lions, ſea-bears, with a variety of oceanic and ſome land birds. The ſea-lions are not of that kind deſcribed under the ſame name by lord Anſon; but, for aught I know, theſe would more properly deſerve that appellation; the long hair with which the back of the head, the neck, and ſhoulders, are covered, giving them greatly the air and appearance of the lion; the other part of the body is covered with ſhort hair, little longer than that of a cow or a horſe, and the whole is of a dark brown. The female is not half ſo big as the male, and is covered with a ſhort hair of an aſh or light dun-colour. They live as it were in herds, on the rocks near the ſea-ſhore. The ſea-bears are not ſo large by far as the lions, but are rather larger than the common ſeal. They have none of that long hair which diſtinguiſhes the lion; theirs is all of an equal length, and finer than that of the lion, ſomething like an otter's, and the general colour is that of an iron-grey; this is the kind which the French call *ſea-wolves*, and the Engliſh *ſeals*; they are, however, different from the ſeals of Europe and North America. The lions may too, without any great impropriety, be called over-grown ſeals; for they are all of the ſame ſpecies."

A remarkable harmony was obſerved among the animals we have mentioned to abound in theſe deſolate regions. The ſea-lions occupy the greateſt part of the ſea-coaſt; the bears occupy the iſland; the ſhags are poſted in the higheſt cliffs; the penguins in ſuch places as have the beſt acceſs to and from the ſea; and the other birds chooſe more retired places. Occaſionally, however, all theſe animals were ſeen to mix together like domeſtic cattle and poultry in a farm-yard, without one attempting to hurt the other in the leaſt. Even the eagles and vultures were frequently obſerved ſitting together on the hills among the ſhags, while none of the latter, either old or young, appeared to be diſturbed at their preſence. It is probable, therefore, that theſe birds of prey ſubſiſt by feeding on the carcaſes of the animals which die naturally or by various accidents, and which muſt be very numerous from the immenſe quantity exiſting on the iſland. Lat. 54. 41. S. lon. 64. 28. W. So ſevere is the cold in theſe ſouthern regions, that theſe iſlands, though only in the latitude of the north of England, are more frozen than Lapland, which lies in 70 degrees of north latitude. See Success Bay.

NEW YORK, one of the United States of America, is ſituated between lat. 40. 40. and 45. N. and between lon. 73. 10. and 80. W. It is about 350 miles in length, and 300 in breadth; bounded ſouth-eaſterly by the Atlantic Ocean; eaſt by Connecticut, Maſſachuſetts, and Vermont; north by Upper Canada; ſouth-weſt and weſt by Pennſylvania, New Jerſey, and Lake Erie.

This ſtate was, by an act of legiſlature paſſed in March 1788, divided into fifteen counties, to which ſix have ſince been added from the neighbouring territory. The following are the names of the twenty-one counties, as they ſubſiſt at preſent:

New York.
Richmond.
Suffolk.
Weſt Cheſter.
Queen's.
King's.
Orange.
Ulſter.
Ducheſs.
Columbia.
Renſſelaer.
Waſhington.
Clinton.
Saratoga.
Albany.
Montgomery.
Herkemer.
Onondago.
Otſego.
Ontario.
Tioga.

The number of inhabitants in this ſtate, as it ſubſiſted in 1756, was 83,233 whites, and 13,542 blacks; 96,775 in the whole. In 1771, there were 148,124 whites, and 19,883 blacks; total 168,007. In 1786, the total number was 238,897, including 18,889 negroes. In 1790, the ſtate contained 340,120 inhabitants, of whom 21,324 were ſlaves, and 41,785 electors. In 1795, after the addition of the counties of Renſſelaer, Saratoga, Herkemer, Onondago, Otſego, and Tioga, Mr. Morſe ſtates the number of electors at 64,107, and that of inhabitants (by ſuppoſition) at 530,177. But, after the act for a regular cenſus was paſſed, the numbers are more to be depended upon; accordingly, we may ſtate the number of ſouls in 1800 at 586,203; and in 1810 the cenſus gives us the aſtoniſhing number of 959,220. The area of this ſtate is 52,125 ſquare miles, or 33,360,000 acres; and it ſends twenty-ſeven members to congreſs. A bill paſſed the ſenate on the 26th of March, 1817, entirely aboliſhing ſlavery in that ſtate after the 4th of July, 1827.

The chief rivers in this ſtate are the Hudſon and the Mohawk, with their branches. The rivers Delaware and Suſquehannah riſe in this ſtate. The principal lakes are Otſego, Oneido, George, Seneca, Cayuga, Salt, and Chautaughque. The principal bay is that of York, which ſpreads to the ſouthward before the city of New York. The legiſlature of New York, ſtimulated by the enterpriſing and active Pennſylvanians, who were competitors for the trade of the weſtern country, granted very liberal ſums towards improving thoſe roads that traverſe the moſt ſettled parts of the country, and opening ſuch as lead into the weſtern and northern parts of the ſtate, uniting as far as poſſible the eſtabliſhments on Hudſon's River and the moſt populous parts of the interior country by the neareſt practicable diſtances. By the eſtabliſhments of poſt-roads, a ſafe and direct conveyance is opened between the moſt interior weſtern parts of this ſtate and the ſeveral ſtates in the union.

The ſtate of New York, to ſpeak generally, is interſected by ridges of mountains extending in a north-eaſt and ſouth-weſt direction. Beyond the Alleghany Mountains, however, the country is level, of a fine rich ſoil, covered in its natural ſtate with maple, beech, birch, cherry, black walnut, locuſt, hickory, and ſome mulberry trees. On the banks of Lake Erie are a few cheſnut and oak ridges. Hemlock-ſwamps are interſperſed thinly through the country. All the creeks that empty into Lake Erie have falls, which afford many excellent mill-ſeats. The lands between the Seneca and Cayuga Lakes, are repreſented as uncommonly excellent, being moſt agreeably diverſified with gentle riſings, and timbered with lofty trees, with little underwood. The legiſlature granted a million and a half acres of land, as a gratuity to the officers and ſoldiers of the line of this ſtate, for their ſervices during the revolutionary war. This tract forms the *military townſhips* of the county of Onondago. See Military Townships, and Onondago. Eaſt of the Alleghany Mountains, which commence with the Kaat's Kill, on the weſt ſide of Hudſon's River, the country is broken into hills with rich intervening valleys. The hills are clothed thick with timber, and when cleared afford fine paſture; the valleys, when cultivated, produce wheat, hemp, flax, peaſe, graſs, oats, Indian-corn, &c. Of the commodities produced from culture, wheat is the principal. Indian-corn and peaſe are likewiſe raiſed for exportation; and rye, oats, barley, &c. for home-conſumption. The beſt lands in the ſtate, along Mohawk-river, and north of it, and weſt of the Alleghany Mountains, but a few years ago was moſtly in a ſtate of nature, but has been of late rapidly ſettling. In the northern and unſettled parts of the ſtate are plenty of mooſe-deer, bears, ſome beavers, martins, and moſt other of the inhabitants of the foreſt, except wolves. The Ball-town, Saratoga, and New Lebanon, medicinal ſprings, are much celebrated; theſe are noticed under their reſpective heads. Large quantities of iron-ore are found here. A ſilver-mine has been worked at Phillipſburg, which produced virgin-ſilver. Lead is found in Herkemer-county, and ſulphur in Montgomery. Spar, zink, manganeſe, yellow pyrites, various kinds of copper-ore, and lead and coal mines, are found in this ſtate; alſo iſinglaſs in ſheets, talcs, and cryſtals of various kinds and colours, flint, aſbeſtos, and ſeveral other foſſils. Gypſum, or plaſter-ſtone, is very abundant in ſeveral parts of the ſtate of New York, particularly about Onondago and Madiſon counties; alſo in the vicinity of Cayuga Lake, whence, in 1812, 6000 tons of it were exported to Pennſylvania. In many parts of the United States it has been found an important article of manure in the cultivation of graſſes, roots, and grain. Rock-ſalt has not hitherto been diſcovered; but there are numerous ſalt-ſprings, which ſometimes flow naturally, but are more frequently formed by ſinking-wells, in thoſe places where ſalt is known to exiſt, as in certain marſhes, and in ſalt *licks*, ſo called from having been formerly the reſort of wild animals to *lick* the clay impregnated with the ſalt. Theſe ſprings occur in the Onondago and Cayuga lakes, aſſociated with the great gypſum-formation already noticed. The brine is ſtrong, and yields about 300,000 buſhels (136lb. each) of ſalt annually; which is about one half of what is produced from ſalt-ſprings throughout the whole of the United States.

The chief manufactures are iron, glaſs, paper, pot and pearl aſhes, earthen-ware, maple-ſugar, and molaſſes. This ſtate, having a ſhort and eaſy acceſs to the ocean, commands the trade of a great proportion of the beſt-ſettled and beſt-cultivated parts of the United States. Their exports to the Weſt Indies are, biſcuit, peaſe, Indian-corn, apples, onions, boards, ſtaves, horſes, ſheep, butter, cheeſe, pickled oyſters, beef and pork. But wheat is the ſtaple commodity of the ſtate, of which no leſs than 677,700 buſhels were exported ſo long ago as the year 1775, beſides 2555 tons of bread, and 2828 tons of flour. The increaſe ſince has been in proportion to the increaſe of the population. In wheat and flour, more than a million of buſhels are now annually exported. Weſt-India goods are received in return for the above articles. Beſides the articles already enumerated, are exported flax-ſeed, cotton, wool, ſarſaparilla, coffee, indigo, rice, pig-iron, bar-iron, pot-aſh, pearl-aſh, furs, deer-ſkin, log-wood, fuſtic, mahogany, bees-wax, oil, Madeira-wine, rum, tar, pitch, turpentine, whale-fins, fiſh, ſugars, molaſſes, ſalt, tobacco, lard, &c. but moſt of theſe articles are imported for re-exportation.

There are in this ſtate, two handſomely-endowed and flouriſhing colleges, viz. Columbia, formerly King's College, in the city of New York, and Union College, at Schenectady. See the next page, and SCHENECTADY. Beſides theſe, there are diſperſed in different parts of the ſtate, fourteen incorporated academies, containing in the whole, as many as ſix or ſeven hundred ſtudents. Theſe, with the eſtabliſhment of ſchools, one at leaſt in every diſtrict of four ſquare miles, for the common branches of education, muſt have the moſt beneficial effects on the ſtate of ſociety. The ſums granted by the legiſlature of this ſtate for the encouragement of literature ſince the year 1790, have been very liberal; and, in March 1790, the legiſlature granted to the regents of the univerſity, who have by law the ſuperintendance and management of the literature of the ſtate, ſeveral large and valuable tracts of land, on the waters of Lakes George and Champlain, and alſo Governor's Iſland in the harbour of New York, with intent that the rents and income thereof ſhould be by them applied to the advancement of literature: at the ſame time, they granted them 1000l. currency, for the ſame general purpoſe. In April 1792, they ordered to be paid to the regents 1500l. for enlarging the library, 200l. for a chemical apparatus, 1200l. for erecting a wall to ſupport the college-grounds, and 5000l. for erecting a hall and an additional wing to the college; and 1500l. annually for five years, to be diſcretionally diſtributed among the academies of the ſtate; alſo 750l. for five years, to be applied to the payment of the ſalaries of additional profeſſors. In their ſeſſions, ſince 1795, the ſums they have granted for the ſupport of the colleges, academies, and common ſchools, throughout the ſtate, have been very liberal. The religious ſects or denominations in the ſtate are, Engliſh Preſbyterians, Dutch Reformed, Baptiſts, Epiſcopalians, Friends or Quakers, German Lutherans, Moravians, Methodiſts, Roman Catholics, Shakers, a few followers of Jemima Wilkinſon at Geneva, and ſome Jews in the city of New York. The body of the Six Nations of Indians inhabit the weſtern part of this ſtate. See IROQUOIS, vol. xi. p. 380.

It has been explained, under the article AMERICA, vol. i. p. 431. that this province was firſt ſettled by the Dutch, who had built a fort, in 1614, on the weſt ſide of Hudſon's River, near Albany, and named it *Fort Orange.* But, the very ſame year, captain Argall, under ſir Thomas Dale, governor of Virginia, attacked the Dutch, who, being unable to reſiſt him, prudently ſubmitted for the preſent to the king of England, and under him to the governor of Virginia. Determined, however, upon the ſettlement of a colony, the ſtates-general, in 1621, granted the country to the Weſt India Company; and in 1629, Wouter Van Twiller arrived at Fort Amſterdam, and took upon himſelf the government. On Auguſt 27, 1664, governor Stuveſant ſurrendered the colony to Col. Nicolls, who had arrived in the bay a few days before, with three or four ſhips and three hundred ſoldiers, having a commiſſion from king Charles II. to reduce the place, which was then called *New Amſterdam,* but was changed to *New York,* as was Fort Orange to *Albany,* in honour of H.R.H. James duke of York and Albany, the king's brother. Very few of the inhabitants thought proper to remove out of the country; and their numerous deſcendants are ſtill in many parts of this ſtate and New Jerſey. In 1667, at the peace of Breda, New York was confirmed to the Engliſh, who, in exchange, ceded Surinam to the Dutch. The Engliſh kept peaceable poſſeſſion of the country until 1673, when the Dutch, with whom they were then at war, ſent a ſmall ſquadron, which arrived at Staten Iſland on the 30th of July. John Manning, a captain of an independent company, who had at that time the command of the fort, ſent a meſſenger down to the commodore, and treacherouſly made his terms with him. On the ſame day the ſhips came up, moored under the fort, landed their men, and entered the garriſon, without giving or receiving a ſhot. All the magiſtrates and conſtables from Eaſt Jerſey, Long Iſland, Æſopus, and Albany, were ſummoned to New York, and the major part of them ſwore allegiance to the ſtates-general and the prince of Orange. The conquerors, however, did not long enjoy the fruits of their ſucceſs; for, on the 9th of February, the year following, a treaty of peace between England and Holland was ſigned at Weſtminſter; by the ſixth article of which, this province was reſtored to the Engliſh, in whoſe hands it remained till the late revolution.

There are but three incorporated cities in this ſtate; New York, Albany, and Hudſon. *Crutwell's Gaz. Morſe's Amer. Gaz.*

NEW YORK, a county in the above ſtate, comprehending the Iſland of New York, or Manhattan, on which the metropolis ſtands, and the following ſmall iſlands; Great Barn, Little Barn, Manning's, Nutten, Bedlow's, Bucking, and Oyſter, Iſlands. New York Iſland, on which the city of that name ſtands, is about fifteen miles long, and does not extend two in any part in breadth. It is joined to the main land by a bridge, called King's Bridge, fifteen miles north of the city of New York.

NEW YORK, the chief city of the above county, and of the whole ſtate, and the ſecond in rank in the union, is ſituated at the ſouth-weſt point of the iſland juſt mentioned, at the confluence of the Hudſon and Eaſt rivers. The principal part of the city lies on the eaſt ſide of the iſland, although the buildings extend from one river to the other. The length of the city on Eaſt-river is about two miles, but falls much ſhort of that diſtance on the banks of the Hudſon: its breadth, on an average, is nearly three-fourths of a mile, and its circumference may be four miles. The plan of this city is not perfectly regular, but is laid out agreeably to the ſituation of the ground. The principal ſtreets are nearly parallel with the rivers; theſe are interſected, though not at right angles, by ſtreets running from river to river: the width of the ſtreets is various. The houſes are generally built of brick, and the roofs tiled: there are remaining a few houſes built after the Dutch manner, but the Engliſh taſte has prevailed almoſt a century. Upon the ſouth-weſt point of the land ſtands the fort; it is a ſquare, with four baſtions; within the walls of which, the governors uſed formerly to reſide. Below the fort, near the water, there is a line of fortifications of conſiderable extent, deſigned to command the entrance into both rivers. But it is queſtionable, whether any number of cannon would prevent ſhips from paſſing with a favourable wind and tide; and indeed whether New York is capable of defence by land againſt a powerful marine force. The city-hall is a brick-building, more ſtrong than elegant; it is three ſtories in height, with wings at each end. There are three houſes of public worſhip belonging to the reformed Proteſtant Dutch church, four Preſbyterian and three Epiſcopal churches, with nine places of worſhip for other Chriſtians, and a ſynagogue for the Jews. The government of the city (which was incorporated in 1696) is now in the hands of a mayor, aldermen, and common-council. The city is divided into nine wards, in each of which there is choſen annually, by the people, an alderman and aſſiſtant, who, together with the mayor and recorder, form the common-council: the mayor and recorder are appointed annually by the council of appointment.

This city is eſteemed the moſt eligible ſituation for commerce in the United States. It almoſt neceſſarily commands the trade of one-half of New Jerſey, moſt of that of Connecticut, and part of that of Maſſachuſetts, beſides the whole fertile interior country, which is penetrated by one of the largeſt rivers in America. This city imports moſt of the goods conſumed between a line of thirty miles eaſt of Connecticut-river and twenty miles weſt of the Hudſon, which is 130 miles; and between the ocean and the confines of Canada, about 250 miles; a conſiderable portion of which is the beſt peopled of any part of the United States, and the whole territory contains at leaſt half a million of people. In times of peace, New York will command more commercial buſineſs than any town in the United States. In time of war, it will be inſecure without a marine force; but a ſmall number of ſhips will be able to defend it from the moſt formidable attacks by ſea. A want of good water is a great inconvenience to the citizens, there being few wells in the city: moſt of the people are ſupplied every day with freſh water, conveyed to their doors in caſks, from a pump, which receives it from a ſpring almoſt a mile from the city.

It is found, by a memorandum in one of the old regiſters, that the total number of inhabitants in the city, taken by order of the king of England, in the year 1697, was 4302. The number of inhabitants in the city and county of New York, in 1756, was 10,881; in 1771, 21,863; in 1786, 23,614; in 1790, 33,131; in 1796, about 70,000; in 1805, 75,770; and in 1810, 96,373, which is an increaſe of more than 25 per cent. in five years. During the malignant fever which raged in 1805, 26,996 perſons retired from the city, beſides thoſe that were cut off by it. A fire happened here, Dec. 3, 1816, which deſtroyed houſes and other property to the value of 300,000 dollars.

King's College, in this city, was originally founded by the voluntary contributions of the inhabitants of the province, aſſiſted by the general aſſembly, in the year 1754, a royal charter (and grant of money) being then obtained, incorporating a number of gentlemen therein mentioned, by the name of "The Governors of the College of the Province of New York, in the City of New York, in America;" and granting to them and their ſucceſſors for ever, amongſt various other rights and privileges, the power of conferring all ſuch degrees as are uſually conferred by either of the Engliſh univerſities. By the charter it was provided, that the preſident ſhall always be a member of the church of England, and that a form of prayer collected from the liturgy of that church, with a particular prayer for the college, ſhould be daily uſed, morning and evening, in the college-chapel; at the ſame time, no teſt of their religious perſuaſion was required from any of the fellows, profeſſors, or tutors; and the advantages of education were equally extended to ſtudents of all denominations. The building (which is only one-third of the intended ſtructure) is of ſtone, three complete ſtories high, with four ſtair-caſes, twelve apartments in each, a chapel, hall, library, muſeum, anatomical theatre, and a ſchool for experimental philoſophy. The college is ſituated on a dry gravelly ſoil, about 150 yards from the bank of Hudſon's river, which it overlooks, commanding a moſt extenſive and beautiful proſpect. Since the revolution, the legiſlature paſſed an act conſtituting twenty-one gentlemen (of whom the governor and lieutenant-governor, for the time being, are members *ex officiis*) a body corporate and politic, by the name and ſtyle of "The Regents of the Univerſity of the State of New York." They are entruſted with the care of literature in general in the ſtate, and have power to grant charters of incorporation for erecting colleges and academies throughout the ſtate, are to viſit theſe inſtitutions as often as they ſhall think proper, and report their ſtate to the legiſlature once a-year. The name of the college was alſo changed; and it is now called *Columbia College*. This college, by an act of the legiſlature paſſed in the ſpring of 1787, was put under the care of twenty-four gentlemen, who are a body corporate, by the name and ſtyle of "The Truſtees of Columbia College in the City of New York." This body poſſeſſes all the powers veſted in the governors of King's College before the revolution, or in the regents of the univerſity ſince the revolution, ſo far as their power reſpected this inſtitution. No regent can be a truſtee of any particular college or academy in the ſtate. The regents of the univerſity have power to confer the higher degrees, and they only. Columbia College conſiſts of two faculties: a faculty of arts and a faculty of phyſic. The firſt has a preſident and ſeven profeſſors, the ſecond a dean and ſeven profeſſors. The officers of inſtruction and immediate government in the faculty of arts, are a preſident, profeſſor of mathematics and natural philoſophy, a profeſſor of logic and geography, and two profeſſors of dead languages. To theſe have lately been added a profeſſor of chemiſtry and agriculture, a profeſſor of oriental languages, a profeſſor of law, and a profeſſor of the French language. In the faculty of phyſic, the dean is lecturer on clinical medicine in the New-York hoſpital; and there are the profeſſorſhips of botany, of anatomy, of the obſtetric art, of materia medica, of the inſtitutes of medicine, of ſurgery, and the practice of phyſic.

New York city is 95 miles north-north-eaſt of Philadelphia, 127 ſouth-weſt of Hartford, 197 north-eaſt of Baltimore, 252 ſouth-weſt of Boſton, 375 from Portland, in Maine, 373 from Richmond, 620 from Fayetteville, 913 from Charleſton, and 1020 from Savannah. Lat. 40. 42. 8. N. lon. 74. 9. 45. W.

NEW YORK, an Indian town of the Creek-nation, ſituated on Tallapooſe-river, in Georgia; and ſo named by Col. Ray, a New-York Britiſh loyaliſt.

NEW YORK, a poſt-town of Virginia: 167 miles ſouth-weſt of Waſhington.

NEW ZE'ALAND, two iſlands in the South Pacific Ocean, firſt diſcovered by Taſman. In the year 1642, he traverſed the eaſtern coaſt from lat. 34. to 43. and entered the ſtrait called *Cook's Strait;* he was attacked by the natives, ſoon after he came to an anchor, in the place to which he gave the name of *Murderer's Bay*, and never went on-ſhore: he gave the country the name of *Staaten Land*, in honour of the States General; but it is now generally diſtinguiſhed in our maps and charts by the name of *New Zealand*. As the whole of this country, except that part of the coaſt which was ſeen by Taſman from on-board his ſhip, had from his time to the voyage of the Endeavour, in the year 1770, remained altogether unknown, it was by many ſuppoſed to be part of a ſouthern continent. It is, however, now known to conſiſt of two large iſlands, divided from each other by a ſtrait, or paſſage, which is about twelve or fifteen miles broad. The northernmoſt of theſe iſlands is called by the natives *Eaheinomauwe;* and the ſouthermoſt *Tavai Poenammoo*. The latter is the name of a lake, and ſignifies "the water of green talc." This lake is ſituated in the northern part of the iſland, and the country adjoining it only is known to the natives under this name. "From my obſervation, (ſays Capt. Cook,) and from other information, it appears to me that the New Zealanders muſt live under perpetual apprehenſions of being deſtroyed by each other; there being few of their tribes that have not, as they think, ſuſtained wrongs from ſome other tribe, which they are continually upon the watch to revenge; and perhaps the deſire of a good meal may be no ſmall incitement. They will even preſerve their enmity from father to ſon, and the ſon never loſes ſight of an injury done to his father. The method of executing their horrible deſigns is by ſtealing upon their enemies in the night; and, if they find them unguarded, (which however is but ſeldom the caſe,) they kill every one indiſcriminately, not even ſparing the women and children: the dead bodies they either devour on the ſpot, or carry them home for that purpoſe. If they are diſcovered before they can execute their bloody purpoſe, they generally ſteal off; and ſometimes are purſued and attacked by the other party in their turn. They never give quarter, or take priſoners. This perpetual ſtate of warfare renders them ſo circumſpect, that they are never off their guard either by night or day. According to their ſyſtem of belief, the ſoul of the man whoſe fleſh is devoured by the enemy is doomed to perpetual fire; while the ſoul of him whoſe body has been reſcued, as well as thoſe who die a natural death, aſcend to the habitation of the gods. They do not therefore eat the bodies of their friends who have been reſcued. Their common method of diſpoſing of the dead is by burying in the earth; but, if they have more of their ſlaughtered enemies than they can eat, they throw them into the ſea.

"They have no ſuch thing as *morais*, or places of public worſhip; nor do they ever aſſemble together with this view. But they have prieſts who alone addreſs the gods in prayers for the proſperity of their temporal affairs. Whatever the principles of their religion may be, they are ſtrongly inculcated from their infancy: of this I had a remarkable inſtance in the youth who was firſt deſtined to accompany Taweiharooa. He refrained from eating the greateſt part of the day, on account of his hair being cut; though every method was tried to induce him to break his reſolution, and he was tempted with the offer of ſuch victuals as he was known to like beſt. He ſaid, that, if he ate any thing that day, the Eatooa would kill him: however, towards evening the cravings of nature got the better of the precepts of religion, and he ate, though but ſparingly. The New Zealanders ſeem to be perfectly ſatisfied with the little knowledge they are maſters of, without attempting in the leaſt to improve it; nor are they remarkably curious either in their obſervations or enquiries."

Tavai Poenammoo is for the moſt part mountainous, and to all appearance a barren country, and thinly peopled. *Eaheinomauwe* has a much better appearance; it is indeed not only hilly, but mountainous: yet even the hills and mountains are covered with wood, and every valley has a rivulet of water; the ſoil in theſe valleys, and in the plains, of which there are many that are not overgrown with wood, is in general light, but fertile, and fit for every kind of European grain, plant, and fruit. From the vegetables that were found here, there is reaſon to conclude the winters are milder than in England, and the ſummer not hotter, though it was more equally warm. Dogs and rats are the only quadrupeds that were ſeen, and of the latter only a few. The inhabitants breed the dogs for the ſole purpoſe of eating them. There are ſeals and whales on the coaſt; and they once ſaw a ſea-lion. The birds are hawks, owls, quails; and there are ſong-birds, whoſe note is wonderfully melodious. There are ducks and ſhags of ſeveral ſorts, not unlike thoſe of Europe; and the gannet, which is exactly the ſame. The ſea-coaſt is viſited by albatroſſes, ſheer-waters, pintados, and penguins. The inſects are fleſh-flies, beetles, butterflies, ſand-flies, and muſquitos; and the neighbouring ſea abounds with fiſh, which are equally delicate and wholeſome food. Capt. Cook ſeldom came to anchor but they caught enough, with hook and line only, to ſupply the whole ſhip's crew; and, when they fiſhed with nets, every meſs in the ſhip, except thoſe who were too indolent, ſalted as much as ſupplied them when at ſea ſome time after. The fiſh was not leſs various in kind than plentiful in quantity; there were many ſorts they had never before ſeen.

This country abounds with foreſts filled with very large, ſtraight, and clean, timber. There is one tree about the ſize of an oak, which was diſtinguiſhed by a ſcarlet flower, that appeared to be compoſed of ſeveral fibres; and another which grows in ſwampy ground, very ſtraight and tall, bearing ſmall bunches of berries, and a leaf reſembling that of a yew-tree; about 400 ſpecies of plants were found, all of which are unknown in England, except garden night-ſhade, ſow-thiſtle, two or three kinds of fern, and one or two ſorts of graſs. They found wild celery, and a kind of creſſes, in great abundance on the ſea-ſhore; and, of eatable plants raiſed by cultivation, cocoas, yams, and ſweet potatoes. There are plantations of many acres of theſe yams and potatoes; and the Chineſe paper mulberry-tree is to be found, but in no abundance. There is only one ſhrub or tree in this country which produces fruit, and that is a kind of a berry almoſt taſteleſs; but they have a plant which anſwers all the uſes of hemp and flax. There are two kinds of this plant, the leaves of one of which are yellow, and the other deep-red, and both of them reſemble the leaves of flags; of theſe leaves they make lines and cordage, and much ſtronger than any thing of the kind in Europe. Theſe leaves they likewiſe ſplit into breadths, and, tying the ſlips together, form their fiſhing-nets. Their common apparel by a ſimple proceſs is made from leaves; and their finer, by another preparation, is made from the fibres. This plant is found both on high and low ground, in dry mould, and deep bogs; but, as it grows largeſt in the latter, that ſeems to be its proper ſoil.

The men of this country are as large as the largeſt Europeans. Their complexion is brown, but little more ſo than that of a Spaniard. They are full of fleſh, yet are ſtout and well ſhaped. The women poſſeſs not that delicacy which diſtinguiſhes the European ladies; but their voice is ſingularly ſoft, which, as the dreſs of both ſexes is ſimilar, chiefly diſtinguiſhes them from the men. The men are active in a high degree; their hair is black, and their teeth are white and even. The features in both ſexes are regular; they enjoy good health, and live to a very advanced age. The women are modeſt and reſerved in their behaviour and converſation. They were not indeed dead to the ſofter impreſſions; but their mode of conſent was, in their idea, as harmleſs as the conſent to marriage with us, and equally binding for the ſtipulated time. If any of the Engliſh addreſſed one of their women, he was informed, that the conſent of her friends muſt be obtained, which uſually followed on his making a preſent. This done, he was obliged to treat his temporary wife at leaſt as delicately as we do in England. They anoint their hair with oil, melted from the fat of fiſh or birds. The poorer people uſe that which is rancid, ſo that their ſmell is very diſagreeable: but thoſe of ſuperior rank make uſe of that which is freſh. They wear combs, both of bone and wood, which are conſidered as an ornament, when ſtuck upright in the hair. The men tie their hair in a bunch on the crown of their head, and adorn it with the feathers of birds, which they likewiſe ſometimes place on each ſide of the temples: they commonly wear ſhort beards. The hair of the women ſometimes flows over the ſhoulders, and ſometimes is cut ſhort.

Both ſexes, but the men more than the women, mark their bodies with black ſtains called *amoco;* in general the women ſtain only the lips, but ſometimes mark other parts with black patches; the men, on the contrary, put on additional marks from year to year, ſo that thoſe who are very ancient are almoſt covered; excluſive of the amoco, they mark themſelves with furrows: theſe furrows make a hideous appearance, the edges being indented, and the whole quite black. The ornaments of the face are drawn in the ſpiral from, with equal elegance and correctneſs, both cheeks being marked exactly alike; while the painting on their bodies reſembles fillagree work, and the foliage in old chaſed ornaments; but no two faces or bodies are painted exactly after the ſame model. Theſe Indians likewiſe paint their bodies, by rubbing them with red-ochre, either dry or mixed with oil. Their dreſs is formed of the leaves of the flag, ſplit into ſlips, which are interwoven, and made into a kind of matting, the ends, which are ſeven or eight inches in length, hanging out on the upper ſide. One piece of this matting, being tied over the ſhoulders, reaches to the knees: the other piece, being wrapped round the wriſt, falls almoſt to the ground. Theſe two pieces are faſtened to a ſtring, which, by means of a bodkin of bone, is paſſed through, and tacks them together. The men wear the lower garment only at particular times. What they conſider as the moſt ornamental part of their dreſs, is the fur of dogs, which they cut into ſtripes, and ſew on different parts of their apparel. As dogs are not in plenty, they diſpoſe theſe ſtripes with great œconomy. They have a few dreſſes ornamented with feathers; and one man was ſeen covered wholly with thoſe of the red parrot. The women never tie their hair on the top of their head, nor adorn it with feathers; and are ſaid to be leſs anxious about dreſs than the men. The ears of both ſexes are bored, and the holes ſtretched ſo as to admit a man's finger: the ornaments of their ears are feathers, cloth, bones, and ſometimes bits of wood; a great many of them uſe nails, which were given them by the Engliſh, for this purpoſe; and the women ſometimes adorn their ears with the white down of the albatroſs, which they ſpread before and behind the hole, in a large bunch; they likewiſe hang to their ears by ſtrings, chiſſels, bodkins, the teeth of dogs, and the teeth and nails of their deceaſed friends. The arms and ancles of the women are adorned with ſhells and bones, or any thing elſe through which they can paſs a ſtring. The men wear a piece of green talc, or whalebone, with the reſemblance of a man carved on it, hanging to a ſtring round the neck.

The houſes, or huts, are from ſixteen to twenty-four feet long, ten or twelve wide, and ſix or eight in height. The frame is of ſlight ſticks of wood, and the walls and roof are made of dry graſs, pretty firmly compacted. Some of them are lined with bark of trees; and the ridge of the houſe is formed by a pole, which runs from one end to the other. The door is only high enough to admit a perſon crawling on hands and knees; and the roof is ſloping. There is a ſquare hole near the door, ſerving both for window and chimney, near which is the fireplace. A plank is placed near the door, adorned with a ſort of carving, and this they conſider as an ornamental piece of furniture. The ſide-walls and roof, projecting two or three feet beyond the walls at each end, form a ſort of portico, where benches are placed to ſit on. The fire is made in the middle of a hollow ſquare in the floor, which is incloſed with wood or ſtone. They ſleep near the walls, where the ground is covered with ſtraw for their beds. Beſides the fern-root, which ſerves them for bread, they feed on albatroſſes, penguins, and ſome other birds. Whatever they eat is either roaſted or baked, as they have no veſſels in which water can be boiled. The manner of preparing the fern-root, which is their ſtaff of life, is very ſimple: after leaving it in the fire for ſome time to be heated ſufficiently, they take it out and pound it with a mallet till it becomes quite ſoft, and fit for chewing. Being thus prepared for uſe, the cooks throw it round in handfuls to the chiefs and other perſons, who chew it till all the ſaccharine or nutritive matter is extracted, and, ſpitting out the fibrous part, they go on again, and continue in this manner till they have ſatisfied their appetites. The fern-root, when hot, has a pleaſant ſweetiſh taſte, and on being ſteeped in water depoſes a glutinous ſubſtance reſembling jelly. If experiments were made with this root in other countries, it might at times be eminently uſeful in wild diſtricts where it abounds, and where the ſcarcity of bread is ſooneſt and moſt ſeverely felt. With all their food, the New Zealanders drink nothing but water; being among the very few people, civilized or ſavage, who are ignorant of the means of intoxication. We need not wonder, therefore, that they enjoy perfect and uninterrupted health. When wounded in battle, the wound heals in a very ſhort time, without the application of medicine; and the very old people carry no other marks of decay about them, than the loſs of their hair and teeth, and a failure of their muſcular ſtrength, but enjoy an equal ſhare of health and cheerfulneſs with the youngeſt.

The canoes of this country are not unlike the whale-boats of New England, being long and narrow. The larger ſort ſeem to be built for war, and will hold from thirty to one hundred men; one of theſe meaſured near ſeventy feet in length, ſix in width, and four in depth. It was ſharp at the bottom, and conſiſted of three lengths, about two or three inches thick, and tied firmly together with ſtrong plaiting: each ſide was formed of one entire plank, about twelve inches broad, and about an inch and a half thick, which were fitted to the bottom part with equal ſtrength and ingenuity. Several thwarts were laid from one ſide to the other, to which they were ſecurely faſtened, in order to ſtrengthen the canoes. Theſe veſſels are rowed with a kind of paddles, between five and ſix feet in length, the blade of which is a long oval, gradually decreaſing till it reaches the handle; and the velocity with which they row with theſe paddles is ſurpriſing: their ſails are compoſed of a kind of mat or netting, which is extended between two upright poles, one of which is fixed on each ſide. Two ropes faſtened to the top of each pole ſerve inſtead of ſheets. The veſſels are ſteered by two men, having each a paddle, and ſitting in the ſtern; but they can only ſail before the wind, in which direction they move with conſiderable ſwiftneſs. Theſe Indians uſe axes, adzes, and chiſſels, with which laſt they likewiſe bore holes. The chiſſels are made of jaſper, or of the bone of a man's arm; and their axes and adzes of a hard black ſtone. Their tillage of the ground is excellent, owing to the neceſſity they are under of cultivating, or running the riſk of ſtarving. A long narrow ſtake, ſharpened to an edge at bottom, with a piece fixed acroſs, a little above it, for the convenience of driving it into the ground with the foot, ſupplies the place both of plough and ſpade. The ſoil being light, their work is not very laborious; and with this inſtrument alone they will turn up ground of ſix or ſeven acres in extent. Their fiſh-hooks are of ſhell or bone; and they have baſkets of wicker-work to hold the fiſh. Their warlike weapons are ſpears, darts, battle-axes, and the patoo-patoo. The ſpear, which is pointed at each end, is about twenty-ſix feet in length, and they hold it in the middle, ſo that it is difficult to parry a puſh from it. Whether they fight in boats or on-ſhore, the battle is hand to hand; their conteſts muſt be bloody. The employment of the men is ſuppoſed to conſiſt in cultivating the ground, making nets, catching birds, and fiſhing; while the women are engaged in weaving cloth, procuring fern-roots and ſhell-fiſh, and dreſſing food.

Theſe people exhibit a ſtrange mixture of civilized and ſavage life. It was hoped, from the ſtate of their cultivated grounds, of which ſeveral hundred acres were ſeen, that preſents of hogs, kids, and poultry, would have been moſt acceptable; and conſiderable numbers were left with them on the firſt and ſecond viſits of Capt. Cook; but, excepting the cocks and hens, which had bred plentifully, and flew about wild in the woods, the others had been wantonly deſtroyed. In 1791, Vancouver touched at Duſky Bay, and remained there for ſome time, examining the bays and creeks in the neighbourhood; but they did not ſee one human being. And, in 1793, d'Entrecaſteaux paſſed between the Three Kings' Iſland and Cape Maria Van Diemen, but had no other communication with the natives but in their canoes. Unlike in every reſpect to the Otaheitans, they have evidently a common origin; their language not differing more than the language of the two New Zealand Iſlands from each other. The few notions they have of ſuperior beings alſo accord with thoſe of Otaheite.

In the year 1810, ſeveral natives of the South-Sea iſlands viſited England, having been brought by different merchant-veſſels, in which they engaged themſelves as common ſailors. Among theſe was Duaterra, nephew to Tippahee, the New Zealand chief, who had formerly viſited Port Jackſon, and ſon-in-law of another chief named Wanakee. He was a very intelligent young man, poſſeſſing conſiderable natural abilities, and an ardent thirſt of knowledge. His only object, as he ſaid, for leaving his native country was to ſee King George. For this purpoſe he entered on-board the Santa Anna, belonging to Port Jackſon, which touched at New Zealand, on her way to ſome of the South-Sea iſlands, on a ſealing-voyage, in the courſe of which he was expoſed to many dangers, hardſhips, and toils. As a reward for theſe, Duaterra expected on his arrival in the Thames to ſee the king, but was unfortunately diſappointed. The captain kept him nearly the whole time he was in England on-board the ſhip at work, till ſhe was diſcharged; and, on the 5th of Auguſt, 1811, ſent him on-board the Anne, which failed almoſt immediately. Duaterra was much concerned at being compelled to return without accompliſhing the object of his voyage, for which, he obſerved, his countrymen would find great fault with him. It is certainly a circumſtance much to be regretted, that this young man, who by birth and marriage is related to eleven out of the thirteen chiefs of New Zealand, ſhould have loſt the only reward which he expected for two years' hard toil as a common ſailor, without wages, or other remuneration than clothing and proviſion. Duaterra, during his reſidence in this country, related certain particulars reſpecting the traditions and manners of thoſe remote iſlanders, which open a field for curious ſpeculation. In regard to the creation of man, he reports, that the New Zealanders have been taught from time immemorial, by their prieſts and fathers, to believe that *three gods* made the firſt man. The general term for bone is *eve;* and they univerſally believe that the firſt woman was made of an *eve*, or bone, taken from the ſide of the firſt man. The fable of the Man in the Moon is likewiſe an ancient tradition among theſe people. There was, (ſay they,) a long time ago, in New Zealand, a man named Rona, who was going for ſome water one very dark night, for neither moon nor ſtars were then to be ſeen. He accidently hurt his foot. While in this ſituation, and ſo lame as to be unable to return home, the moon came ſuddenly upon him. Rona laid hold of a tree to ſave himſelf, but in vain; for the moon carried both him and the tree away, and they are ſtill to be ſeen there to this day.

The common mode of ſalutation between two perſons is, to bring their noſes in contact with each other; and Duaterra declared, that, when he left New Zealand, ſo many came to ſee him previous to embarkation, his noſe was ſore with rubbing againſt the noſes of his friends.

We are enabled to add ſome intereſting particulars of the manners of this people from the report of a miſſionary-voyage to New Zealand, performed ſo lately as the year 1815. The Church Miſſionary Society in London having been induced in 1814, at the recommendation of Mr. Marſden, to eſtabliſh a miſſion in New Zealand, that benevolent gentleman, who was principal chaplain of New South Wales, determined to accompany the miſſionaries in their hazardous undertaking. But, as the New Zealanders are looked upon, at the colony of New South Wales, as barbarians of the moſt furious and implacable diſpoſitions, it was not without much earneſt importunity that Mr. Marſden obtained leave of abſence from the governor for four months, as his excellency conſidered it a moſt dangerous enterpriſe for him to venture his life among them; and told him plainly, he did not think himſelf juſtified in granting him the permiſſion, though with extreme reluctance he yielded to his requeſt. Mr. Marſden was accompanied alſo by John Liddiard Nicholas, eſq. who was at Port Jackſon upon a commercial ſpeculation, and who afterwards wrote a "Narrative of the Voyage," which was publiſhed in London at the beginning of the preſent year 1818.

The miſſion was kindly received by all the New Zealand chiefs whom they viſited; with ſome they traded for wood, which was obtained at a very cheap rate, and an advantageous cargo carried back to Port Jackſon. Among the reſt, Korra-Korra entertained them hoſpitably, and, in honour of his gueſts, inſtituted a ſham-fight, equivalent to the tournaments of ancient European times. This bloodleſs battle was conteſted with every ſign of ſavage fury, howlings, war-ſongs, ſhouts, and clamours. "From this mock encounter, (ſays Mr. Nicholas,) which was carried on, while it laſted, with impetuous activity, and was an exact repreſentation of their real mode of fighting, we had an opportunity of eſtimating how formidable theſe ſavage warriors muſt always prove themſelves in a ſerious conflict. Their general plan is, for each individual to ſingle out his antagoniſt, with whom he engages in furious combat, and continues to fight till one or other of them falls; as neither has any idea of quitting the ground while he has a drop of blood remaining, unleſs as the triumphant victor. They always throw the long ſpear before they come to cloſe attack, when the battle-axe and pattoo-pattoo are alone employed. The combatants on both ſides were nearly equal in point of numbers, Duaterra (already mentioned as a chief who had been in England) having about two hundred, and Korra-Korra not quite ſo many; but from the nature of the fight, in which they attacked and retreated, as the buſineſs of the entertainment required, and in obedience to their own free will, it was impoſſible to ſay which party would prove ſuperior in an actual engagement, the appearance of each being equally formidable. Duaterra's men were equipped like their adverſaries, and had the ſame terrible peculiarities of disfigurement; while the two parties formed ſuch an aſſemblage as the reader would hardly ſuppoſe could ever be found among his fellow-mortals. Amongſt thoſe who diſtinguiſhed themſelves by peculiar intrepidity, and were foremoſt in every attack, I was a good deal ſurpriſed to ſee the queen of Tippoonah, Duaterra's lady, whoſe courage, on this day, was eminently conſpicuous. This ſturdy amazon, dreſſed out in the red gown and petticoat ſhe had received from Mr. Marſden, and holding a large horſe-piſtol in her hand, appeared upon all occaſions anxious to ſignalize herſelf; and, ſuperior to the timidity of her ſex, diſplayed in the conflict the moſt undaunted ſpirit, rivalling the boldeſt man in deeds of heroiſm, and ſelecting for her antagoniſt the moſt formidable ſhe could find. But, from the exertions of her majeſty, both in the battle and war-dance, or what may not be improperly termed the play and afterpiece, her plump frame was quite exhauſted, and ſhe ſtood, at the concluſion of the entertainment, panting for breath, and reeking with perſpiration. In this ſtate ſhe was pleaſed to notice me with a diſtinguiſhed mark of flattering condeſcenſion, by holding out her lips for me to kiſs; an honour I could have very well diſpenſed with, but which, at the ſame time, I could not decline, without offering a ſlight to a perſonage of ſuch elevated conſequence. Beſides this dauntleſs Pentheſilea, I obſerved likewiſe ſome other female warriors, who joined in the combat with much reſolution, and, following the example of their queen, expoſed themſelves in the thickeſt of the fight to mimic dangers. From what I diſcovered, however, I found that it was not a general practice for women in this iſland to take the field; and that the paſſion for warlike proweſs was only to be found among certain ladies of a more intrepid character than the reſt.

"The chiefs maintain conſiderable ſtate. In the centre of one of their towns we were ſhown the throne of Kangeroa. It was curiouſly ſhaped, and raiſed upon a poſt about ſix feet from the ground, with ſome fanciful devices of groteſque carving. There was a ſtep to it, to aſſiſt the chief in getting up, and it ſerved him alſo for a footſtool. On his throne, the chief, elevated above his people, diſpenſed his laws and iſſued his commands with as much authority as the moſt abſolute potentate in Europe. Contiguous to this ſeat was another, appropriated excluſively for the uſe of the queen dowager, Kangeroa's mother; and cloſe to it a ſmall box, to hold her majeſty's proviſions.

"The people are, with all their barbarity, very ingenious. The children of the natives diſplayed before us a ſpecimen of their ingenuity, as we rowed along the cove, in a curious imitation of our ſhip, the Active, made in wicker-work. They had fitted up their little bark as nearly after the plan of the model as poſſible: ſhe had a bowſprit and two maſts, with ropes connected to them; while the builders, having now launched her into the water, were proving the ſucceſs of their labours, and ſeemed quite happy at the reſult. This ſtrong proof of the imitative genius of theſe people was the more pleaſing to us, as being found in the children, who thereby gave us every reaſon to augur favourably of their future improvement; and the reflection was highly gratifying, that they might, as they grew up, copy, with ſimilar induſtry, all thoſe arts of civilized life, which the miſſionaries were to introduce among them."

The miſſionary having purchaſed the land for the ſettlement, it became difficult to have the deed of ſale properly ſigned. The contrivance, *pro* ſignature, was an amuſing one: it conſiſted of "a complete repreſentation of the *amoco*, or tatooing, of the countenance of Gunnah" (the ſeller), to which he put his mark as the ratifying ſymbol. The deed itſelf is as follows: "Know all men to whom theſe preſents ſhall come, that I, Ahoodee O Gunnah, king of Ranghehoo, in the iſland of New Zealand, have, in conſideration of twelve axes to me in hand now paid and delivered by the Rev. Samuel Marſden, of Paramatta, in the territory of New South Wales, given, granted, bargained, and ſold, and by this preſent inſtrument do give, grant, bargain, and ſell, unto the committee of the Church Miſſionary Society for Africa and the Eaſt, inſtituted in London, in the kingdom of Great Britain, and to their heirs and ſucceſſors, all that piece and parcel of land, ſituate in the diſtrict of Hoſhee, in the iſland of New Zealand, bounded on the ſouth ſide by the bay of Tippoona and the town of Ranghehoo, on the north ſide by a creek of freſh water, and on the weſt by a public road into the interior; together with all the rights, members, privileges, and appurtenances, thereunto belonging, to have and to hold, to the aforeſaid committee, their heirs, ſucceſſors, and aſſigns, for ever, cleared and freed from all taxes, charges, impoſitions, and contributions, whatſoever, as and for their abſolute and proper eſtate for ever. In teſtimony whereof, I have to theſe preſents, thus done and given, ſet my hand at Hoſhee, in the iſland of New Zealand, this 24th day of February, in the year of Chriſt one thouſand eight hundred and fifteen.

Gunnah.
Thomas Kendall.
J. L. Nicholas."

When they had ſettled the coloniſts, the voyagers took an excurſion from the Bay of Iſlands, and viſited the river Thames, of Cook, and the ſettlements on its banks. They here encountered Mayhanger, the native Mr. Savage brought to England, and who excited ſo much notice in London about ten years ago, when he was preſented to the king and royal family. Mayhanger had relapſed into as great barbariſm as the reſt of his countrymen, ſeemed quite indifferent about England, and wholly occupied in contriving what he might aſk for. A cat and ſome large nails were, however, the only objects of his cupidity; and with theſe he was gratified.

At another place they met a native of Hindooſtan, a deſerter from the city of Edinburgh, who had reconciled himſelf to the habits and mode of living of the New Zealanders. He was married, and preferred this iſland to his own country.

A funeral is generally one of the moſt curious of ſavage ceremonies. In New Zealand they are thus conducted: "The New Zealanders never ſuffer their dead to remain longer above ground, after the vital ſpark is extinguiſhed, than till they can arrange the forms of their inhumation. Being curious to obſerve their ceremonies upon this occaſion, we immediately haſtened to the place where the corpſe was lying, which was about a mile from Ranghehoo. Arriving here, we found ſeveral of the natives on the beach before us, and the body of the deceaſed bundled up in the clothes he wore at the time he expired; the knees and feet apparently brought cloſe to the body; and the whole faſtened tight round with a belt, and placed on a bank between two poles, which had ſerved to convey it thither. Though the aſſemblage was large, the number of mourners were few; and of all who were ſtanding beſide the corpſe, I could ſee only the widow of Tippahee, and another woman, who appeared ſeriouſly affected. Theſe wept bitterly, and were particularly careful that we ſhould not approach too near the body; telling us, with anxious precaution, that it was *taboo taboo*, and ſhowing violent ſigns of uneaſineſs, leſt we ſhould advance beyond certain preſcribed limits. The other natives who were in attendance, though ſome of them had all the hideous marks of ſorrow inſcribed on their faces, felt, I am perſuaded, no real concern. One young man, who was probably a near relation of the deceaſed, had his face lacerated in a frightful manner, and was ſhedding tears very copiouſly; but, on going up to this mourner, I witneſſed in him a moſt unſeemly tranſition, for he ſmiled with a degree of vivacious levity that proved his grief to be only in the revolting ſemblance. I ſhook hands with him, and, from only ſmiling at firſt, he now laughed very heartily; and his behaviour was altogether ſo inconſiſtent with the appearance he aſſumed, that I knew not how to account for it, unleſs by conſidering the moſt doleful teſtimonies of ſorrow among ſome of theſe people as nothing more than common-place forms, preſcribed by long-eſtabliſhed uſage. The women, excepting the two firſt I have mentioned, evinced, in the preſent inſtance, no regret whatever: they laughed and talked away without the leaſt reſerve, quite heedleſs of the occaſion, being much more inclined to loquacity and mirth than to ſilence or dejection."

Mr. Nicholas ſtrongly enforces the advantages that might accrue from the importation of the flax of New Zealand, (which has been ſucceſsfully cultivated in the department of the Drome, in France.) After being abſent four months, he narrates the return of the expedition to Port Jackſon, having left a ſettlement in the Bay of Iſlands, which promiſes to civilize the country, and render it of importance as a place of trade, and of intereſt as a place where intellectual talents, moral virtues, and Chriſtian duties, are ſuperſeding ſavage ignorance, barbarous crimes, and ſuperſtitious horrors. The two iſlands of which New Zealand conſiſts extend from lat. 34. to 38. S. lon. 181. to 194. W.

To the eaſtward of New Zealand is an iſland of conſiderable extent, and well peopled, diſcovered by Mr. Broughton in 1791, when on a voyage aound the world with Vancouver. He called it *Chatham Iſland*; the people and its productions are the ſame as thoſe of New Zealand.

It may be proper here to notice a recent diſcovery of a group of iſlands directly ſouth of the ſouth cape of Tavai Poenammoo, one of the New Zealands, named *Lord Auckland's Group* by the diſcoverer, Mr. Briſtow, maſter of a South-Sea whaler, in gratitude to the nobleman whoſe name they bear, for having, when a boy, procured him admiſſion into the ſchool of Greenwich-hoſpital. This group, ſeven in number, were firſt ſeen on the 10th of Auguſt, 1806; and, on the 20th of October, 1807, Capt. Briſtow came to anchor with his ſhip, the Sarah, in a fine harbour on the largeſt iſland, which he called *Enderby*; and to the harbour he gave the quaint name of *Sarah's Boſom*. They are ſituated in lat. 50. 40. S. and lon. 166. 35. E. Wood and water being plentiful, and eaſily procured, they are repreſented as holding out, in this deſolate and remote region, conſiderable advantages to the ſouthern whale-fiſhery. The climate, however, is unuſually ſevere, and the weather tempeſtuous. In the middle of ſummer (December), every day was attended with ſnow, ſleet, or rain. Yet this ſeverity of climate appeared to make no unfavourable impreſſion on the vegetable productions, as the woods were covered with verdure ſo early in the ſpring as October. He obſerved four kinds of timber-trees, the principal of which was the mangrove, growing to the height of thirty or forty feet; but the trunks were ſo twiſted and turned by the violent winds, that it was difficult to find a ſtraight piece of ten feet in length. There was no want of ſhrubby and herbaceous plants. There were neither men nor quadrupeds of any kind; but ſeals, ſea-elephants, and ſea-fowl, in great plenty. The woods abounded with a great variety of ſinging birds, with ſweet melodious notes, and among them was a ſpecies of lark; wild-ducks, ſeals, and ſnipes, were plentiful; and he caught a kind of rock-cod with the hook and line.

To the ſouthward of the group, another ſmall iſland was diſcovered in 1811, to which was given the name of *Campbell's Iſland;* and to the ſouth-weſt of them, Macquarrie's Iſlands, in lat. 55. S. and lon. 160. E. Several other iſlands are ſcattered about thoſe of New Zealand; *Chatham Iſland* to the eaſtward of it, and a group of ſmall ones near it, ſeen by the Cornwallis in 1807; *Bounty Iſland* to the ſouth-eaſt; and, to the ſouthward of the latter, a little iſland, which, from its poſition with regard to England, has been named *Antipodes Iſland.* See Ency. Brit. Suppl. Monthly Mag. vol. xxx. Gent. Mag. vol. lxxxviii. and Nicholas's Narrative of a Voyage to New Zealand, performed in the Years 1814, 15.

NEWARK, a borough and market-town in the county of Nottingham, is a place of great antiquity, and ſuppoſed to have riſen on the ruins of the Roman ſtations of *Ad Pontem* and *Crocolana,* which were undoubtedly ſituated in this vicinity. Newark, according to Mr. Dickenſon, means *New-work,* which, he ſays, evidently implies that there was ſomething older on which it was ingrafted, though whether the new erection took place in the time of the Romans, or the Saxons, he thinks cannot be preciſely determined. It is certain, however, that this place had acquired its preſent name before the reign of Edward the Confeſſor, as it is mentioned in his time as the property of Leofric earl of Mercia, and given by him to the monaſtery of Stow, near Lincoln. What was its condition or extent at this period is unknown, nor does any circumſtance deſerving attention occur reſpecting it till about the year 1126, when we are informed that Alexander biſhop of Lincoln built "a large and magnificent caſtle here," which was ſoon after ſeized from him by king Stephen, and held for many years in the poſſeſſion of the crown. During the troubleſome reign of king John, this fortreſs was beſieged by the rebellious barons, and reſolutely defended till news arrived of the approach of the monarch, when the aſſailants thought proper to retire; the king, in conſequence, ſubſequently entered the town without oppoſition; but ſo fatigued and exhauſted by care, and the difficulties of a long march, that he was attacked with a dyſentery, which, in a few days, put an end to his life. In the ſucceeding reign, Newark-caſtle was fortified by the barons who had ſupported the intereſts of prince Louis, and were baſely deſerted by him. The earl of Pembroke marched againſt them; and, having cloſely inveſted the caſtle, compelled them to ſurrender at diſcretion, after a reſiſtance of eight days. Throughout the time of the grand rebellion in the ſeventeenth century, the inhabitants of this town were conſpicuous for their loyalty. By the exertions made to render the place defenſible, and the bravery of the royaliſts, it became a moſt important garriſon, and not only held in ſubjection the county of Northampton, but laid a great part of Lincolnſhire under contribution. It ſtood three very deſperate ſieges, in all of which much reſolution and gallantry were diſplayed; nor were the parliamentary forces able to obtain poſſeſſion of it till it ſurrendered to the Scotch army by order of the king.

Newark, ſubſequent to the erection of the caſtle, ſeems to have advanced rapidly in extent and population. Edward VI. conſtituted it a borough by charter in the third year of his reign. This deed has been confirmed, and many privileges added, by ſeveral of his ſucceſſors, and particularly by Charles II. who, in gratitude to the town for its loyalty to his father, granted it the privilege of ſending members to parliament; ſo that this is the moſt modern parliamentary borough in England. Now, though this is ſo large a town, containing above 7000 inhabitants, it is abſolutely dependent in the choice of its members. The duke of Newcaſtle, lord Middleton, John Sutton, eſq. of Kelham, and ſir Jenniſon Gordon, are proprietors of the greateſt part of the borough; and the nomination of its members is left to the two former. Sir William Paxton made a powerful oppoſition to this phalanx in 1790, and again in 1796, but without final ſucceſs. The houſe of commons, in 1699, came to a reſolution, "that all who paid, or *ought to pay,* ſcot and lot, had a right to vote at elections of members of parliament;" but a contrary one was paſſed in 1791, which ſtates the right to be in the mayor, aldermen, and inhabitants, *paying* ſcot and lot. In this reſolution, the words "ought to pay," are omitted. With his laſt reſolution Mr. Oldfield finds great fault, becauſe, he ſays, it confirms the influence of the patrons, as the magiſtrates and the overſeers of the poor are ſure to be in their intereſt, and have the power of making poor's rates to a certain degree conformable to their wiſhes. The corporation conſiſts of a mayor, twelve aldermen, and twelve aſſiſtants; the number of voters, paying ſcot and lot, is about 700. The mayor is the returning officer. The preſent members are—Henry Willoughby, eſq. and ſir William Clinton.

Newark has a weekly market on Wedneſday, which is well ſupplied; and ſix fairs in a year, viz. Careing-fair, the Friday before Careing Sunday, which is the Sunday fortnight before Eaſter; May-fair, the 14th of May; Whitſun-Tueſday; Lammas-fair, the 2d of Auguſt; All Saints, the 1ſt of November; and St. Andrew's fair, the Monday before the 11th of December. In the market-place, which is a large ſquare, and ſaid to have been formerly much more extenſive than at preſent, ſtands the town-hall, an elegant ſtone building, erected in 1805, at an expenſe of 17,000l. paid out of the funds of the teſtamentary eſtates left for the advantage of the town. It conſiſts of three ſtories, containing the courts and requiſite offices and apartments belonging to the corporation, and a large room appropriated to concerts and aſſemblies. The workhouſe of this town is one of the moſt commodious and beſt regulated in the kingdom; but its priſon was, till very lately at leaſt, a diſgrace to any civilized nation, and ſtill requires conſiderable amelioration. Here is a grammar-ſchool of acknowledged reſpectability, founded by Dr. Thomas Magnus in 1529, as an inſcription over the door imports. The church is a truly ſuperb and capacious edifice of the age of Henry VI. The tower is finely ornamented with arch-work and ſculpture, and ſupported a lofty ſpire, adorned with ſtatues of the twelve apoſtles in niches: but the ſpire was lowered about ten feet in July 1818; and the beauty of the edifice, which was conſidered to be unrivalled by any in the counties of Lincoln and Northampton, ſo famous for their ſpires, entirely deſtroyed. (See Gent. Mag. for Sept. 1818.) In the windows appear ſome paintings on glaſs, repreſenting the various events of our Saviour's life, together with a number of armorial bearings.

Cloſe to the river ſtand the ruins of the caſtle, which, notwithſtanding the demolition it has undergone, ſtill preſent an auguſt and impoſing aſpect. The north front is the moſt perfect, having a maſſive ſquare tower at the north-eaſt angle, and another in the centre of the elevation. Between theſe, in the principal ſtory, and among ſome large magnificent windows, is an immenſe projecting-window, exhibiting a perfect ſpecimen of thoſe anciently called "bays or bowers." Under the great hall, which ſeems to have been of later erection than the reſt of the building, is a moſt curious arched vault, or crypt, ſupported by a row of pillars in the centre, and having loop-holes and embraſures towards the river. At the end of this vault is a ſubterraneous paſſage, ſaid to have gone a great way under ground, but it has never been explored. The bridge thrown over the Trent here is conſtructed of brick, faced with ſtone, and was the gift of the earl of Northumberland.

The religious foundations in this town, during the times of popery, were a houſe of Auſtin Friars, and another of Obſervant Friars; beſides an hoſpital dedicated to St. Leonard, built by biſhop Alexander in the latter end of the reign of Henry I. and one belonging to the Knights Templars, founded previous to the year 1185. Near Northgate was a great houſe, called the Spittle, which was burnt down in the civil wars, and ſuppoſed by ſome authors, but without ſufficient evidence, to have been the hoſpital of St. Leonard. In the church-yard ſtood an edifice called the chauntry free-ſchool, and a ſong-ſchool, for an organiſt and ſix choriſters. There was likewiſe in Newark a ſecond church, but this was demoliſhed during one of the three laſt ſieges in the ſeventeenth century.

The trade and manufactures of Newark are tolerably extenſive. In Northgate is a very large brewery, which was accuſtomed to carry on a vaſt commerce with the north of Europe, before the development of the continental ſyſtem. The manufacture of cotton has been lately introduced, and affords employment to a conſiderable number of the poor. The counties of Nottingham, Lincoln, Derby, Stafford, Cheſter, Warwick, and part of York, are chiefly ſupplied with malt made in this town and its vicinity. Two large eſtabliſhments for the weaving and bleaching of coarſe linen are in a thriving condition, as is likewiſe an infant manufactory of ſail-cloth and ſacking. Corn and coals form important articles of traffic in Newark.

According to the parliamentary returns of 1801, this town contained only 1390 houſes, and a population of 6730 perſons. By the late returns (1811), however, it appears that a very material increaſe has taken place; the houſes being there ſtated to amount to 1504, and the inhabitants to 7236 in number. The pariſh of Newark compriſes about 800 acres.

The vicinity of this town has been much cut up by military works in the time of the civil wars, many traces of which remain.—Beacon-hill, where are ſeveral extenſive quarries of gypſum, was the ſcene of action between the royal army under prince Rupert, and the parliamentary troops, commanded by ſir John Meldrum, who had laid ſiege to the caſtle in 1643. In this engagement the royaliſts were completely ſucceſsful, though much inferior in number to the republicans. The foſſe-road paſſes cloſe to this hill.—At Coddington, on the Sleaford road, ſtands a handſome ſeat of S. C. Colclough, eſq. and directly north from hence is the Bruff or Brough, pointed out by Stukeley as the undoubted Crocolana of the Romans.—Balderton, two miles from Newark, is remarkable for a curious Saxon porch to its church, wrought with zig-zag mouldings and ozes' heads.—Elveſton, or Elſton, ſituated about four miles ſouth from the town, has acquired juſt celebrity as the birth-place of the late Dr. Darwin, whoſe ſcientific and literary labours, and active benevolence, reflect luſtre on the human character.—Between this village and that of Stoke, or, as ſome antiquaries aſſert, of Thorpe, Henry VII. engaged and defeated the army of the earl of Lincoln, who had eſpouſed the cauſe of the impoſtor Lambeth Simnel. This action was fought in the month of June, in the year 1487, but much difference of opinion prevails with reſpect to the exact day: Hall calls it the 6th, Stowe the 16th, and Holinſhed the 20th. Tradition affirms that Henry fixed his head-quarters, before the battle, in Elſton fields, cloſe to the village.

North Muſkham is a large village, diſtant four miles north from Newark. Joſeph Pocklington, eſq. the proprietor of the Pocklington's Iſland, on the lake of Keſwick, is lord of the manor, and poſſeſſes a very large eſtate here, on which he has lately built a moſt magnificent and commodious houſe. A conſiderable manſion, called Muſkham Grainge, is poſſeſſed by William Dickinſon Raſtall, eſq. author of the Hiſtory of Southwell.

South Muſkham is about three miles diſtant. A navigation paſſes by the town, which joins the river Trent in this pariſh, and alſo joins the Trent two miles above the town, in the pariſh of Averham. This navigation belongs to one company of proprietors, from Gainſborough in the county of Lincoln to Cavendiſh-bridge in the counties of Derby and Leiceſter; and the whole length is ſeventy-two miles. All kinds of goods, &c. are navigated the whole length at nine-pence a-ton; coals, plaſter, and lime, only half tonnage. All goods, &c. landed in the town of Newark, pay one penny per ton, and all goods loaded, one halfpenny per ton, towards keeping in repair the above-mentioned four miles, extending out of the river Trent by this town. From Cavendiſh-bridge to Gainſborough there is about ninety-two feet fall, which is at an average about fifteen inches in a mile. Various are the dimenſions of the boats navigated on this river, both in length and breadth, carrying, at a draft of twenty-ſix inches, from thirty to forty tons. Several canals branch out of the ſaid river Trent: one near Nottingham Trent-bridge to Grantham; another from the ſaid Trent-bridge to the town of Nottingham; alſo one extending up the river Erewaſh, which ſupplies this part with coals; another leading up to Crumford in Derbyſhire; another up the river Soar, leading to Loughborough and Leiceſter; another called the Grand Trunk, through which goods are carried from hence to Mancheſter; and another to Derby.

The village of Kilham, where John Sutton, eſq. a conſiderable proprietor in this county, has a ſeat, is only two miles diſtant from Newark. *Dickenſon's Hiſt. of Newark,* 1806. *Oldfield's Repreſentative Hiſt.* 1816. *Wilkes's Britiſh Directory. Beauties of England and Wales,* vol. xii.

NEW'ARK, a town of the ſtate of Delaware: ten miles ſouth-weſt of Wilmington.

NEW'ARK, a townſhip of America, in Eſſex county, Vermont.

NEW'ARK, a town lately laid out by the Britiſh in Upper Canada, on the river which connects lakes Erie and Ontario, directly oppoſite to Niagara town and fort. The town is handſome, about a mile ſquare, with its ſtreets at right angles, and contains about 150 houſes.—Alſo a townſhip, comprehending the above town, in the county of Lincoln, Upper Canada, and lying on the weſt ſide of Niagara river, oppoſite to the fort.

NEW'ARK, a town of New Jerſey. This town contains three churches, a town-houſe, and a gaol. It is ſituated on the Paſſaic, and gives name to a bay: ſixty-five miles north-north-eaſt of Philadelphia. Lat. 40. 18. N. lon. 74. 12.

NEWARK BA'Y, a bay on the coaſt of America, at the mouths of the Paſſaic and Hackinſack, between the main land and a peninſula of New Jerſey, which extends from Paulus Hook to near Staten Iſland. It divides into two branches: one running to the eaſt, between the continent and north coaſt of Staten Iſland, joins the Hudſon; the other runs ſoutherly between the continent and weſt coaſt of Staten Iſland.

NEW'BATTLE, a town of Scotland, in the county of Edinburgh, where is an abbey, formerly belonging to Ciſtercian monks, now the ſeat of the marquis of Lothian: one mile ſouth of Dalkeith.

NEW'BERN, a town of United America, in the ſtate of North-Carolina, on the ſouth ſide of the Neuſe. In 1791, a third of the town was deſtroyed by fire. Lat. 35. 17. N. lon. 77. 20. W.

NEW'BERN, a diſtrict of North-Carolina, ſo called from the town; it includes the counties of Beaufort, Carteret, Craven, Glaſgow, Hyde, Jones, Johnſton, Lenoir, Pitt, and Wayne; with 60,433 inhabitants, including 20,134 ſlaves.

NEW'BIGGIN, a fiſhing town in the county of Northumberland, with a fine bay for ſhipping, ſecure from ſtorms, and capable of receiving veſſels of ſixty tons burthen. The town is ſmall, chiefly inhabited by fiſhermen. The church ſtands on the north ſide of the haven, on a point of land that projects a conſiderable way into the ſea, and it is ſaid there are the remains of a pier there. The church has been much larger than it is at preſent, and its ſpire is a landmark for the ſhipping on the coaſt. It is eight miles eaſt Morpeth, and 295 north of London. Lat. 55. 14. N.

NEW'BIGGIN, a village in Northumberland, near Norham-Caſtle; another near Newcaſtle; another ſouth of Hexham; another ſouth-weſt of Rothbury.—A village in Cumberland, ſouth-eaſt of Carliſle.—A village in the county of Durham, near the foreſts of Teaſdale and Lune; another weſt of Lancheſter; another ſouth-weſt of Biſhop's Auckland.—A village in Lancaſhire, near the Kendal ſands and Foulney-iſle.—A village in the north riding of Yorkſhire, north-weſt of Rumbald Kirk; another ſouth-weſt of Whitby; another near Burrowby; another in Biſhopſdale, weſt of Midlam.—A village in the weſt riding, near Leeds; another on the river Are, ſouth of Skipton in Craven.—A village in Weſtmoreland, north of Appleby; a pariſh eight miles in circuit. Near it, upon the rocks, Mr. Camden ſays, were found characters and ancient inſcriptions, now no more.

NEWBLISS', a poſt-town of the county of Monaghan, Ireland: fifty-five miles north-weſt by north from Dublin.

NEW'BOLD, a village in Cheſhire, near Aſtbury.—A village in Derbyſhire, near Cheſterfield.—A village in Leiceſterſhire, north-eaſt of Aſhby-de-la-Zouch.—A village in Staffordſhire, near Burton upon Trent.—A village in Worceſterſhire, near Alderminſter.

NEW'BOLD, (North and South), villages in the eaſt riding of Yorkſhire, near North and South Cove.

NEW'BOLD UPON A'VON, a village in Warwickſhire, near Rugby.

NEW'BOLD CO'MIN, a village in Warwickſhire, on the north ſide of the Leame, in the pariſh of Leamington Priors.

NEW'BOLD PA'CIS, a village in Warwickſhire, one mile from Morton-Merial.

NEW'BOLD REV'EL, a village in Warwickſhire, between Brinklow and Monks Kirby.

NEW'BOLD VER'DEN, a village in Leiceſterſhire, eaſt of Boſworth.

NEW'BOROUGH, or GO'REY, a town of Ireland, in the county of Wexford. Before the union it ſent two members to the Iriſh parliament. In 1798, this town was ſet on fire and partly deſtroyed: twenty-one miles north of Wexford, and thirty-nine ſouth of Dublin.

NEW'BOROUGH, or NEWBURGH, a borough, market-town, and pariſh, in the hundred of Menai, and county of Angleſey, North Wales, is ſituated on the river Braint, or Breint, about three miles from the ſhore of Caernarvon-bay. The Britiſh name of this place is *Rhos Hir*, or *Vair*. Edward I. conſtituted it a corporation by charter, and annexed it to the royalties of the prince of Wales; and this deed afterwards received the ſanction of parliament, in the reign of Edward III. In the time of Henry VIII. and the firſt year of Edward VI. Newborough ſent members to parliament; but the latter monarch was pleaſed to transfer the elective franchiſe from hence to Beaumaris, in the ſecond year of his ſovereignty. The government of the town is now veſted in a mayor, two bailiffs, a recorder, and other aſſiſtant officers, who continue to hold regular courts. The revenue of the corporation is chiefly derived from about four hundred acres of excellent land, (ſituated in the vicinity,) which the magiſtrates have it in contemplation to encloſe. This was an ancient manor of the Britiſh princes, who had a *llys*, or palace, here; and here was alſo the ſeat of juſtice for the whole comot of Menai, and which continued ſo long after Wales became ſubject to England. The chief manufacture carried on by the inhabitants is that of mats, netting, and cordage, made of ſea reed-graſs. A few perſons are likewiſe engaged in fiſhing, and a conſiderable number in the labours of agriculture. It has a weekly market on Tueſday; and fairs, June 22, Aug. 10 and 21, Sept. 25, and Nov. 11. According to the parliamentary returns of 1811, it contains 183 houſes, and a population of 750 perſons. The amount of acres in the pariſh is eſtimated at 1000.

Adjoining to the town, and near the ruins of a building which has been generally regarded as the domeſtic chapel of the ancient palace, may be ſeen a large upright ſtone, inſcribed *Filius Ulrici erexit hunc lapidem,* and ſuppoſed to commemorate ſome Daniſh chieftain who had fallen in battle here, as it is well aſcertained that the Danes made frequent deſcents on this coaſt.—At Llanddwyn, a ſmall narrow peninſula, projecting into the bay of Caernarvon, ſtood an oratory of St. Dwynwen, the Britiſh Venus, or tutelary ſaint of lovers, who flouriſhed in the fifth century. In after-times a Benedictine abbey was erected upon the ſame ſpot, and ſeems to have been one of the richeſt in the county. In the time of Owen Glyndwr its wealth gave riſe to a very ſerious depredatory quarrel; and, in the viſitation made by the order of Henry VIII. it is mentioned amongſt the moſt valuable prebends belonging to the ſee of Bangor.

Five miles north-eaſt lies the village of LLANEDWEN, which ſee, vol. xii.

NEW'BURGH, a royal borough, market-town, and pariſh, in the county of Fife, Scotland, is ſituated on the ſouth bank of the river Tay. This place was very early conſtituted a borough of regality, by one of the abbots of Lindores, under whoſe charter it was governed till the ſecularization of the abbey by James VI. Charles I. granted the charter by which it now enjoys all the privileges and immunities of any royal burgh in North Britain, except the right of voting for a repreſentative in the national councils, and of ſending a delegate to the convention of boroughs. A court is held weekly, with the uſual marks of dignity; and it retains a clerk for recording its public proceedings. The town of Newburgh forms one principal ſtreet of conſiderable length, having ſmall ſuburbs at each end, and a lane leading towards the ſhore from its centre. Moſt of the houſes on each ſide of the lane, and in the ſuburbs, are of late erection; as well as a great proportion of thoſe in the main ſtreet. Hence, and in conſequence of alterations in ſuch as have not been entirely rebuilt, Newburgh is capable of containing double the amount of inhabitants it could have done formerly, though it probably does not occupy a rood more ground now than at the beginning of the laſt century. At that time the generality of the houſes were low built, and covered with a thatch of ſtraw or of reeds; but for many years a better ſtyle of architecture has prevailed, and at preſent the town has pretenſions to a more than ordinary degree of neatneſs. The chief ſtreet is excellently paved, and kept in repair by means of an aſſeſſment from proprietors within the burgh. The principal employment of the inhabitants is that of weaving cloth. Accuſtomed in early life to handle the oar and the plough, as well as the ſhuttle, they frequently betake themſelves either to the ſea, or to agriculture, whenever the price of the kinds of cloth they are in the practice of manufacturing ſuffers any material depreciation in the market. Moſt of the perſons employed in this trade weave their own yarn, and carry their own webs to market; that is to ſay, diſpoſe of them to a few individuals in the town and neighbourhood, by whom they are re-ſold to the merchants of Dundee, Cupar, and Glaſgow.

Cloſe to the burgh, but independant of the juriſdiction of the magiſtrates, is the harbour of Newburgh, conſiſting of three contiguous piers, projecting into the ſouth-deep of the Tay, and of ſeveral dwelling-houſes, ſtore-houſes, and other conveniences for commerce. Theſe piers form very ſafe ſtations for the veſſels employed in the trade on the river; and, though none of any burden can properly be ſaid to belong to Newburgh, and few are freighted to it except with coals or lime, they are ſeldom devoid of ſhipping, as the generality of veſſels for Perth, muſt wait the flow of the tide here; and not a few of them unload a part of their cargoes, before they can venture up further, even with the tide. Hence ariſes a good deal of activity at Newburgh; and conſiderable quantities of grain are annually exported for Edinburgh and London.

The pariſh of Newburgh is comparatively of inconſiderable extent, and only deſerving of notice on account of ſome veſtiges of antiquity which it contains. Of theſe, the ruins of the ancient abbey of Lindores are the moſt noted. They are ſituated at the north-eaſt extremity of the pariſh, on a gentle eminence, riſing from the edge of the river Tay. This monaſtery was founded in the twelfth century, and filled with monks of the order of St. Benedict. The extent of ground occupied by the buildings of the abbey in former times cannot now be aſcertained, as many of them have been completely razed to the very foundations. It was no doubt, however, one of the moſt ſuperb and magnificent on the northern ſide of the Forth. The luxury and wealth of its eccleſiaſtics are ſtrongly marked by the pains they have evidently taken, in the economy of their garden, to ſecure all the delicacies of the table. Near the abbey ſtands the ancient manſion of Lindores, once a baronial reſidence belonging to the family of Leſley. The other monuments of ancient art, in this vicinity, are two croſſes, one called the Croſs of Mugdrum, and the other Macduff's Croſs. The former ſtands only four yards from the ſhore, and, though much mutilated, ſtill diſplays remains of the figures of horſes, but there is no appearance of any inſcription. The latter, which is placed on an opening on the Ochil-hills, and which, at preſent, exhibits one large quadrilateral block of free-ſtone, rudely indented in ſeveral places, is traditionally ſaid to have pointed out the limits of the juriſdiction of the powerful Thane of Fife. Concerning Mugdrum Croſs, even tradition is ſilent. According to the parliamentary reports of 1811, the whole pariſh contains 283 houſes, and a population of 1951 perſons. It is ſix miles north of Falkland, and eight ſouth-eaſt of Perth.

NEW'BURGH, a village in Lancaſhire, to the weſt of Wigan, with a fair on the 21ſt of June.—A village in Northumberland, near Hexham.—A village in the eaſt riding of Yorkſhire, near Bridlington.—A village in the north riding, near Rhidal-vale, ten miles from York: here was formerly an abbey.

NEW'BURGH, a poſt-town of North America, in Orange county, New York, containing 3258 inhabitants, and conſiſting of between fifty and ſixty houſes, and a Preſbyterian church, ſituated on a gentle aſcent from the river. The country to the north is well cultivated, and affords a rich proſpect. Veſſels of conſiderable burden may load and unload at the wharfs, and many veſſels are annually built; ſo that the place is encouraging to induſtry, and thriving.

NEW'BURN, a town of Scotland, in the county of Fife: eight miles ſouth-ſouth-weſt of St. Andrew's.

NEW'BURN, a village in Northumberland, chiefly inhabited by miners, but was a place of conſequence before the Conqueſt. Here Charles the Firſt's army was routed, Aug. 28, 1640. It is ſix miles weſt of Newcaſtle, and 172 north of London.

NEW'BURY, a large market-town in Berkſhire, is ſituated in a fertile valley on the banks of the river Kennet, ſeventeen miles from Reading, and fifty-ſix from London. Though its name implies a modern borough, it was a town of conſiderable importance at the time of the Norman ſurvey, and then known by the name of *Ulritone*, probably a corruption of Ulwardetone, from Ulward, who poſſeſſed it in the time of Edward the Confeſſor. Newbury was originally the name of a caſtle which was built by one of the earls of Perch, and this appellation might be transferred to the town inſtead of its Saxon name. The town was incorporated in 1586 by queen Elizabeth; and is governed by a mayor, high-ſteward, recorder, ſix aldermen, and twenty-four capital burgeſſes. It ſent two members to parliament in the 30th year of Edward I. (it ſends none at preſent;) and in the 11th of Edward III. was alſo repreſented by three perſons in a great council, held on account of trade at Weſtminſter.

Extenſive manufactories of woollen cloth were eſtabliſhed in this town, and furniſhed the inhabitants with employment for ſeveral centuries; but the clothing-buſineſs has been removed into the more weſtern parts of the kingdom. It does not appear that the town has ſuffered by the removal; but on the contrary, from the influx of trade conſequent on the ready communication it now has by canals with London and Briſtol, its opulence as well as its population has been on the increaſe. In the year 1555, when the clothing buſineſs was at its greateſt height, the number of inhabitants was 1600. The return to parliament in the year 1801 ſtates the houſes to be 965, the number of perſons 4275; and, by the late ſurvey in 1811, the houſes are returned as 1028, the inhabitants as 4898: theſe returns do not include the tything of Speenhamland, which is apparently part of the town, but is in the pariſh of Speen, and contains about 150 houſes and upwards of 700 inhabitants.

The town conſiſts chiefly of three principal ſtreets, which are ſpacious and well built. The old market-houſe is an ancient timber building, over which is the gaol and a town-hall: the new market-houſe is a brick edifice of modern date; above it is an aſſembly-room, ſometimes called the New Town-hall, where the corporation tranſact their private buſineſs, the public meetings being held at the Old Hall. In the year 1762 the corporation of Newbury purchaſed, and put up in their New Town-hall, the fine hiſtorical picture of the Surrender of Calais to King Edward III. painted by Mr. Pine; for which he obtained the firſt premium of a hundred guineas from the Society for encouraging of Arts, &c. in London. The market, which is held on Thurſdays by preſcriptive right, is a great mart for corn, and is under excellent regulations. Four fairs are kept annually, and a ſtatute for hiring ſervants.

On the banks of the Kennet, in the vicinity of Newbury, are ſeveral mills, which ſupply the cities of London and Briſtol with great quantities of flour. The pariſh-church of Newbury is a plain ſtone ſtructure, built in the reign of Henry VIII. principally at the charge of John Winchcombe, a wealthy clothier of this town, of which he was a native. He died in the year 1519, and lies buried in the church, by the name of John Smallwode, alias Winchcombe. A braſs plate, with his effigy, was formerly placed over his tomb, but it is now fixed againſt the eaſt wall of the north aiſle. The hiſtory of this celebrated perſon, who was generally known by the name of *Jack of Newbury*, is rather of a marvellous caſt: he appears to have carried on the clothing-buſineſs to a great extent; having an hundred looms in conſtant uſe, in his own houſe, for the weaving of broad cloth only. He is recorded to have aſſiſted the king with an hundred of his men, all armed and clothed at his own expenſe, in the expedition againſt Scotland, which was terminated by the battle of Flodden Field. The building called his manufactory, is now divided into tenements, reſpectively occupied as a bookſeller's, a hair dreſſer's, and an inn; the latter bearing the ſign of Jack of Newbury. The charitable endowments in this town are numerous; not leſs than ſixty alms-houſes being eſtabliſhed on different foundations. One of theſe, called St. Bartholomew's Hoſpital, is ſaid to have been founded by king John, who granted a fair for its ſupport. It was formerly under the government of a maſter, warden, or prior; but is now, by charter of queen Elizabeth, veſted in the corporation. The original endowment has been increaſed by various benefactions. In the year 1624, Mr. John Kendrick of Reading bequeathed 4000l. to provide a workhouſe and employment for the poor of Newbury. Great part of this gift appears to have been loſt: with a portion of it the wharf and other premiſes were purchaſed; and the remainder is lent, without intereſt, in ſums of fifty pounds, to weavers, for three years.

In the dreadful conteſt between Charles I. and his parliament, Newbury became remarkable for being the ſcene of action in two ſucceeding years. The firſt battle was fought September 18, 1643, on a common called the Waſh; the other in the fields between Newbury, Speen, and Shaw, October 27, 1644. Thoſe who were killed in the firſt engagement were depoſited beneath two tumuli near the field of battle; whilſt thoſe who fell in the ſecond conteſt were interred in a large pit near Newbury church. Many veſtiges of theſe ſanguinary conflicts have, at different times, been found in the ſurrounding country.

About a mile north-weſt from Newbury is the ſmall village and pariſh of Speen, a place of conſiderable antiquity, deriving its name from the Roman *Spinæ*, which is ſuppoſed to have been ſituated in this vicinity. Speen had formerly a market on Mondays, which was granted, in the year 1218, by William Marſhall, earl of Pembroke.

At a ſmall diſtance from Speen, on the north, but in the pariſh of Shaw, is Donnington Grove, late the ſeat of William Brummell, eſq. The houſe, which is pleaſantly ſituated under a ridge of woody hills, was built by the late James Petit Andrews, eſq. author of The Hiſtory of Great Britain connected with the Chronology of Europe; and was for ſome time his reſidence.

On an eminence north-eaſt of the Grove are the remains of Donnington Caſtle, which was formerly a place of great importance; and, by commanding the weſtern road, gave to its poſſeſſors a conſiderable degree of authority. It is ſaid to have been built by ſir Richard Abberbury in the reign of Richard II. About the year 1397, Geoffrey Chaucer, the father of Engliſh poetry, became poſſeſſed of this caſtle, and ſpent the cloſe of his life in retirement here. From the Chaucers, the caſtle deſcended, by marriage, to the dukes of Suffolk. In the reign of James I. it belonged to the family of the Packers, whoſe heireſs married Dr. Hartley, the anceſtor of Mr. Hartley the preſent poſſeſſor. During the civil wars, this caſtle was a poſt of great conſequence; being fortified as a garriſon for the king, and entruſted to the command of colonel Boys, who bravely defended it during a long ſiege. Camden, in whoſe time the caſtle was entire, deſcribes it as "a ſmall but very neat place, ſeated on the brow of a woody hill, having a fine proſpect, and lighted by windows on every ſide." The walls nearly fronted the cardinal points of the compaſs, the entrance being at the eaſt end. It was defended by four round towers placed on the angles. The length of the eaſt end, including the towers, was 85 feet; the extent from eaſt to weſt, 120 feet. All this part is deſtroyed: the remains conſiſt of the ſtone gate-houſe, with its two towers, and a ſmall part of the eaſt wall. The gateway is in good preſervation, and the place for the portcullis is ſtill viſible.

To the eaſt of Donnington-caſtle, about a mile diſtant, ſtands Shaw-houſe, a large edifice, built in the reign of queen Elizabeth, by Mr. Doleman, an eminent clothier, in whoſe family the eſtate continued till about the year 1727, when it was purchaſed by James duke of Chandos, who ſold it, in 1746, to Joſeph Andrews, eſq. grandfather to ſir Joſeph Andrews, bart. who now poſſeſſes it.

About a mile weſtward from Speen is Benham-place, a villa of lord Craven's. The houſe, an elegant ſtructure of the Ionic order, was completed in 1775; it was built by Brown, under the direction of lady Craven. The lodges, at the eaſtern and weſtern extremities of the park, were recently built by the margravine. *Lyſons's Magna Britannia. Beauties of England and Wales. Wilkes's Britiſh Directory.*

NEW'BURY, a county of South-Carolina.

NEW'BURY, a town of Pennſylvania: fifty miles weſt-ſouth-weſt of Philadelphia.—Another 150 miles north-weſt of Philadelphia.

NEW'BURY, a town of the ſtate of Vermont, on the weſt ſide of the Connecticut, oppoſite Haverhill, in New Hampſhire: 130 miles north-eaſt of Bennington.

NEW'BURY, a town of the ſtate of Maſſachuſetts, adjoining to Newbury Port, but diſtinct from it as a town corporate.

NEW'BURY PORT, a port of entry and poſt-town in Eſſex county, Maſſachuſetts, pleaſantly ſituated on the ſouth ſide of Merrimack-river, over which it has a bridge, (See MERRIMACK,) about three miles from the ſea; ranking in a commercial view next to Salem, and containing 5946 inhabitants: incorporated into a townſhip, conſiſting of 640 acres, in 1764. The churches, which are ſix in number, are ornamented with ſteeples: the other public buildings are the court-houſe, gaol, and a bank. In this town are ten public ſchools and three printing-houſes. Many of the dwelling-houſes are elegant. The harbour is ſafe and capacious, but difficult of acceſs. The buſineſs of ſhip-building is carried on here; and a conſiderable trade ſubſiſts between this place and the Weſt Indies, as well as the ſouthern ſtates. Some veſſels are employed in the freighting-buſineſs, and a few in the fiſhery. In 1790 there belonged to this port ſix ſhips, forty-five brigantines, thirty-nine ſchooners, and twenty-eight ſloops, amounting in the whole to 11,870 tons. The exports in the year ending September 1794, amounted to 363,380 dollars. A machine for cutting nails has been invented in this town, which will manufacture 200,000 in a day. In this town are a Humane and Marine Society. The light-houſes are on Plum-iſland, in lat. 42. 47. N. lon. 70. 47. W. Newbury Port is forty miles north-north-eaſt of Boſton.

NEWCAS'TLE, a town of Ireland, in the county of Dublin. Before the union it ſent two members to parliament: ten miles weſt-ſouth-weſt of Dublin.

NEWCAS'TLE, a poſt-town of the county of Limeric, Ireland, which was originally founded by the Knights Templars, and became a corporation; but has been ſince reduced, and is now a place of little conſequence. It is 114 miles ſouth-weſt from Dublin, and twenty ſouth-weſt from Limeric.—There are ſome other villages of this name; as one near the river Inny, in the county of Longford, and one in the county of Down, on the Iriſh Sea; but there is no occaſion to enlarge.

NEWCAS'TLE, the moſt northern county of Delaware-ſtate, about forty miles long and twenty broad, containing 25,361 inhabitants, including 1838 ſlaves. The chief towns are Wilmington and Newcaſtle.—Alſo, a poſt-town and capital of the above county, ſituated on the weſt ſide of Delaware-river: thirty-three miles ſouth-weſt of Philadelphia. It contains more than a hundred houſes, a court-houſe, and gaol. This town was ſettled by the Swedes about the year 1627, and they called it *Stockholm*. The Dutch had poſſeſſion of it under the name of *New Amſterdam*; and the Engliſh gave it the name of *Newcaſtle*. It was incorporated in 1672. Lat. 39. 38. N.

NEWCAS'TLE, a town in Rockingham-county, New Hampſhire, called *Great Iſland*, conſiſting of about a hundred houſes, and 534 inhabitants, in 1790. It is the largeſt of a number of iſlands in the mouth of Piſcataqua: two miles eaſt of Portſmouth. It has a meeting-houſe; and on the north-eaſt point of the iſland are the light-houſe and fort, built in 1795.

NEWCAS'TLE, a town of Upper Canada, ſituated on the preſqu'iſle de Quinté, extending into Lake Ontario, from the eaſtern part of the townſhip of Cramahi.

NEWCAS'TLE, a poſt-town in Lincoln-county, Maine, between Damaſcotte and Skungut rivers: 192 miles north-eaſt of Boſton. It contains 996 inhabitants.

NEWCAS'TLE, a town of Maſſachuſetts, in the province of Maine: ſixty-ſix miles north-eaſt of Portland, and 192 north-eaſt of Boſton.

NEWCAS'TLE, a town of the ſtate of Virginia, on the York River: eighteen miles north of Richmond. Lat. 37. 44. N. lon. 77. 22. W.

NEWCAS'TLE, a poſt-town of Hanover-county, Virginia, at the mouth of the Aſſequin Creek, on the ſouth-weſt ſide of Pamunky-river, containing about thirty-ſix houſes: fifty-four miles north-weſt of Williamſburgh.

NEWCAS'TLE, a townſhip in Weſt Cheſter-county, New York, incorporated in 1791.

NEWCAS'TLE, a town on the north coaſt of the iſland of Nevis: ſix miles north-north-eaſt of Charleſtown.

NEWCAS'TLE, a ſmall iſland in the Florida Stream: Lat. 24. 48. N. lon. 81. 40. W.

NEWCASTLE BAY, a large open bay of the Pacific Ocean, on the north-eaſt coaſt of New Holland, in which are ſome ſmall low iſlands and ſhoals, ſouth of York Cape.

NEWCASTLE-IN-EMLYN, a ſmall market-town of South Wales, ſituated partly in the county of Caermarthen, and partly in Cardiganſhire. It is pleaſantly ſtationed on the banks of the river Tivy, which meanders along the vale here in a very bold and ſerpentine courſe, and adds greatly, by its majeſtic ſweeps, to the charms of the ſurrounding ſcenery. The approach to the town lies through an arched gateway, about fourteen feet high, and ſupported by two octagon pillars, which contributes alſo to enhance the romantic and pictureſque view beyond it. Here are the ruins of a caſtle originally founded at a very remote period, and ſubſequently rebuilt by ſir Rhys ap Thomas, who made it one of his principal ſeats. Some coins and other veſtiges of a Roman ſtation are ſaid to have been diſcovered in this vicinity; and the country around exhibits ſeveral encampments of different forms and ſizes, ſome of which were doubtleſs either conſtructed or altered by the Romans. The market-day in this town is Saturday; (Wilkes's Britiſh Directory ſays Friday;) and it is ſaid to have ſix fairs in the year, of which Wilkes enumerates only three, which are—June 22, July 18, and Nov. 22, for cattle, horſes, and ſheep. It is ſeventeen miles north of Carmarthen, and 216 weſt-north-weſt of London.

NEWCASTLE-UNDER-LINE, a borough and market-town in the hundred of Pyrehill, and county of Stafford, England, is ſituated on a branch of the river Trent; and owes its name and origin to a caſtle built here by Edmund earl of Lancaſter, in the reign of Henry III. This edifice ſtood in the centre of a conſiderable lake, being on the ſouth-weſt ſide of the town; but ſcarcely any veſtiges of it now remain. Leland ſays the whole was deſtroyed in his time, with the exception of one tower; and that it was originally erected to ſupply the place of the more ancient fortreſs at Cheſterton-under-Line. Hence the appellation *New Caſtle*. This town was incorporated, by royal charter, ſoon after its foundation; and queen Elizabeth and Charles II. ſeverally confirmed its privileges. It is now governed by a mayor, two juſtices, two bailiffs, and twenty-four common-councilmen, who have the right of holding courts for the recovery of debts under forty pounds. Newcaſtle ſends two members to parliament, and has done ſo ſince the twenty-ſeventh year of the reign of Edward III.

The right of election in this borough has been three times the ſubject of parliamentary inveſtigation; viz. in 1624, 1705, and in 1792. The firſt determination was in favour of ancient cuſtom, which was that of the freemen reſidents, who did not forfeit their claim till a year and a day after they had left the town; the ſecond and laſt have been confined to the queſtion of reſidence for the year and day that they had actually ceaſed to reſide, which in both caſes was decided againſt this claim. In the trial of the petition of Thomas Fletcher and Clement Kynnerſley, eſqrs. againſt ſir Archibald Macdonald and the Hon. John Leveſon Gower, the ſitting members, in 1792, it appeared in evidence, that a great part of this borough was the property of the marquis of Stafford, whoſe influence directs the choice of the electors; and that it is very cuſtomary for the burgeſſes, who are the electors, to live ten, fifteen, and twenty, years, in their reſpective houſes, without paying any rent; and that the then members were the brother and ſon-in-law of that nobleman. Upon the trial of the above petition, the counſel for the petitioners ſtated the right of election to be in the mayor, bailiffs, and burgeſſes or freemen, whoſe place of reſidence, at the time of their giving their votes, was in the ſaid borough; or who, at ſuch time, have no place of reſidence elſewhere, and who have never been abſent from the borough for the ſpace of a year and a day without interruption ſince they were admitted to the freedom thereof, or whoſe families (if they were maſters of families) have not been abſent for the ſpace of time aforeſaid without interruption, after the time of the admiſſion of ſuch burgeſſes or freemen, having families, to the freedom of the ſaid borough. The counſel for the ſitting members ſtated the right of election to be in the freemen reſiding in the borough of Newcaſtle, and not receiving alms or church-bread; and that perſons living a year and a day out of the borough loſt their freedom. The committee determined, that neither of the ſtatements delivered in by the petitioners, or ſitting members, was the ſpecific right of voting for this borough; but that the right was, "In the freemen reſiding in the borough of Newcaſtle-under-Line."

At the general election in 1812, ſir John Fletcher Fenton Boughey, bart. was elected for this borough in oppoſition to the patron, the marquis of Stafford; and in 1815, ſir John Chetwode, bart. of Oakley, in this county, was choſen in oppoſition to Mr. Wilmot, ſon of ſir Robert Wilmot of Derbyſhire, who was nominated and ſupported by the patron. The preſent members are W. T. Kinnerſley and B. J. Wilmot, eſqrs.

The ſituation of the town is extremely pleaſant, and the houſes diſplay a ſuperior neatneſs in their architecture, as well as a more than ordinary degree of uniformity in their arrangement. The principal ſtreet, in particular, is ſpacious and well paved; but its appearance is ſomewhat injured by the market-place occupying its centre. It is ſaid there were anciently four churches in this town, though one only now exiſts, and this is denominated a chapelry to Stoke. Diſſenting meeting-houſes, however, are numerous. The alms-houſes, twenty in number, owe their erection to the marquis of Stafford and lord Grenville, and are appropriated for the accommodation of twenty poor women, inhabitants of the borough. A manufactory of hats, the coal and clothing trade, and the potteries in the vicinity, form the chief ſupport both of the higher and lower orders of the inhabitants. The market-day is on Monday, weekly, for proviſions; and every alternate week a great cattle-market is held; beſides cattle-fairs on Eaſter-Monday, Whit-Monday, July 6, the firſt Monday in September, and on the 6th of November. According to the parliamentary-returns of 1811, this town contained 1344 houſes, and 6175 inhabitants; ſhowing an increaſe, ſince 1801, of 286 houſes, and 1571 perſons.

Cheſterton-under-Line, the ſite of the ancient fortreſs, the decay of which, gave occaſion to the erection of that at Newcaſtle, is now a trifling village, but there can be no doubt of its having been a place of importance previous to the event we have juſt mentioned. Scarcely any traces either of the caſtle or town can now be diſcovered; but Camden tells us he ſaw their ruins and ſhattered walls; and Erdeſwick ſays, he could perceive the walls had been of wonderful thickneſs and ſtrength. In the reign of king John, the property of the manor here, and conſequently the cuſtody of the caſtle, were veſted by that monarch in Randal, one of the earls of Cheſter, from whom it moſt probably took its preſent name, for we conceive it very likely that it had a different appellation at a more remote period.

At Trentham, three miles and a half from Newcaſtle, on the ſouth bank of the river, is a magnificent ſeat, belonging to the marquis of Stafford. The houſe is a modern erection, built after the model of Buckingham-houſe, in St. James's Park; and is ſurrounded by extenſive incloſures, finely variegated with umbrageous foliage, ſwelling lawns, and expanſive ſheets of water, formed by the Trent, which flows through the park. The noble owner of Trentham is juſtly eminent in the annals of the fine arts for his large collection of pictures, which is partly preſerved in this manſion, and partly in the town-houſe at St. James's, London. At an extremity of Trentham Park, bordering on the public road, is a family-mauſoleum, lately erected from the claſſical deſign of J. H. Tatham, eſq. architect. In the village of Trentham ſtood an ancient nunnery, where St. Werburgh, the ſiſter of king Ethelred, was abbeſs at the time of her death, A. D. 683.

This monaſtery, having fallen to decay, was reſtored by Randal, ſecond earl of Cheſter, in the reign of Henry I. and filled with canons of the order of St. Auguſtine. After its renewal it was dedicated to the Virgin Mary and All Saints; and at the period of the diſſolution had ſeven religious inmates, and poſſeſſed endowments to the amount of 121l. 3s. 2d. per annum.

As the Grand-Trunk Canal, which directly connects the navigation of the Trent, the Merſey, the Severn, and the Thames, with, collaterally, almoſt every trading-town in the interior, paſſes cloſe to Newcaſtle, its poſition muſt be regarded as extremely favourable to trade and manufactures. Its vicinity, moreover, abounds with coal; and contains an exhauſtleſs ſtore of ſeveral kinds of clay, admirably adapted for the manufacture of various ſorts of earthenware; and, accordingly, here are ſituated the moſt extenſive and valuable Potteries in Great Britain. The diſtrict comprehended under this title is ſomewhat above eight miles in length, and nearly as many in breadth, including within its compaſs ſeveral thriving market-towns and villages, which entirely owe their riſe and proſperity to this branch of induſtry; and is perhaps the moſt populous and buſy of any diſtrict of ſimilar extent in Great Britain. The ſoil preſents, in almoſt every part, a great variety of clays; covering rich and productive ſtrata of coal, which, lying in general near the ſurface, are wrought at a comparatively ſmall expenſe. Theſe ſtrata are uſually divided by veins of clays, moſt of which form excellent fire-bricks for conſtructing potters' kilns and ſagars, to burn the ware in. Finer clays alſo are plentiful in many places; of which in former times the bodies of the wares themſelves were wholly manufactured. To theſe advantages, joined to the inaptitude of the ſoil for huſbandry-purpoſes, this diſtrict is doubtleſs indebted for its ſelection as the ſite of its preſent ſtaple manufactories. When this originally occurred is utterly unknown; but the exiſtence of ſome kind of earthen-ware manufactory can be traced at leaſt two centuries back. Its principal ſeat at that period was the town of Burſlem, which was called a *butter-pottery*; that is, a manufactory of pots for the preſervation of butter; and under that name it is marked in ſeveral old maps; but this eſtabliſhment ſeems to have been, even ſo late as the year 1686, very inconſiderable, as Dr. Plot, in his Natural Hiſtory of the county, ſays, that the ſale of its products was chiefly "to the poor crate-men, who carried them *at their backs* over all the country." All the ware was then of a coarſe yellow, or red, black, and mottled. The common glaze was produced by lead-ore finely powdered, and ſprinkled upon the pieces of ware before firing; ſometimes with the addition of manganeſe. Occaſionally, when the potter wiſhed "to ſhow the utmoſt of his ſkill," he employed inſtead of lead ore, calcined lead itſelf, but ſtill ſprinkled it on in the ſame rude manner.

The era of improvement commenced about the year 1690, when two ingenious Dutchmen of the name of Elers ſettled here, and introduced the practice of adding common ſalt to the clay when at its higheſt heat, in order to give it a ſuperficial vitrification. The ſame individuals alſo introduced the manufacture of a new ſpecies of ware, in imitation of the unglazed red china of the Eaſt; and, the clays here being ſuitable for the purpoſe, they ſucceeded wonderfully for a firſt attempt, ſo that many of their tea-pots are ſaid to have ſold as high as a guinea each. The next improvement was made in the ſubſtance of the ware itſelf by a Mr. Aſtbury, as tradition aſſerts, through this incident: Being on his way to London, he happened to have powered flint recommended to him to cure ſome diſorder in his horſe's eyes, and accordingly a flint-ſtone was thrown into the fire, to render it more eaſily pulverable, which changing to a pure white by the influence of the heat, the potter was ſtruck with the idea that his ware might be improved by an addition of the ſame material to the whiteſt clays. He tried the experiment with tobacco-pipe clay, and the event proved fully anſwerable to his expectation. Thus originated the *white* ſtone wares, which ſoon ſupplanted the coloured ones, and continued for many years the ſtaple branch of pottery in this country.

It was, however, about the year 1760, that the moſt important improvements began to be made in the Staffordſhire potteries, by the late Joſias Wedgewood, eſq. This gentleman not only improved the compoſition, forms, and colours, of the old wares; but likewiſe invented, in 1763, a new ſpecies of ware, for which he obtained a patent, and which, being honoured by her late majeſty's approbation and patronage, received the name of *queen's ware*. Continuing his experimental reſearches, Mr. Wedgewood afterwards invented ſeveral other ſpecies of earthenware and porcelain, of which the principal are: 1. A *terra cotta;* reſembling porphyry, granite, Egyptian pebble, and other beautiful ſtones of the ſiliceous or cryſtalline order. 2. *Baſaltes,* or *black ware;* a black porcelain biſcuit of nearly the ſame properties with the natural ſtone, receiving a high poliſh, reſiſting all the acids, and bearing without injury a very ſtrong fire. 3. *White porcelain biſcuit;* of a ſmooth wax-like appearance, of ſimilar properties with the preceding. 4. *Jaſper;* a white porcelain of exquiſite beauty, poſſeſſing the general properties of baſaltes; together with the ſingular one of receiving through its whole ſubſtance, from the admixture of metallic calces, the ſame colours which thoſe calces give to glaſs or enamels in fuſion; a property poſſeſſed by no porcelain of ancient or modern compoſition. 5. *Bamboo,* or cane-coloured biſcuit porcelain, of the ſame nature as the white porcelain biſcuit. And 6. A *porcelain biſcuit* remarkable for great hardneſs, little inferior to that of agate; a property which, together with its reſiſtance to the ſtrongeſt acids, and its impenetrability to every known liquid, renders it well adapted for the formation of mortars, and many different kinds of chemical veſſels. For ſome further account of this gentleman's diſcoveries; ſee the article Wedgewood.

The above ſix diſtinct ſpecies of ware, together with the queen's ware firſt noticed, have increaſed, by the induſtry and ingenuity of different manufacturers, and particularly by Mr. Wedgewood and his ſon, into an almoſt endleſs variety of forms for ornament and uſe. Theſe, variouſly painted and embelliſhed, conſtitute nearly the whole of the preſent fine earthen-wares and porcelains of Engliſh manufacture.

The number of perſons who derive their ſupport from the manufacturing part of the pottery-buſineſs alone, including the wives and children of thoſe employed in it, is computed to exceed 25,000 perſons; and probably three times that number depend for bread on the labour it creates, particularly in the collieries, in procuring the raw material from ſeveral diſtant parts of the kingdom, and in the inland navigation connected with the ſame, and of the manufactured product. The principal towns and hamlets compriſed within the limits of The Pottery, are Stoke, Hanley, Shelton, Golden-Hill, New-Field, Smith-Field, Tunſtall, Long-Port, Burſlem, Cobridge, Etruria (the ſeat of the Wedgewoods), Lane-End, Lower-Lane, and Lane-Delft. *Beauties of England and Wales. Oldfield's Repreſentative Hiſt.* 1816. and *Wilkes's Britiſh Directory;* to which laſt work we refer for a deſcription of the Pottery Towns, and their principal inhabitants.

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